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**Prospectus** 

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Filed Pursuant to Rule 424(b)(2) Registration No. 333-221865-01

# **CALCULATION OF REGISTRATION FEE**

	Maximum	
Title of each class of securities offered	aggregate offering price	Amount of registration fee
Thic of cach class of securities offered	price	registration rec
Pass Through Certificates, Series 2020-1	\$3,000,000,000	\$327,300.00

The filing fee of \$327,300.00 is calculated in accordance with Rule 457(r) of the Securities Act of 1933.

## PROSPECTUS SUPPLEMENT TO PROSPECTUS, DATED DECEMBER 1, 2017

\$3,000,000,000



# 2020-1 PASS THROUGH TRUST CLASS A PASS THROUGH CERTIFICATES, SERIES 2020-1

United Airlines Class A Pass Through Certificates, Series 2020-1, are being offered under this prospectus supplement. The Class A certificates will represent interests in the Class A trust to be established in connection with this offering. The proceeds from the sale of the Class A certificates will be used by the Class A trust to acquire a Series A equipment note. The Series A equipment note will be issued by United Airlines, Inc. and will initially be secured by substantially all of United's aircraft spare parts from time to time, as well as by a designated group of 99 spare engines and 352 aircraft owned by United. Payments on the Series A equipment note held in the Class A trust will be passed through to the holders of certificates of such trust.

Interest on the Series A equipment note will be payable quarterly on January 15, April 15, July 15 and October 15 of each year, beginning on January 15, 2021. Principal payments on the Series A equipment note are scheduled on January 15, April 15, July 15 and October 15 of each year, beginning on January 15, 2021.

Goldman Sachs Bank USA and, potentially, one or more other banks will provide the initial liquidity facilities for the Class A certificates in an amount sufficient to make six quarterly interest payments.

The Class A certificates will not be listed on any national securities exchange.

Investing in the Class A certificates involves risks. See "Risk Factors" beginning on page S-21.

Pass Through		Interest	Final Expected	Price to	
Certificates	 Face Amount	Rate	Distribution Date	Public <sup>(1)</sup>	
Class A	\$ 3,000,000,000	5.875%	October 15, 2027		100%

Plus accrued interest, if any, from the date of issuance.

The underwriters will purchase all of the Class A certificates if any are purchased. The aggregate proceeds from the sale of the Class A certificates will be \$3,000,000,000. United will pay the underwriters a commission of \$30,000,000. Delivery of the Class A certificates in book-entry form only will be made on or about October 28, 2020.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Bookrunners

Goldman Sachs & Co. LLC Citigroup Structuring Agent

Barclays

J.P. Morgan

Morgan Stanley

**BofA Securities** 

The date of this prospectus supplement is October 20, 2020.

## CERTAIN VOLCKER RULE CONSIDERATIONS

The Trust is not nor, immediately after the issuance of the Certificates pursuant to the Trust Supplement, will it be a "covered fund" as defined in the final regulations issued December 10, 2013, implementing the "Volcker Rule" (Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act). In making the foregoing determination, the Trust is relying on an analysis that the Trust will not be deemed to be an "investment company" under Rule 3a-7 promulgated by the Securities and Exchange Commission (the "Commission"), under the Investment Company Act of 1940, as amended (the "Investment Company Act"), although other exemptions or exclusions under the Investment Company Act may be available to the Trust.

### PRESENTATION OF INFORMATION

These offering materials consist of two documents: (a) this Prospectus Supplement, which describes the terms of the certificates that we are currently offering, and (b) the accompanying Prospectus, which provides general information about our pass through certificates, some of which may not apply to the certificates that we are currently offering. The information in this Prospectus Supplement replaces any inconsistent information included in the accompanying Prospectus.

We have given certain capitalized terms specific meanings for purposes of this Prospectus Supplement. The "Index of Terms" attached as Appendix I to this Prospectus Supplement lists the page in this Prospectus Supplement on which we have defined each such term.

At various places in this Prospectus Supplement and the Prospectus, we refer you to other sections of such documents for additional information by indicating the caption heading of such other sections. The page on which each principal caption included in this Prospectus Supplement and the Prospectus can be found is listed in the Table of Contents below. All such cross references in this Prospectus Supplement are to captions contained in this Prospectus Supplement and not in the Prospectus, unless otherwise stated.

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You should rely only on the information contained in this document or to which this document refers you. We have not authorized anyone to provide you with information that is different. This document may be used only where it is legal to sell these securities. The information in this document may be accurate only on the date of this document.

### PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information from this Prospectus Supplement and the accompanying Prospectus and may not contain all of the information that is important to you. For more complete information about the Certificates and United, you should read this entire Prospectus Supplement and the accompanying Prospectus, as well as the materials filed with the Securities and Exchange Commission that are considered to be part of this Prospectus Supplement and the Prospectus. See "Incorporation of Certain Documents by Reference" in this Prospectus Supplement and the Prospectus.

## **Summary of Terms of Certificates**

Aggregate Face Amount	\$3,000,000,000
Interest Rate	5.875%
Initial Loan to Collateral Value(1)	
All Collateral (cumulative)	51.6%
Spares Collateral Group	60.3%
Tier I Aircraft Collateral Group	50.0%
Tier II Aircraft Collateral Group	45.0%
Highest Loan to Collateral Value (cumulative)(2)	51.6%
Expected Principal Distribution Window (in years)	0.2 - 7.0
Initial Average Life (in years from Issuance Date)	4.1
Regular Distribution Dates	January 15, April 15,
	July 15 and October 15
Final Expected Distribution Date	October 15, 2027
Final Maturity Date	April 15, 2029
Minimum Denomination	\$1,000
Section 1110 Protection	Yes
Liquidity Facility Coverage	Six quarterly interest
	payments

(1) These percentages are calculated as of October 28, 2020, the expected issuance date of the Certificates. In calculating these percentages, we have assumed that the aggregate appraised value of all Collateral is \$5,815,310,686, the Spares Collateral Group is \$1,941,922,368.71, the Tier I Aircraft Collateral Group is \$1,712,166,496.11 and the Tier II Aircraft Collateral Group is \$2,161,221,821.26 as of such date, and we have divided the applicable appraised value by, in the case of all Collateral, the original outstanding principal amount of the Equipment Note and, in the case of the Spares Collateral Group, the Tier I Aircraft Collateral Group and the Tier II Aircraft Collateral Group the principal amount of the Equipment Note allocated to such Group as follows:

Group	Equipment Note
Spares Collateral Group	\$ 1,171,000,000
Tier I Aircraft Collateral	\$ 856,000,000
Tier II Aircraft Collateral	\$ 973,000,000

See "—Loan to Collateral Value Ratios". The appraised value is only an estimate and reflects certain assumptions. See "Description of the Collateral and the Appraisals—The Appraisals".

(2) See "—Loan to Collateral Value Ratios".

## **Summary of Collateral**

The Equipment Note will initially be secured by substantially all of United's aircraft Spare Parts from time to time, as well as by a designated group of 99 Spare Engines and 352 Aircraft owned by United. The Spare Parts are utilized with respect to United's entire fleet of aircraft and engines. The Spare Engines consist of 15 different engine models and collectively may be installed on 14 different aircraft models. The Aircraft consist of eleven different aircraft models and were manufactured by Airbus or Boeing.

## **Summary of Appraisals**

An appraisal of the Spare Parts that will initially secure the Equipment Note has been prepared by mba. In addition, appraisals of the Spare Engines and Aircraft that will initially secure the Equipment Note have been prepared by BK, ICF and mba, in respect of the Spare Engines and the Aircraft, and mba's appraisal includes a report on the maintenance status of such Spare Engines and Aircraft. Copies of such appraisals are annexed to this prospectus supplement as Appendix II. Based on such appraisals and maintenance report, the aggregate appraised value of the Collateral initially securing the Equipment Note is approximately \$5.8 billion. Appraised value of the Spare Parts represents their current market value as determined by one appraiser. Appraised value represents, with respect to each Spare Engine and each Aircraft, the lesser of the mean and the median of its appraised base value assuming half-life condition as determined by the three appraisers, adjusted for its maintenance status as provided in such maintenance report.

The appraisals were based on various assumptions and methodologies, each as described in the respective appraisal. See "Risk Factors—Risk Factors Relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value." For a discussion of "current market value" and "base value" see "Description of the Collateral and the Appraisals." Appraised values should not be relied upon as a measure of the proceeds that could be received upon a foreclosure on the Collateral. See "Description of the Collateral and the Appraisals—The Appraisals."

## **Loan to Collateral Value Ratios**

The following table sets forth loan to Collateral value ratios ("LTVs") for the Certificates as of the Issuance Date and as of each Regular Distribution Date thereafter. The table should not be considered a forecast or prediction of expected or likely LTVs but simply a mathematical calculation based on one set of assumptions. See "Risk Factors—Risk Factors Relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value".

Regular Distribution Date	_	Assumed Aggregate collateral Value(1)		Outstanding Balance(2)	LTV(3)
At Issuance	_	5,815,310,686	\$	3,000,000,000	51.6%
January 15, 2021	Ψ	5,835,642,935	Ψ	2,927,475,000	50.2%
April 15, 2021		5,855,975,183		2,854,950,000	48.8%
July 15, 2021		5,876,307,432		2,782,425,000	47.3%
October 15, 2021		5,896,639,680		2,709,900,000	46.0%
January 15, 2022		5,903,417,545		2,625,212,500	44.5%
April 15, 2022		5,910,195,410		2,540,525,000	43.0%
July 15, 2022		5,916,973,274		2,455,837,500	41.5%
October 15, 2022		5,923,751,139		2,371,150,000	40.0%
January 15, 2023		5,804,664,287		2,263,600,000	39.0%
April 15, 2023		5,685,577,435		2,156,050,000	37.9%
July 15, 2023		5,566,490,582		2,048,500,000	36.8%
October 15, 2023		5,447,403,730		1,940,950,000	35.6%
January 15, 2024		5,325,312,483		1,796,912,500	33.7%
April 15, 2024		5,203,221,237		1,652,875,000	31.8%
July 15, 2024		5,081,129,990		1,508,837,500	29.7%
October 15, 2024		4,959,038,744		1,364,800,000	27.5%
January 15, 2025		3,198,150,790		1,278,643,750	40.0%
April 15, 2025		3,135,153,694		1,192,487,500	38.0%
July 15, 2025		3,072,156,597		1,106,331,250	36.0%
October 15, 2025		3,009,159,501		1,020,175,000	33.9%
January 15, 2026		2,953,520,040		976,818,750	33.1%
April 15, 2026		2,897,880,579		933,462,500	32.2%
July 15, 2026		2,842,241,118		890,106,250	31.3%
October 15, 2026		2,786,601,656		846,750,000	30.4%
January 15, 2027		2,754,200,355		803,393,750	29.2%
April 15, 2027		2,721,799,053		760,037,500	27.9%
July 15, 2027		2,689,397,751		716,681,250	26.6%
October 15, 2027		2,656,996,450		_	_

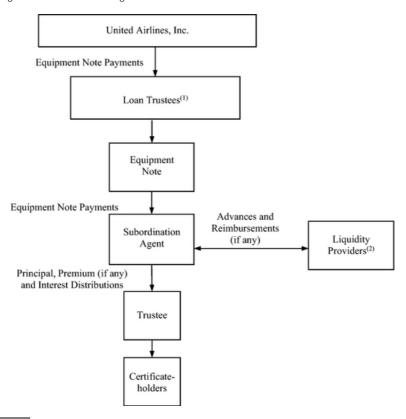
We have assumed that the composition of the Collateral remains the same as it was on the Issuance Date through the Final Expected Distribution Date. Assumed Aggregate Collateral Value reflects the sum of the appraised values of the Spare Parts, Spare Engines and Aircraft included in the Collateral. In the case of the Spare Parts, initial and forward appraised values reflect current market value as of August 31, 2020, as appraised by mba. We have assumed that such value does not change during the term of the Certificates. In the case of the Spare Engines and Aircraft, the initial appraised values of each Spare Engine and Aircraft reflect as of September 1, 2020 the lower of the mean and median of the base values thereof as provided by BK, ICF and mba, each as adjusted for current maintenance condition as determined by mba. Forward appraised values reflect as of September 1, 2020 the lower of the mean and median of the projected base values as appraised by BK, ICF and mba, each as adjusted for projected maintenance condition as determined by mba. See "Risk Factors Relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value". United is required to provide to the Loan Trustee a semiannual appraisal of the Collateral. See "Description of the Collateral and the Appraisals—Semiannual LTV Test".

<sup>(2)</sup> Outstanding balances as of each Regular Distribution Date are shown after giving effect to distributions expected to be made on such distribution date.

<sup>(3)</sup> The LTVs for the Certificates were obtained for the Issuance Date and each Regular Distribution Date by dividing (i) the expected outstanding balance of such Certificates after giving effect to the distributions expected to be made on such date, by (ii) the assumed value of the Collateral on such date based on the assumptions described above.

## **Cash Flow Structure**

Set forth below is a diagram illustrating the structure for the offering of the Certificates and certain cash flows.



- (1) The Equipment Note will be issued under the Indenture.
- (2) The Liquidity Facilities for the Certificates are expected to be sufficient to cover up to six consecutive quarterly interest payments with respect to the Certificates.
- (3) The proceeds of the offering of the Certificates will be used by the Trust to purchase the Equipment Note on the Issuance Date. The scheduled payments of interest on the Equipment Note will be sufficient to pay accrued interest on the outstanding Certificates.

## The Offering

Certificates Offered

• Class A Pass Through Certificates, Series 2020-1.

The Certificates will represent a fractional undivided interest in the related Trust.

Use of Proceeds

The proceeds from the sale of the Certificates will be used by the Trust to acquire the Equipment Note issued under the Indenture on the Issuance Date.

United intends to use the proceeds from the sale of Equipment Note to repay in full the \$2.0 billion aggregate principal amount outstanding under the term loan facility it entered into on March 9, 2020, the \$500 million aggregate principal amount outstanding under the term loan facility it entered into on March 20, 2020, and the \$250 million aggregate principal amount outstanding under the term loan facility it entered into on April 7, 2020. The proceeds of these term loans were used to pay certain transaction fees and expenses, and for working capital and other general corporate purposes of United. United will use any proceeds from the sale of the Equipment Note not used in connection with the repayment of such term loans to pay fees and expenses relating to the Offering and for United's general corporate purposes.

Subordination Agent, Trustee and Loan

rustee

Wilmington Trust, National Association

Liquidity Providers Goldman Sachs Bank USA and, potentially, one or more other Replacement Liquidity Providers

Trust Property The property of the Trust will include:

• The Equipment Note acquired by such Trust.

- All monies receivable under the Liquidity Facilities for such Trust.

Funds from time to time deposited with the Trustee in accounts relating to such Trust, including
payments made by United on the Equipment Note held in such Trust.

payments made by Clinica on the Equipment (vote field in such Trus

Purchase of Equipment Note On the Issuance Date, the Trust will purchase the Equipment Note issued by United under the Indenture

pursuant to the Note Purchase Agreement.

Regular Distribution Dates January 15, April 15, July 15 and October 15, commencing on January 15, 2021.

Record Dates The fifteenth day preceding the related Distribution Date.

Distributions

The Trustee will distribute all payments of principal, premium (if any) and interest received on the Equipment Note held in the Trust to the holders of the Certificates, subject to the subordination provisions applicable to the Certificates. Scheduled payments of principal and interest made on the Equipment Note will be distributed on the applicable Regular Distribution Dates.

Payments of principal, premium (if any) and interest made on the Equipment Note resulting from any early redemption of such Equipment Note will be distributed on a special distribution date after not less than 15 days' notice from the Trustee to the Certificateholders.

Subordination

Distributions on the Certificates will be made in the following order:

- · First, to the holders of the Certificates to pay interest on the Certificates.
- Second, if any Class of Additional Junior Certificates has been issued and is outstanding, to the
  holders of each such Class of Additional Junior Certificates (in relevant order of priority if more than
  one such Class of Additional Junior Certificates) to pay Adjusted Interest with respect to such Class of
  Additional Junior Certificates.
- Third, to the holders of the Certificates to make distributions in respect of the Pool Balance of the Certificates.
- Fourth, if any Class of Additional Junior Certificates has been issued and is outstanding, to the holders
  of each such Class of Additional Junior Certificates (in relevant order of priority if more than one such
  Class of Additional Junior Certificates), first to pay interest on the Pool Balance with respect to such
  Class of Additional Junior Certificates not previously distributed under clause "Second" above, and
  then to make distributions in respect of the Pool Balance with respect to such Class of Additional
  Junior Certificates.

Control of Loan Trustee

The holders of at least a majority of the outstanding principal amount of the Equipment Note will be entitled to direct the Loan Trustee under the Security Documents in taking action as long as no Indenture Default is continuing thereunder. If an Indenture Default is continuing, subject to certain conditions, the "Controlling Party" will direct the Loan Trustee under the Security Documents (including in exercising remedies, such as accelerating such Equipment Note or foreclosing the lien on the Collateral securing such Equipment Note).

The Controlling Party will be:

· The Trustee.

 Under certain circumstances, and notwithstanding the foregoing, the Liquidity Provider (including, if any Class B Certificates or Class C Certificates are issued, any liquidity provider for the Class B Certificates or Class C Certificates) with the largest amount owed to it.

In exercising remedies during the nine months after the earlier of (a) the acceleration of the Equipment Note or (b) the bankruptcy of United, the Equipment Note and the Collateral may not be sold for less than certain specified minimums.

Right to Purchase Other Classes of Certificates If United is in bankruptcy and certain specified circumstances then exist:

 If Additional Junior Certificates have been issued, the holders of such Additional Junior Certificates will have the right to purchase all but not less than all of the Certificates.

The purchase price in the case described above will be the outstanding balance of the Certificates plus accrued and unpaid interest.

Liquidity Facilities

Under the Liquidity Facilities, the Liquidity Providers will, if necessary, make advances in an aggregate amount sufficient to pay interest on the Certificates on up to six successive quarterly Regular Distribution Dates at the interest rate for such Certificates. Drawings under the Liquidity Facilities cannot be used to pay any amount in respect of the Certificates other than interest.

Notwithstanding the subordination provisions applicable to the Certificates, the holders of the Certificates will be entitled to receive and retain the proceeds of drawings under the Liquidity Facilities for such Trust.

Upon each drawing under any Liquidity Facility to pay interest on the Certificates, the Subordination Agent will reimburse the applicable Liquidity Provider for the amount of such drawing. Such reimbursement obligation and all interest, fees and other amounts owing to the Liquidity Provider under each Liquidity Facility and certain other agreements will rank equally with comparable obligations relating to the other Liquidity Facilities and will rank senior to the Certificates in right of payment.

If Class B Certificates or Class C Certificates are issued, such Class B Certificates or Class C Certificates may have the benefit of credit support similar to the Liquidity Facilities. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

Issuances of Additional Classes of Certificates

Additional pass through certificates of one or more separate pass through trusts, which will evidence fractional undivided ownership interests in equipment notes secured by the Collateral, may be issued. Any such transaction may relate to (a) the issuance of one or more new series of subordinated equipment notes with respect to all (but not less than all) of the Collateral at any time on or after the Issuance Date or (b) the refinancing of any of such series of subordinated equipment notes at or after repayment of any such refinanced equipment notes issued with respect to all (but not less than all) of the Collateral secured by such refinanced notes at any time on or after the Issuance Date. The holders of Additional Junior Certificates relating to other series of subordinated equipment notes, if issued, will have the right to purchase all of the Certificates under certain circumstances after a bankruptcy of United at the outstanding principal balance of the Certificates to be purchased plus accrued and unpaid interest and other amounts due to Certificateholders, but without a premium. Consummation of any such issuance of additional pass through certificates will be subject to satisfaction of certain conditions, including, if issued after the Issuance Date, receipt of confirmation from the Rating Agencies that it will not result in a withdrawal, suspension or downgrading of the rating of the Certificates. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

## **Equipment Note**

(a) Issuer United. United's executive offices are located at 233 S. Wacker Drive, Chicago, Illinois 60606. United's

telephone number is (872) 825-4000.

(b) Interest The Equipment Note held in the Trust will accrue interest at the rate per annum for the Certificates set

forth on the cover page of this Prospectus Supplement. Interest will be payable on January 15, April 15, July 15 and October 15 of each year, commencing on January 15, 2021. Interest is calculated on the

basis of a 360-day year consisting of twelve 30-day months.

(c) Principal Principal Principal payments on the Equipment Note are scheduled on January 15, April 15, July 15 and

October 15 of each year, commencing on January 15, 2021.

(d) Redemption

Event of Loss. If an Event of Loss occurs with respect to a Spare Engine or Aircraft, United will be required either (i) to redeem a pro rata portion of the outstanding principal amount of the Equipment Note based on the Appraised Value of such Spare Engine or Aircraft compared to the Aggregate Appraised Value of all Collateral, provided that if the aggregate principal amount of the Equipment Note required to be redeemed in connection with such Event of Loss is less than \$50,000,000, in lieu of such redemption United may elect to deposit cash or permitted investments with the Loan Trustee to be held as Collateral for the applicable Collateral Group until such time as the amount deposited into such account exceeds \$50,000,000, at which time such amount shall be used to redeem the Equipment Note as discussed above, provided further that, such loss proceeds may be released on the same basis that the Collateral subject to the Event of Loss could have been released prior to such Event of Loss and subject to the applicable Release Threshold for the Relevant Period or (ii) to replace such Spare Engine or Aircraft under the related Security Documents. The redemption price in such case will be the principal amount of such Equipment Note required to be redeemed, together with accrued interest, but without any premium.

Optional Redemption. United may elect to redeem all but not less than all of the Equipment Note prior to maturity of the Equipment Note. The redemption price for any optional redemption will be the unpaid principal amount of the Equipment Note, together with accrued interest and Make-Whole Premium

The Equipment Note will be secured by a security interest in all of the Collateral. This means that any proceeds from the exercise of remedies with respect to any Collateral will be available to cover, in accordance with the applicable priority of payments, payment shortfalls then due under the Equipment Note.

The security interest in a Spare Part will not apply for as long as it is installed on or being used in any aircraft, engine or other spare part so installed or being used. In addition, the security interest will not apply to a Spare Part not located at one of the designated locations specified pursuant to the Spare Parts Security Agreement. Because spare parts are regularly used, refurbished, purchased, transferred and discarded in the ordinary course of United's business, the quantity and types of spare parts included in the Collateral and the appraised value of the Spare Parts will change over time.

(e) Security

(f) Substitution of Airframe or Engine

United may elect to release any airframe(s) or engine(s) (including any Spare Engine(s)) from the security interest of the Security Documents and substitute for it one or more airframes or engines, as applicable. However, no engine may be substituted with an airframe and no airframe may be substituted with one or more engines. In addition, a widebody Aircraft may be released and substituted with other narrowbody aircraft may be released and substituted with other narrowbody aircraft or Eligible Regional Aircraft, but not widebody aircraft. In any case, no substitute airframe or engine may be a model that (i) has been fully retired or has been announced for such retirement by United or (ii) is not then type certificated by the FAA. Any such release and substitution shall be subject to the satisfaction of the following conditions:

- no Indenture Default has occurred and is continuing at the time of substitution;
- no failure to comply with a Composition Test shall have occurred and be continuing at the time of substitution (unless such substitution would improve compliance, or otherwise not worsen any noncompliance, with such Composition Test);
- in the case of a substitute airframe (or airframes), it has (or in the case of multiple airframes, they have, on a weighted average basis) a date of manufacture no earlier than the date of manufacture of the airframe (or airframes on a weighted average basis) being released;
- in the case of a substitute airframe or engine, it has a Maintenance Adjusted Base Value (or, in the
  case of multiple substitute aircraft or engines, the sum of their Maintenance Adjusted Base Values is)
  at least equal to 110% of that of the released airframe(s) or engine(s); and
- in the case of a replacement of an airframe with one or more airframes of a different model (other than
  a comparable or improved model) and/or manufacturer, United will be obligated to obtain written
  confirmation from each Rating Agency that substituting such substitute airframe (and if applicable,
  any other substitute airframes) for the replaced airframe will not result in a withdrawal, suspension or
  downgrading of the ratings of the Certificates if then rated by such Rating Agency.

(g) Section 1110 Protection

United's outside counsel will provide its opinion to the Trustees that the benefits of Section 1110 of the U.S. Bankruptcy Code will be available with respect to the Equipment Note.

(h) Semiannual LTV Test

On or prior to each May 15 and November 15 of each year, commencing in May 2021, United will be required to deliver to the Loan Trustee (i) an Appraisal reflecting the current market value of the Spare Parts Collateral; (ii) an Appraisal reflecting the Maintenance Adjusted Base Values of the Spare Engines Collateral; (iii) an Appraisal reflecting the Maintenance Adjusted Base Values of the Tier I Aircraft Collateral; and (iv) an Appraisal reflecting the Maintenance Adjusted Base Values of the Tier II Aircraft Collateral. United will also be required to deliver a certificate of United with a calculation demonstrating whether or not the LTV Ratio with respect to the Spares Collateral Group, the Tier I Aircraft Collateral Group or the Tier II Aircraft Collateral Group is greater than the applicable Maximum LTV Threshold.

If the LTV Ratio is greater than the applicable Maximum LTV Threshold with respect to any such Collateral Group, United will be required to:

- (I) grant a security interest to the Loan Trustee in Additional Collateral with respect to such Collateral Group such that the Aggregate Appraised Value of such Collateral Group (including such Additional Collateral and after giving effect to any action taken by United pursuant to clause (II) and (III) of this sentence) is greater than or equal to the applicable Minimum Collateral Value, subject to certain conditions;
- (II) deposit cash or permitted investments with the Loan Trustee as Collateral in a sufficient amount such that the Aggregate Appraised Value of such Collateral Group after giving effect to any action taken by United pursuant to clause (I) and (III) of this sentence, is greater than or equal to the applicable Minimum Collateral Value (after giving effect to such deposit); or
- (III) pay to the Loan Trustee an amount not less than the difference of (i) the applicable Minimum Collateral Value minus (ii) the Aggregate Appraised Value of the applicable Collateral Group after giving effect to any action taken by United pursuant to clause (I) and (II) of this sentence. Any amounts paid pursuant to clause (III) will be deemed a deposit of Cure Cash Collateral for purposes of the foregoing clauses (I) and (II) and be applied to redeem the Equipment Note. The redemption price in such case will be the principal amount of such Equipment Note required to be redeemed, together with accrued interest, but without any premium.

(i) Release of Collateral

United may request that Spare Engines Collateral or Aircraft Collateral specified by United be released from the lien of the applicable Security Document on any date following the first anniversary of the Issuance Date (or, in the case of a Technical Impairment, on any date following the Issuance Date), subject to satisfaction of certain conditions, including (but not limited to):

- United reasonably expects the Collateral to be released would not otherwise be utilized as part of its
  in-service fleet, that the Collateral to be released is of a model that has been retired by United or that
  United has announced will be retired or that the Collateral to be released is subject to a Technical
  Impairment;
- United delivers to the Loan Trustee one Appraisal from an applicable Appraiser dated a date no
  earlier than 90 days prior to such Release Request Date with respect to the Aggregate Appraised
  Value of the Collateral to be released; and
- The Aggregate Appraised Value of the Collateral to be released does not exceed, together with all
  other Spare Engines Collateral and Aircraft Collateral (excluding Cure Cash Collateral allocated to
  any such Collateral Group and based on the most recent Appraised Values of remaining applicable
  Collateral) released pursuant to this provision during the same Relevant Period, the applicable
  Release Threshold.

"Release Threshold" means, with respect to any Release Request Date, (i) from the Issuance Date to, but excluding the second anniversary of the Issuance Date, \$100,000,000, provided that from the Issuance Date to, but excluding the first anniversary of the Issuance Date, only Aircraft or Spare Engines that are subject to a Technical Impairment may be released pursuant to this provision; (ii) from the second anniversary of the Issuance Date to, but excluding the third anniversary of the Issuance Date, \$100,000,000, (iii) from the third anniversary of the Issuance Date to, but excluding the fourth anniversary of the Issuance Date to, but excluding the fifth anniversary thereof, \$50,000,000, (iv) from the fifth anniversary of the Issuance Date to, but excluding the sixth anniversary thereof, \$40,000,000 and (vi) following the sixth anniversary of the Issuance Date to, but excluding the seventh anniversary thereof, \$40,000,000 (each such period, a "Relevant Period"). Notwithstanding the foregoing, with respect to any Relevant Period after the initial Relevant Period, the Release Threshold shall be increased by the unused portion of the Release Threshold for the immediately preceding Relevant Period.

If, on any date of determination, Cure Cash Collateral is held by the Loan Trustee and the amount of such Cure Cash Collateral exceeds the amount necessary for avoiding a Collateral Trigger Event for such Collateral Group (in each case if determined as of such date), upon request by United the Loan Trustee will promptly release from the lien of the Security Documents all such (or all such excess) Cure Cash Collateral and pay it to United, subject to satisfaction of certain conditions.

If the Debt Balance with respect to the Tier II Aircraft Collateral is zero (which is expected to occur on the payment date occurring in October 2024), upon request by United the Loan Trustee will promptly release from the lien of the Indenture all such Tier II Aircraft Collateral, subject to satisfaction of certain conditions. Any aircraft partially allocated to both the Tier I Aircraft Collateral and the Tier II Aircraft Collateral shall thereafter automatically fully constitute Tier I Aircraft Collateral.

United may use, install, dispose of, transfer or move its Spare Parts, in each case in any manner consistent with United's ordinary course of business. Furthermore, United may remove any location from the list of "designated locations" if such location does not then contain any Spare Parts (including as a result of a concurrent permitted ordinary course disposition or transfer of any Spare Parts located therein). Any such use, installation, move, disposition, transfer or removal shall result in a release of the lien of the Security Documents, and any such installation or disposition shall be made free and clear of the lien of the Security Documents.

(i) Certain Spare Parts Covenants

United will be required to maintain, as of each Collateral Test Date, Spare Parts representing at least 85% (by Aggregate Appraised Value) of its spare parts then available for use in its fleet at a "designated location"

If any location owned or leased by United (other than a "designated location") shall as of any Collateral Test Date hold Spare Parts representing 1.5% or more of the aggregate Appraised Value of all spare parts then available for use in its fleet, United shall use reasonable commercial efforts to cause such location to be added as a "designated location".

Spare Parts associated exclusively with aircraft models that have fully exited United's fleet will be given a value of zero for purposes of calculating the LTV Ratios for the Spares Collateral Group.

Spare Parts other than Rotables and Repairables in excess of 25% (by Appraised Value) of the Aggregate Appraised Value of the Spare Parts Collateral shall be deemed to have a value of zero for purposes of calculating the LTV Ratios with respect to the Spares Collateral Group and all Collateral collectively.

United will be required to deliver a certificate of United reflecting certain appraised value and other information regarding its spare parts and the Spare Parts Collateral, attaching a parts inventory report and reflecting compliance with the spare parts covenants reflected above, in each case, as of the

applicable Collateral Test Date.

Certain U.S. Federal Tax Consequences

Each person acquiring an interest in Certificates generally should report on its federal income tax return its pro rata share of income from the Equipment Note and other property held by the Trust. See "Certain U.S. Federal Tax Consequences".

Certain ERISA Considerations

Each person who acquires a Certificate will be deemed to have represented that either: (a) no employee benefit plan assets have been used to purchase or hold such Certificate or (b) the purchase and holding of such Certificate are exempt from the prohibited transaction restrictions of ERISA and the Code pursuant to one or more prohibited transaction statutory or administrative exemptions. See "Certain

ERISA Considerations".

Threshold Rating for the Liquidity Providers

Long Term

S&P BBB

Liquidity Provider Rating

The Liquidity Providers meet the Liquidity Threshold Rating requirements.

### SUMMARY FINANCIAL AND OPERATING DATA

The following tables summarize certain consolidated financial and operating data with respect to United. This information was derived as follows:

Statement of operations data for the nine months ended September 30, 2020 and 2019 was derived from the unaudited consolidated financial statements of United, including the notes thereto, included in United's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020. Statement of operations data for years ended December 31, 2019, 2018 and 2017 was derived from the audited consolidated financial statements of United, including the notes thereto, included in United's Annual Report on Form 10-K filed with the Commission on February 25, 2020 (the "Form 10-K").

Special charges data for the nine months ended September 30, 2020 and 2019 was derived from the unaudited consolidated financial statements of United, including the notes thereto, included in United's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020. Special charges data for the years ended December 31, 2019, 2018 and 2017 was derived from the audited consolidated financial statements of United, including the notes thereto, included in the Form 10-K.

Balance sheet data as of September 30, 2020 was derived from the unaudited consolidated financial statements of United, including the notes thereto, included in United's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020. Balance sheet data as of December 31, 2019 and 2018 was derived from the audited consolidated financial statements of United, including the notes thereto, included in the Form 10-K.

		Nine Mont Septemb		Year	oer 31,	
		2020 2019		2019	2018	2017
Statement of Operations Data(1)(in millions):						
Operating revenue	:	11,943	\$ 32,371	\$ 43,259	\$ 41,303	\$ 37,784
Operating expenses		16,166	28,929	38,956	38,072	34,164
Operating income (loss)		(4,223)	3,442	4,303	3,231	3,620
Net income (loss)		(5,171)	2,369	3,011	2,123	2,161

		mber 30,	As of Dece		of December 31,	
	2	020	201	9		2018
Balance Sheet Data(in millions):						
Unrestricted cash, cash equivalents and short-term investments	\$	13,702	\$ 4	938	\$	3,944
Total assets		61,189	52	605		49,018
Debt and finance leases(2)		27,295	14	818		13,792
Stockholder's equity		6,972	11	492		10,004

(Footnotes on the next page)

(1) Includes the following special charges (credit) and unrealized (gains) losses on investments:

	Nine Months Ended September 30,		Year Ended December 31,		,
	2020	2019	2019	2018	2017
Special Charges (credit) (in millions):					
Operating:					
CARES Act grant credit(4)	(3,083)	_	_	_	_
Severance and benefit costs	413	14	16	41	116
Impairment of assets	168	69	171	377	25
Termination of a maintenance service agreement	_	_	_	64	_
(Gains) losses on sale of assets and other special charges, net	35	33	59	5	35
Nonoperating special charges and unrealized (gains) losses on investments:					
Credit loss on BRW term loan and guarantee	697	_	_	_	_
Special termination benefits and settlement losses	646	_	_	_	_
Unrealized (gains) losses on investments	295	(72)	(153)	5	_
Income tax expense (benefit), net of valuation allowance related to special charges (credits)	375	(10)	(21)	(110)	(63)
Income tax adjustment(3)	_	_	_	(5)	(206)

- (2) Includes the current and noncurrent portions of debt and finance leases.
- (3) The Company recorded \$5 million and \$206 million of tax benefits in 2018 and 2017, respectively, due to the passage of the Tax Cuts and Jobs Act in the fourth quarter of 2017.
- (4) During the nine months ended September 30, 2020, the Company received approximately \$5.1 billion in funding pursuant to the Payroll Support Program under the CARES Act, which consists of \$3.6 billion in a grant and \$1.5 billion in an unsecured loan. The Company also recorded \$66 million in warrants issued to Treasury, within stockholders' equity, as an offset to the grant income. For the nine months ended September 30, 2020, the Company recognized \$3.1 billion of the grant as a credit to Special charges (credit) with the remaining \$453 million recorded as a deferred credit on our balance sheet. The Company expects to recognize the remainder of the grant income from the Payroll Support Program as Special charge (credit) during the fourth quarter of 2020 as the salaries and wages the grant is intended to offset are incurred.

## **Selected Operating Data**

United transports people and cargo through its mainline operations, which utilize jet aircraft with at least 126 seats, and its regional operations, which utilize smaller aircraft that are operated under contract by United Express carriers. These regional operations are an extension of United's mainline network.

	Nine Mont		Year Ended December 31,			
	2020	2019	2019	2018	2017	
Consolidated Operations:						
Passengers (thousands)(1)	42,911	122,137	162,443	158,330	148,067	
Revenue passenger miles (millions)(2)	56,812	180,727	239,360	230,155	216,261	
Available seat miles (millions)(3)	92,113	213,961	284,999	275,262	262,386	
Passenger load factor:(4)						
Consolidated	61.7%	84.5%	84.0%	83.6%	82.4%	
Domestic	62.7%	85.7%	85.2%	85.4%	85.2%	
International	60.0%	82.9%	82.4%	81.3%	78.9%	
Passenger revenue per available seat mile (cents)	10.20	13.88	13.90	13.70	13.13	
Total revenue per available seat mile (cents)	12.97	15.13	15.18	15.00	14.40	
Average yield per revenue passenger mile (cents)(5)	16.54	16.43	16.55	16.38	15.93	
Cargo revenue ton miles (millions)(6)	1,876	2,440	3,329	3,425	3,316	
Aircraft in fleet at end of period	1,319	1,348	1,372	1,329	1,262	
Average stage length (miles)(7)	1,312	1,464	1,460	1,446	1,460	
Approximate employee headcount (thousands)	88	95	96	92	90	
Average fuel price per gallon	\$ 1.65	\$ 2.08	2.09	2.25	5 1.74	
Fuel gallons consumed (millions)	1,501	3,221	4,292	4,137	3,978	

- (1) The number of revenue passengers measured by each flight segment flown.
- (2) The number of scheduled miles flown by revenue passengers.
- (3) The number of seats available for passengers multiplied by the number of scheduled miles those seats are flown.
- (4) Revenue passenger miles divided by available seat miles.
- (5) The average passenger revenue received for each revenue passenger mile flown.
- (6) The number of cargo revenue tons transported multiplied by the number of miles flown.
- (7) Average stage length equals the average distance a flight travels weighted for size of aircraft.

#### RISK FACTORS

You should carefully consider the risks and uncertainties described below, together with all of the other information included in or incorporated by reference into this prospectus supplement, including the "Risk Factors" section contained in our most recent Annual Report on Form 10-K, as updated by subsequent Quarterly Reports on Form 10-Q and other reports filed by us with the Commission (which are incorporated by reference herein) before purchasing the Certificates. If any of these risks actually occurs, our business, financial condition or results of operations could be materially adversely affected. As a result, the market value of the Certificates could decline and you could lose part or all of your investment.

Unless the context otherwise requires, references in this "Risk Factors" section and "The Company" section to "UAL", "the Company", "we", "us" and "our" mean United Airlines Holdings, Inc. ("UAL") and its consolidated subsidiaries, including United Airlines, Inc. ("United"), and references to "United" include United's consolidated subsidiaries.

## **Risk Factors Relating to Recent Events**

The global pandemic resulting from a novel strain of coronavirus has had an adverse impact that has been material to the Company's business, operating results, financial condition and liquidity, and the duration and spread of the pandemic could result in additional adverse impacts. The outbreak of another disease or similar public health threat in the future could also have an adverse effect on the Company's business, operating results, financial condition and liquidity.

The novel coronavirus ("COVID-19") pandemic, together with the measures implemented by governmental authorities and private organizations in response to the pandemic, has had an adverse impact that has been material to the Company's business, operating results, financial condition and liquidity. Measures such as "shelter in place" or quarantine requirements, international and domestic travel restrictions or advisories, limitations on public gatherings, social distancing recommendations, remote work arrangements and closures of tourist destinations and attractions, as well as consumer perceptions of the safety, ease and predictability of air travel, have contributed to a precipitous decline in passenger demand and bookings for both business and leisure travel.

The Company began experiencing a significant decline in international and domestic demand related to COVID-19 during the first quarter of 2020. The decline in demand caused a material deterioration in our revenues in the first nine months of 2020, resulting in a net loss of \$5.2 billion for that period. Although during the third quarter of 2020 the Company experienced modest improvement in demand, the full extent of the ongoing impact of COVID-19 on the Company's longer-term operational and financial performance will depend on future developments, including those outside our control related to possible increases in COVID-19 cases and/or new quarantine requirements being imposed in certain jurisdictions or other restrictions on travel, all of which are highly uncertain and cannot be predicted with certainty. In response to decreased demand, the Company cut, relative to 2019 capacity, approximately 70% of its scheduled capacity for the third quarter of 2020. The Company expects scheduled capacity to be down approximately 55% year-over-year in the fourth quarter of 2020. The Company plans to continue to proactively evaluate and cancel flights on a rolling 60-day basis until it sees signs of a recovery in demand and expects demand to remain suppressed and plateau at levels of around 50%, relative to 2019 levels, until an accepted treatment and/or vaccine for COVID-19 is widely available. In addition, the Company does not currently expect the recovery from COVID-19 to follow a linear path. As such, the Company's actual flown capacity may differ materially from its currently scheduled capacity.

The Company has taken a number of actions in response to the decreased demand for air travel. In addition to the schedule reductions discussed above, the Company has reduced its planned capital expenditures and reduced operating expenditures for the remainder of 2020 and 2021 (including by postponing projects deemed non-critical to the Company's operations), terminated its share repurchase

program, issued or entered into approximately \$10.2 billion in secured notes, secured facilities and new aircraft financings, including \$6.8 billion of senior secured notes and a secured term loan facility (the "MileagePlus Financing") secured by substantially all of the assets of Mileage Plus Holdings, LLC, a direct wholly-owned subsidiary of United ("MPH"), and Mileage Plus Intellectual Property Assets, Ltd., an indirect wholly-owned subsidiary of MPH ("MIPA"), raised approximately \$1.1 billion in cash proceeds in an underwritten public offering of UAL common stock, entered into an equity distribution agreement relating to the issuance and sale, from time to time, of up to 28 million shares of UAL common stock, borrowed \$1.0 billion under the \$2.0 billion revolving credit facility, entered into an agreement to finance certain aircraft currently subject to purchase agreements through a sale and leaseback transaction, deferred certain payroll taxes pursuant to the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), temporarily grounded certain of its mainline fleet and taken a number of actions to reduce employee-related costs. In addition, in connection with the Payroll Support Program under the CARES Act, United entered into a Payroll Support Program Agreement with the U.S. Treasury Department ("Treasury"), that provided the Company with total funding of approximately \$5.1 billion to pay the salaries and benefits of employees through September 30, 2020. The Company also entered into a term loan facility of up to approximately \$5.2 billion (the "Term Loan Facility") pursuant to the loan program established under Section 4003(b) of the CARES Act (the "Loan Program"), and on September 28, 2020, United borrowed \$520 million under the Term Loan Facility. Subject to final approval by Treasury and both the availability, and agreement on, collateral, the Company expects to have increased availability under the Term Loan Facility of up to \$7.5 billion, in the aggregate. The grants and/or loans under the CARES Act subject the Company and its business to certain restrictions, including, but not limited to, restrictions on the payment of dividends and the ability to repurchase UAL's equity securities, requirements to maintain certain levels of scheduled service, requirements to maintain U.S. employment levels through September 30, 2020 and certain limitations on executive compensation. These restrictions and requirements have materially affected and will continue to materially affect the Company's operations, and the Company may not be successful in managing these impacts for the duration of the restrictions. In particular, limitations on executive compensation, which, depending on the form of aid, could extend up to six years, may impact the Company's ability to attract and retain senior management or attract other key employees during this critical time.

The Company continues to focus on reducing expenses and managing its liquidity. The Company achieved target average daily cash burn during the third quarter of 2020 of \$21 million plus \$4 million of average debt principal payments and severance payments per day, compared to second-quarter average daily cash burn of \$37 million plus \$3 million of debt principal payments and severance payments per day. For this purpose, cash burn is defined as: net cash from operations, less investing and financing activities. Proceeds from the issuance of new debt (excluding expected aircraft financing), government grants associated with the Payroll Support Program of the CARES Act, issuance of new stock, net proceeds from the sale of short-term and other investments and changes in certain restricted cash balances are not included in this figure. Cash burn excludes the borrowing and replacement of a \$200 million short-term loan associated with the CARES Act Loan Program. We expect to continue to modify our cost management structure and capacity as the timing of demand recovery becomes more certain. The Company's reduction in expenditures, measures to improve liquidity or other strategic actions that the Company may take in the future in response to COVID-19 may not be effective in offsetting decreased demand, and the Company will not be permitted to take certain strategic actions as a result of the CARES Act, which could result in a material adverse effect on the Company's business, operating results and financial condition.

The full extent of the ongoing impact of COVID-19 on the Company's longer-term operational and financial performance will depend on future developments, including the effectiveness of the mitigation strategies discussed above, the duration and spread of COVID-19 and related travel advisories and restrictions, the impact of COVID-19 on overall long-term demand for air travel,

including the impact on overall demand for business travel as a result of increased usage of teleconferencing and other technologies, the impact of COVID-19 on the financial health and operations of the Company's business partners and future governmental actions, including whether applicable governmental authorities will continue to grant waivers of usage requirements for certain of the Company's slots, routes and gates. All of these future developments are highly uncertain and cannot be predicted with certainty. The COVID-19 pandemic has had a material impact on the Company, and the continuation of reduced demand could have a material adverse effect on the Company's business, operating results, financial condition and liquidity.

In addition, an outbreak of another disease or similar public health threat, or fear of such an event, that affects travel demand, travel behavior or travel restrictions could have a material adverse impact on the Company's business, financial condition and operating results. Outbreaks of other diseases could also result in increased government restrictions and regulation, such as those actions described above or otherwise, which could adversely affect our operations.

The Company has a significant amount of financial leverage from fixed obligations and intends to seek material amounts of additional financial liquidity in the short-term, and insufficient liquidity may have a material adverse effect on the Company's financial condition and business.

The Company has a significant amount of financial leverage from fixed obligations, including aircraft lease and debt financings, leases of airport property, secured loan facilities and other facilities, and other material cash obligations. In addition, the Company has substantial noncancelable commitments for capital expenditures, including for the acquisition of new and used aircraft and related spare engines.

In addition, in response to the travel restrictions and advisories, decreased demand and other effects the COVID-19 pandemic has had and is expected to have on the Company's business, the Company currently intends to continue to seek material amounts of additional financial liquidity in the short-term, which may include additional drawings of loans under the Loan Program of the CARES Act, the issuance of additional unsecured or secured debt securities, equity securities and equity-linked securities, the sale of assets as well as additional bilateral and syndicated secured and/or unsecured credit facilities, among other items.

There can be no assurance as to the timing of any such incurrence or issuance, which may be in the near term, or that any such additional financing will be completed on favorable terms, or at all. As of September 30, 2020, we had total long-term debt of \$26.9 billion, \$4.7 billion available for borrowing under the Loan Program under the CARES Act and \$1.0 billion available for borrowing under our revolving credit facility. Subject to final approval by Treasury and both the availability of, and agreement on, collateral, we expect to have up to \$2.3 billion of additional availability under the Loan Program under the CARES Act.

The Company's substantial level of indebtedness, the Company's non-investment grade credit ratings and the availability of Company assets as collateral for loans or other indebtedness, which available collateral has been reduced as a result of CARES Act Loan Program borrowings and any other future liquidity-raising transactions, may make it difficult for the Company to raise additional capital if needed to meet its liquidity needs on acceptable terms, or at all.

Although the Company's cash flows from operations and its available capital, including the proceeds from financing transactions, have been sufficient to meet its obligations and commitments to date, the Company's liquidity has been, and may in the future be, negatively affected by the risk factors discussed elsewhere in this "Risk Factors" section of the prospectus supplement and in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as updated by the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, including risks related to future results arising from the COVID-19 pandemic. If the Company's liquidity is materially

diminished, the Company's cash flow available for general corporate purposes may be materially and adversely affected. In particular, with respect to the MileagePlus Financing, the cash flows generated by the MileagePlus business are required to first satisfy interest and principal due thereunder. Therefore, the cash generated by the MileagePlus program is not fully available for our operations or to satisfy our other indebtedness obligations for the seven-year term of the MileagePlus Financing debt. This limitation on our cash flows could have a material adverse effect on our operations and flexibility.

A material reduction in the Company's liquidity could also result in the Company not being able to timely pay its leases and debts or comply with material provisions of its contractual obligations, including covenants under its financing and credit card processing agreements. Moreover, as a result of the Company's financing activities in response to the COVID-19 pandemic, the number of financings with respect to which such covenants and provisions apply has increased, thereby subjecting the Company to more substantial risk of cross-default and cross-acceleration in the event of breach, and additional covenants and provisions could become binding on the Company as it continues to seek additional liquidity. In addition, several of the Company's debt agreements contain covenants that, among other things, restrict the ability of the Company and its subsidiaries to incur additional indebtedness. The Company has agreements with financial institutions that process customer credit card transactions for the sale of air travel and other services. Under certain of the Company's credit card processing agreements, the financial institutions in certain circumstances have the right to require that the Company maintain a reserve equal to a portion of advance ticket sales that have been processed by that financial institution, but for which the Company has not yet provided the air transportation. Such financial institutions may require cash or other collateral reserves to be established or withholding of payments related to receivables to be collected, including if the Company does not maintain certain minimum levels of unrestricted cash, cash equivalents and short-term investments. In light of increased demand for refunds on their tickets, and we anticipate some level of increased demand for refunds on tickets will continue to be the case for the near future. Refunds lower our liquidity and put us at risk of triggering liquidity covenants in these processing agreements and, in doing so, could force us to post cash collateral w

In addition to the foregoing, the degree to which we are leveraged could have important consequences to holders of our securities, including the following:

- we must dedicate a substantial portion of cash flow from operations to the payment of principal and interest on applicable indebtedness, which, in turn, reduces funds available for operations and capital expenditures;
- · our flexibility in planning for, or reacting to, changes in the markets in which we compete may be limited;
- we may be at a competitive disadvantage relative to our competitors with less indebtedness;
- we are rendered more vulnerable to general adverse economic and industry conditions;
- we are exposed to increased interest rate risk given that a portion of our indebtedness obligations are at variable interest rates; and
- · our credit ratings may be reduced and our debt and equity securities may significantly decrease in value.

Finally, as of September 30, 2020, the Company had \$12.1 billion in variable rate indebtedness, all or a portion of which uses London interbank offered rates ("LIBOR") as a benchmark for establishing applicable rates. As announced in July 2017, LIBOR is expected to be phased out by the end of 2021.

Although many of our LIBOR-based obligations provide for alternative methods of calculating the interest rate payable if LIBOR is not reported, the extent and manner of any future changes with respect to methods of calculating LIBOR or replacing LIBOR with another benchmark are unknown and impossible to predict at this time and, as such, may result in interest rates that are materially higher than current interest rates. If interest rates applicable to the Company's variable interest indebtedness increase, the Company's interest expense will also increase, which could make it difficult for the Company to make interest payments and fund other fixed costs and, in turn, adversely impact our cash flow available for general corporate purposes.

See Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 for additional information regarding the Company's liquidity as of September 30, 2020.

If we are not able to comply with the covenants in the MileagePlus Financing agreements, our lenders could accelerate the MileagePlus indebtedness, foreclose upon the collateral securing the MileagePlus indebtedness or exercise other remedies, which would have a material adverse effect on our business, results of operations and financial condition.

The covenants in the agreements governing the MileagePlus Financing contain a number of provisions that will limit our ability to modify aspects of the MileagePlus program if such modifications would be reasonably expected to have a material adverse effect on the MileagePlus program or on our ability to pay the obligations under the MileagePlus Financing agreements. Moreover, the terms of such agreements also place certain restrictions on our establishing or owning another mileage or loyalty program and our ability to make material modifications to our agreements with certain MileagePlus partners. Furthermore, the MileagePlus Financing may also negatively affect certain material business relationships, and if any such relationship were to be materially impaired and/or terminated, we could experience a material adverse effect on our business, results of operations and financial condition.

The agreements governing the MileagePlus Financing restrict our ability to terminate or modify the intercompany agreements governing the relationship between United and the MileagePlus program, including the agreement governing the rate that United must pay MPH for the purchase of miles and United's obligation to make certain seat inventory available to MPH for redemption. Such restrictions are in addition to restrictions on the ability of the obligors under the MileagePlus indebtedness to make restricted payments, incur additional indebtedness, dispose of, create or incur certain liens on, or transfer or convey, the collateral securing the MileagePlus indebtedness, enter into certain transactions with affiliates, merge, consolidate, or sell assets, or designate certain subsidiaries as unrestricted. Complying with these covenants may restrict our ability to make material changes to the operation of the MPH business and may limit our ability to take advantage of business opportunities that may be in our long-term interest. We may also take actions, or omit to take actions, to comply with such covenants that could have a material adverse effect on our business and operations.

Our failure to comply with any of these covenants or restrictions could result in a default under the agreements governing the MileagePlus Financing, which could lead to an acceleration of the debt under such instruments and, in some cases, the acceleration of debt under other instruments that contain cross-default or cross-acceleration provisions, each of which could have a material adverse effect on us. In the case of an event of default under the agreements governing the MileagePlus Financing agreements, or a cross-default or cross-acceleration under our other indebtedness, we may not have sufficient funds available to make the required payments. If we are unable to repay amounts owed under the agreements governing the MileagePlus Financing, the lenders or noteholders thereunder may choose to exercise their remedies in respect of the collateral securing such indebtedness, including foreclosing upon the MileagePlus collateral, in which case we would lose the right to operate the MileagePlus program thereafter. The exercise of such remedies, especially the loss

of the MileagePlus program, would have a material adverse effect on our business, results of operations and financial condition.

In connection with the MileagePlus Financing, we were required to contribute certain assets, including certain MileagePlus intellectual property, including brands and member data, to Mileage Plus Intellectual Property Assets, Ltd., an indirect wholly-owned subsidiary of MPH structured to be bankruptcy remote that serves as a co-issuer of the MileagePlus Financing indebtedness, the assets of which subsidiary are collateral for such indebtedness. United and MPH will have the right to use the contributed intellectual property pursuant to a license agreement with MIPA. Such license agreement will be terminated, and our right to use such intellectual property will cease, upon specified termination events, including, but not limited to, our failure to assume the license agreement and various related intercompany agreements in a restructuring process. The termination of the license agreement would be an event of default under the agreements governing the MileagePlus Financing and in certain circumstances would trigger a liquidated damages payment in an amount that is several multiples of the principal amount of the MileagePlus Financing debt. Thus, the terms of the MileagePlus Financing limit our flexibility to manage our capital structure going forward, and as a result, in the future we may take actions to ensure that the MileagePlus Financing debt is satisfied or that the lenders' remedies under such debt are not exercised, potentially to the detriment of our other creditors.

The Company's ability to use its net operating loss carryforwards and certain other tax attributes to offset future taxable income for U.S. federal income tax purposes may be significantly limited due to various circumstances, including certain possible future transactions involving the sale or issuance of UAL common stock, or if taxable income does not reach sufficient levels

As of September 30, 2020, UAL reported consolidated federal net operating loss ("NOL") carryforwards of approximately \$8.2 billion.

The Company's ability to use its NOL carryforwards and certain other tax attributes to offset future taxable income may be limited if it experiences an "ownership change" as defined in Section 382 ("Section 382") of the Internal Revenue Code of 1986, as amended (the "Code"). An ownership change generally occurs if certain stockholders increase their aggregate percentage ownership of a corporation's stock by more than 50 percentage points over their lowest percentage ownership at any time during the testing period, which is generally the three-year period preceding any potential ownership change.

There is no assurance that the Company will not experience a future ownership change under Section 382 that may significantly limit its ability to use its NOL carryforwards or certain other tax attributes. Potential future transactions involving the sale or issuance of UAL common stock may increase the possibility that the Company will experience a future ownership change under Section 382. Such transactions may include the exercise of warrants issued in connection with the CARES Act programs, the issuance of UAL common stock upon the conversion of any convertible debt that UAL may issue in the future, the repurchase of any debt with UAL common stock, any issuance of UAL common stock for cash, and the acquisition or disposition of any stock by a stockholder owning 5% or more of the outstanding shares of UAL common stock, or a combination of the foregoing.

Under Section 382, a future ownership change would subject the Company to additional annual limitations that apply to the amount of pre-ownership change NOLs and certain other tax attributes that may be used to offset post-ownership change taxable income. For NOLs, this limitation is generally determined by multiplying the value of a corporation's stock immediately before the ownership change by the applicable long-term tax-exempt rate. Any unused annual limitation may, subject to certain limits, be carried over to later years, and the limitation may, under certain circumstances, be increased by built-in gains in the assets held by such corporation at the time of the ownership change. This limitation could cause the Company's U.S. federal income taxes to be greater, or to be paid earlier,

than they otherwise would be, and could cause a portion of the Company's NOLs and certain other tax attributes to expire unused. Similar rules and limitations may apply for state income tax purposes. The Company's ability to use its NOL carryforwards and certain other tax attributes will also depend on the amount of taxable income it generates in future periods. As a result, certain of the Company's NOL carryforwards and other tax attributes may expire before it can generate sufficient taxable income to use them in full.

COVID-19 has materially disrupted our strategic operating plans in the near-term, and there are risks to our business, operating results and financial condition associated with executing our strategic operating plans in the long-term.

COVID-19 has materially disrupted our strategic operating plans in the near-term, and there are risks to our business, operating results and financial condition associated with executing our strategic operating plans in the long-term. In recent years, we have announced several strategic operating plans, including several revenue-generating initiatives and plans to optimize our revenue, such as our plans to add capacity, including international expansion and new or increased service to mid-size airports, initiatives and plans to optimize and control our costs and opportunities to enhance our segmentation and improve the customer experience at all points in air travel. In developing our strategic operating plans, we make certain assumptions, including, but not limited to, those related to customer demand, competition, market consolidation, the availability of aircraft and the global economy. Actual economic, market and other conditions have been and may continue to be different from our assumptions. For example, in 2019, our capacity growth was lower than planned due to the grounding of The Boeing Company ("Boeing") 737 MAX aircraft, among other factors, which adversely impacted our ability to execute our strategic operating plans. If we do not successfully execute or adjust our strategic operating plans in the long-term, or if actual results continue to vary significantly from our prior assumptions or vary significantly from our future assumptions, our business, operating results and financial condition could be materially and adversely impacted.

## The mandatory grounding of the Boeing 737 MAX aircraft may have a material adverse effect on our business, operating results and financial condition.

On March 13, 2019, the Federal Aviation Administration (the "FAA") issued an emergency order prohibiting the operation of Boeing 737 MAX series aircraft by U.S. certificated operators (the "FAA Order"). As a result, the Company grounded all 14 Boeing 737 MAX 9 aircraft in its fleet, and Boeing also suspended deliveries of new Boeing 737 MAX series aircraft. The Company does not know whether, on what conditions or when the MAX grounding will end. The long-term operational and financial impact of this grounding is uncertain and could negatively affect the Company based on a number of factors, including, among others, the period of time the aircraft are unavailable, the availability of replacement aircraft, to the extent needed, and the circumstances of any reintroduction of the grounded aircraft to service.

In 2019, the grounding affected the delivery of 16 Boeing 737 MAX aircraft that were scheduled for delivery and were not delivered, and it is also expected to affect the timing of future Boeing 737 MAX aircraft deliveries, including the Boeing 737 MAX aircraft of which the Company planned to take delivery in 2020. The extent of the delay of future deliveries is expected to be impacted by the length of time the FAA Order remains in place, Boeing's production rate and the pace at which Boeing can deliver aircraft following the lifting of the FAA Order, among other factors, and these factors have been and could continue to be significantly impacted by the COVID-19 pandemic.

In addition, if the FAA Order is not lifted by the two-year anniversary of its issuance, an event of loss is likely to occur under certain of the Company's financing documents related to the Boeing 737 MAX aircraft. An event of loss would require the Company to prepay at par approximately \$450 million of indebtedness incurred to finance these aircraft. The Company expects that it would be

able to refinance any such prepayment; however, there can be no assurances that the Company's refinancing would be successful.

In response to the grounding, the Company has made adjustments to its flight schedule and operations, including substituting replacement aircraft on routes originally intended to be flown by Boeing 737 MAX aircraft. In 2019, the grounding impacted the Company's ability to implement its strategic growth strategy, reducing the Company's scheduled capacity from its planned capacity, and resulted in increased costs as well as lower operating revenue. Furthermore, in 2020, demand has been, and is expected to continue to be, significantly impacted by COVID-19, which, in addition to the grounding of the Boeing 737 MAX aircraft, has materially disrupted the timely execution of our plans to add capacity in 2020. The Company had discussions with Boeing regarding compensation from Boeing for the Company's financial damages related to the grounding of the airline's Boeing 737 MAX aircraft, and in March 2020, the Company entered into a confidential settlement with Boeing with respect to compensation for financial damages incurred in 2019. The settlement agreement was amended and restated in June 2020 to provide for the settlement of additional items related to aircraft delivery and to update the scheduled delivery for substantially all undelivered Boeing 737 MAX aircraft.

## Disruptions to our regional network and United Express flights provided by third-party regional carriers could adversely affect our business, operating results and financial condition.

The Company has contractual relationships with various regional carriers to provide regional aircraft service branded as United Express. These regional operations are an extension of the Company's mainline network and complement the Company's operations by carrying traffic that connects to mainline service and allows flights to smaller cities that cannot be provided economically with mainline aircraft. The Company's business and operations are dependent on its regional flight network, with regional capacity accounting for approximately 11% and 15% of the Company's total capacity for the year ended December 31, 2019 and nine months ended September 30, 2020, respectively.

Although the Company has agreements with its regional carriers that include contractually agreed performance metrics, each regional carrier is a separately certificated commercial air carrier, and the Company does not control the operations of these carriers. A number of factors may impact the Company's regional network, including weather-related effects and seasonality. In addition, the decrease in qualified pilots driven by changes to federal regulations has adversely impacted and could continue to affect the Company's regional flying. For example, the FAA's expansion of minimum pilot qualification standards, including a requirement that a pilot have at least 1,500 total flight hours, as well as the FAA's revised pilot flight and duty time requirements under Part 117 of the Federal Aviation Regulations, have contributed to a smaller supply of pilots available to regional carriers. The decrease in qualified pilots resulting from the regulations as well as factors including a decreased student pilot population and a shrinking U.S. military from which to hire qualified pilots, could adversely impact the Company's operations and financial condition, and could also require the Company to reduce regional carrier flying.

The significant decline in demand for air travel services resulting from the COVID-19 pandemic has also materially impacted demand for regional carrier services and, as a result, the Company's utilization of its regional network is significantly reduced and is expected to remain so for the foreseeable future. We expect the disruption to services resulting from the COVID-19 pandemic to continue to adversely affect our regional carriers, some of which may declare bankruptcy or otherwise cease to operate, and we may also incur damages to our regional carriers under our agreements with them. If, as a result of the COVID-19 pandemic or another significant disruption to our regional network, one or more of the regional carriers with which the Company has relationships is unable to perform its obligations over an extended period of time, there could be a material adverse effect on the

Company's business, operating results and financial condition. In addition, although our need for regional carrier services is materially lower than in prior years, we may be obligated to make minimum payments under one or more of our contracts with our regional providers that are in excess of the cost of the services we currently require from them.

Our significant investments in other airlines, including in other parts of the world, and the commercial relationships that we have with those carriers may not produce the returns or results we expect.

An important part of our strategy to expand our global network has included making significant investments in airlines both domestically and in other parts of the world and expanding our commercial relationships with these carriers. For example, in January 2019, we completed the acquisition of a 49.9% interest in ManaAir LLC ("ManaAir"), which, as of immediately following the closing of that investment, owns 100% of the equity interests in ExpressJet Airlines, LLC, a domestic regional airline ("ExpressJet"). We also have minority equity interests in CommutAir and Republic Airways Holdings Inc. See Note 9 to the financial statements included in Part II, Item 8 of the Company's Annual Report on Form 10-K for the year ended December 31, 2019 and Note 9 to the financial statements included in Part I, Item 1 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 for additional information regarding our investments in regional airlines. We also have significant investments in Latin American airlines, including significant investments in Avianca Holdings, S.A. ("AVH") and BRW Aviation LLC ("BRW"), an affiliate of Synergy Aerospace Corporation and the majority shareholder of AVH, and an equity investment in Azul Linhas Aéreas Brasileiras S.A. ("Azul"). In the future, our regional and global business strategy could include entering into joint business arrangements ("JBAs"), commercial agreements and strategic alliances with other carriers, and possibly making loan transactions with, and non-controlling investments in, such carriers.

These transactions and relationships involve significant challenges and risks, and we face competition in forming and maintaining these relationships, since there are a limited number of potential arrangements and other airlines are looking to enter into similar relationships. We are dependent on these other carriers for significant aspects of our network in the regions in which they operate. While we work closely with these carriers, each is a separately certificated commercial air carrier, and we do not have control over their operations, strategy, management or business methods. And not only are these airlines subject to a number of the same risks as our business, which are described by the risk factors discussed elsewhere in this "Risk Factors" section of the prospectus supplement and in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as updated by the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, including the impact of the COVID-19 pandemic, competitive pressures on pricing, demand and capacity, changes in aircraft fuel pricing, and the impact of global and local political and economic conditions on operations and customer travel patterns, among others, they are also subject to their own distinct financial and operational risks.

As a result of these and other factors, we may not realize satisfactory returns on our investments, and we may not receive repayment of any invested or loaned funds. Further, these investments may not generate the revenue or operational synergies we expect, and they may distract management focus from our operations or other strategic options. Finally, our reliance on these other carriers in the regions in which they operate may negatively impact our regional and global operations and results if those carriers continue to be impacted by the COVID-19 pandemic and other general business risks discussed above or perform below our expectations or needs and are not able to effectively mitigate these impacts or restore performance levels. Any one or more of these events could have a material adverse effect on our operating results or financial condition.

We have recently notified ExpressJet that prior to the end of 2020 we will withdraw all aircraft from our capacity purchase agreement with ExpressJet; as a result, ExpressJet and ManaAir may be dissolved. See Notes 8 and 9 to the financial statements included in Part II, Item 8 of the Company's Annual Report on Form 10-K for the year ended December 31, 2019 and Notes 7, 8 and 9 to the financial statements included in Part I, Item 1 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 for additional information regarding our investments in AVH and Azul and our capacity purchase arrangements with ExpressJet, respectively. See also the additional risks with respect to our investment in AVH described in this Prospectus Supplement.

We may also be subject to consequences from any illegal conduct of JBA partners, including for failure to comply with anti-corruption laws such as the U.S. Foreign Corrupt Practices Act. Furthermore, our relationships with these carriers may be subject to the laws and regulations of non-U.S. jurisdictions in which these carriers are located or conduct business. In addition, any political or regulatory change in these jurisdictions that negatively impacts or prohibits our arrangements with these carriers could have an adverse effect on our operating results or financial condition. To the extent that the operations of any of these carriers are disrupted over an extended period of time (including as a result of the COVID-19 pandemic) or their actions subject us to the consequences of failure to comply with laws and regulations, our operating results may be adversely affected.

## Our significant investments in AVH and its affiliates, and the commercial relationships that we have with Avianca may not produce the returns or results we expect.

In November 2018, as part of our global network strategy, United entered into a revenue-sharing joint business arrangement ("JBA") with Aerovías del Continente Americano S.A. ("Avianca"), a subsidiary of Avianca Holdings, S.A. ("AVH"), Copa Airlines and several of their respective affiliates, subject to regulatory approval. Concurrently with this transaction, United, as lender, entered into a Term Loan Agreement (the "BRW Term Loan Agreement") with, among others, BRW Aviation Holding LLC ("BRW Holding") and BRW Aviation LLC ("BRW"), as guarantor and borrower, respectively. Pursuant to the BRW Term Loan Agreement, United provided to BRW a \$456 million term loan (the "BRW Term Loan"), secured by a pledge of BRW's equity, as well as BRW's 516 million common shares of AVH (which are eligible to be converted into the same number of preferred shares, which may be deposited with the depositary for AVH's American Depositary Receipts ("ADRs"), the class of AVH securities that trades on the New York Stock Exchange (the "NYSE"), in exchange for 64.5 million ADRs) (such shares and equity, collectively, the "BRW Loan Collateral"). In connection with funding the BRW Term Loan Agreement, the Company entered into an agreement with Kingsland Holdings Limited, AVH's largest minority shareholder ("Kingsland"), pursuant to which United granted to Kingsland a right to put its AVH common shares to United at market price on the fifth anniversary of the BRW Term Loan Agreement or upon certain sales of AVH common shares owned by BRW, including upon a foreclosure of United's security interest or any completed liquidation or dissolution of AVH, and also guaranteed BRW's obligation to pay Kingsland the excess, if any, of \$12 per ADR on the NYSE and such market price of AVH common shares on the fifth anniversary, or upon any such sale, as applicable (the "Cooperation Payment"), for an aggregate maximum possible combined put payment and guarantee amount of \$217 million. See Notes 7 and 9 to the financial statements included in Part I, Item

BRW is currently in default under the BRW Term Loan Agreement. In order to protect the value of its collateral, on May 24, 2019, United began to exercise certain remedies available to it under the terms of the BRW Term Loan Agreement and related documents. In connection with the delivery by United of a notice of default to BRW, and in accordance with the agreements related to the BRW Term Loan Agreement, Kingsland was granted authority to manage BRW, which remains the majority shareholder of AVH. After a hearing on September 26, 2019, a New York state court granted

Kingsland summary judgment authorizing it to foreclose on the BRW Loan Collateral under the BRW Term Loan Agreement. Kingsland then continued with the foreclosure process intended to result in a judicially supervised sale of the BRW Loan Collateral. The New York state court also granted Kingsland's motion for a preliminary injunction that, among other things, enjoins BRW Holding from interfering with Kingsland's ability to exercise voting and other rights in certain equity interests in BRW. These rulings are intermediate steps in the judicial foreclosure process in New York and are subject to appeal.

The judicial foreclosure process is subject to significant uncertainty given the filing by AVH and certain of its affiliates of voluntary reorganization proceedings under Chapter 11 of the United States Bankruptcy Code in the U.S. Bankruptcy Court for the Southern District of New York on May 10, 2020 (as described in more detail below, the "AVH Reorganization Proceedings"). In light of the AVH Reorganization Proceedings, the New York state court judge presiding over the foreclosure proceedings agreed to stay those proceedings until later this year. The repayment of the BRW Term Loan is dependent on this judicial foreclosure process and the value of the BRW Loan Collateral, if any, during or upon the conclusion of he AVH Reorganization Proceedings, and there is no assurance that a judicial foreclosure sale will be completed, or, if completed, will result in the full satisfaction of all of the obligations under the BRW Term Loan, including the obligation to repay United for any payment made in respect of our guarantee of the Cooperation Payment. In that regard, based on United's assessment of AVH's financial uncertainty and the fact that Avianca had ceased operations as a consequence of the COVID-19 pandemic, during the first quarter of 2020, the Company recorded a \$697 million expected credit loss allowance for the BRW Term Loan and the Cooperation Payment. Even if a foreclosure sale of the BRW Loan Collateral were to proceed, the amount we receive from such a foreclosure sale may be inadequate to fully pay the amounts owed to us by BRW (including in respect of any payment we make in respect of the Cooperation Payment, if any) and our costs incurred to foreclose, repossess and sell the collateral. In addition, our ability to enforce a deficiency judgment against BRW or BRW Holding in the event that the proceeds from the sale of the BRW Loan Collateral in the judicial foreclosure are insufficient to repay the full amount of the BRW Term Loan may be limited. Any of these circumstances may lead to a loss or delay i

In November 2019, United entered into a senior secured convertible term loan agreement (the "AVH Convertible Loan Agreement") with, among others, AVH, as borrower, for the provision by the lenders thereunder (including United) to AVH of convertible term loans for general corporate purposes. In December 2019, United provided such a convertible term loan to AVH under the AVH Convertible Loan Agreement in the aggregate amount of \$150 million (the "AVH Convertible Loan"). See Notes 7 and 9 to the financial statements included in Part I, Item 1 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 for additional information regarding our investments in AVH and its affiliates and our guarantee of the Cooperation Payment, respectively.

Upon the commencement of the AVH Reorganization Proceedings, an automatic stay was imposed that prohibits us from attempting to collect pre-bankruptcy debts from AVH or its properties, including repayment of the AVH Convertible Loan, and any other claims we may have against AVH or its affiliates unless we obtain relief from the automatic stay from the Bankruptcy Court. The AVH Convertible Loan is secured by a pledge of equity interests in certain of AVH's major subsidiaries, including LifeMiles, Ltd., the indirect subsidiary of AVH that owns and operates the LifeMiles frequent flier program and did not file for bankruptcy protection ("LifeMiles"), and, until released, certain Colombian Peso-denominated credit card receivables owing to Avianca, a guarantor under the AVH Convertible Loan Agreement. On October 5, 2020, U.S. Bankruptcy Court for the Southern District of

New York approved an approximately \$2 billion debtor-in-possession financing (the "AVH DIP Financing"), which was then consummated on October 13, 2020. Pursuant to the AVH DIP Financing, the AVH Convertible loan was refinanced, or "rolled up", into the AVH DIP Financing without any investment of new funds by United. As a result, United is a Tranche B DIP lender in the AVH DIP Financing to the extent of the principal and interest owed on the AVH Convertible Loan (or less, under certain circumstances). United's Tranche B loan accrues interest at a rate of 14.5% per annum and can be converted, at AVH's option in certain circumstances, into equity upon AVH's exit from bankruptcy. As part of the AVH DIP Financing, the U.S. Bankruptcy Court for the Southern District of New York also approved certain amendments to the alliance agreement and certain related agreements among United, Avianca and some of Avianca's subsidiaries and additional arrangements among those parties applicable to whether AVH accepts or rejects the JBA at or prior to the end of the bankruptcy case. There is no guarantee that United's participation in the AVH DIP Financing will produce the results expected or result in the ultimate repayment to United of the amounts initially loaned under the AVH Convertible Loan. While United's position as an AVH DIP Financing lender provides it with priority secured claims and liens that have been approved by the Bankruptcy Court, the duration of the AVH Reorganization Proceedings is difficult to predict, and United's recovery on its claims, including possibly repayment or conversion of its Tranche B DIP Loans, may be adversely affected by, among other things, delays while a plan of reorganization is being negotiated and approved by creditors entitled to vote on it and whether such plan or reorganization is confirmed by the Bankruptcy Court and subsequently becomes effective.

These transactions and relationships involve significant challenges and risks, particularly given the AVH Reorganization Proceedings, the impact of the COVID-19 pandemic and the judicial foreclosure process to which the repayment of the BRW Term Loan is subject. Furthermore, while we have worked closely with Avianca in connection with the JBA, and have supported AVH by providing capital in the form of the AVH Convertible Loan, Avianca is a separately certificated commercial air carrier, and we do not have control over its or AVH's operations, strategy, management or business methods. Avianca is also subject to a number of the same risks as our business, which are described elsewhere in this "Risk Factors" section of the prospectus supplement and in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as updated by the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, including the impact of the COVID-19 pandemic, competitive pressures on pricing, demand and capacity, changes in aircraft fuel pricing, and the impact of global and local political and economic conditions on operations and customer travel patterns, among others, as well as to its own distinct financial and operational risks.

As a result of these and other factors, including the AVH Reorganization Proceedings and delays in foreclosure proceedings, we may not receive full (or any) repayment of our BRW Term Loan (including any payment we make in respect of the Cooperation Payment), our AVH Convertible Loan or our participation, if any, in the AVH DIP Financing, and we may be unable to realize the full (or any) value of the BRW Loan Collateral or the collateral securing the AVH Convertible Loan or the AVH DIP Financing, as applicable. As a consequence, we may not realize a satisfactory (or any) return on our invested or loaned funds with respect to BRW, AVH and its affiliates.

Further, these investments may not generate the revenue or operational synergies we expect, and they may distract management focus from our operations or other strategic options. Finally, our reliance on Avianca in the region in which it operates may negatively impact our global operations and results if AVH does not successfully emerge from the AVH Reorganization Proceedings or the COVID-19 pandemic, if the JBA is rejected in connection with the AVH Reorganization Proceedings or if AVH is otherwise impacted by general business risks or performs below our expectations or needs. Any one or more of these events could have a material adverse effect on our operating results or financial condition.

The Company may never realize the full value of its intangible assets or its long-lived assets causing it to record impairments that may negatively affect its financial condition and operating results.

In accordance with applicable accounting standards, the Company is required to test its indefinite-lived intangible assets for impairment on an annual basis, or more frequently where there is an indication of impairment. In addition, the Company is required to test certain of its other assets for impairment where there is any indication that an asset may be impaired.

The Company may be required to recognize losses in the future due to, among other factors, extreme fuel price volatility, tight credit markets, government regulatory changes, decline in the fair values of certain tangible or intangible assets, such as aircraft, route authorities, airport slots and frequent flyer database, unfavorable trends in historical or forecasted results of operations and cash flows and an uncertain economic environment, as well as other uncertainties. For example, during the nine months ended September 30, 2020, the Company recorded impairment charges of \$130 million, respectively, for its China routes, primarily as a result of the COVID-19 pandemic and the Company's subsequent suspension of flights to China. In addition, in 2019 and 2018, the Company recorded impairment charges of \$90 million and \$206 million, respectively, associated with its Hong Kong routes, resulting in the full impairment of these assets. The Company can provide no assurance that a material impairment loss of tangible or intangible assets will not occur in a future period, and the risk of future material impairments has been significantly heightened as result of the effects of the COVID-19 pandemic on our flight schedules and business. The value of the Company's aircraft could also be impacted in future periods by changes in supply and demand for these aircraft. Such changes in supply and demand for these aircraft. An impairment loss could have a material adverse effect on the Company's financial condition and operating results.

#### Risk Factors Relating to the Certificates and the Offering

## The Equipment Note will not be an obligation of UAL.

The Equipment Note to be held for the Trust will be the obligation of United. Neither UAL nor any of its subsidiaries (other than United) is required to become an obligor with respect to, or a guarantor of, the Equipment Note. You should not expect UAL or any of its subsidiaries (other than United) to participate in making payments in respect of the Equipment Note.

### The Appraisals are only estimates of Collateral value.

One independent appraisal and consulting firm has prepared an appraisal of the Spare Parts, and three such firms have prepared appraisals of the Spare Engines and the Aircraft. In addition, one of such firms has prepared a report on the maintenance status of the Spare Engines and Aircraft for purposes of adjusting their Appraised Values based on their maintenance condition. Letters summarizing such appraisals and such maintenance report are annexed to this Prospectus Supplement as Appendix II. Such appraisals are based on varying assumptions and methodologies, which differ among the appraisers. Such appraisals and report were prepared without physical inspection of the Collateral (except in the case of the Spare Parts, for which a virtual inspection as discussed therein was conducted) based on information provided by United. In addition, the appraisals include certain assumptions regarding the equipment specifications and performance characteristics of the Spare Engines and Aircraft. However, the Security Documents relating to the Spare Engines and Aircraft permit United to make alterations and modifications to the Spare Engines and Aircraft and to remove parts therefrom, which may impact such assumptions. Also, as noted in the mba report, some Aircraft and Spare Engine Maintenance Adjusted Base Values are floored at salvage value. As such, the maintenance adjustments used for calculating Appraised Value is derived by subtracting the Half-Life Base Value from the Maintenance Adjusted Base Value. Appraisals and maintenance adjustments that are based on other assumptions and methodologies or other available information may result in

valuations or adjustments that are materially different from those contained in such appraisals or maintenance reports. See "Description of the Collateral and the Appraisals—The Appraisals".

An appraisal is only an estimate of value. It does not indicate the price at which a Spare Part, Spare Engine or Aircraft may be purchased from the applicable manufacturer. Nor should an appraisal be relied upon as a measure of realizable value, whether prepared based on current market value, such as the appraisal of the Spare Parts Collateral, or base value, such as the appraisals of the Spare Engines and Aircraft Collateral. The proceeds realized upon a sale of any Spare Part, Spare Engine or Aircraft may be less than its appraised value. In addition, the appraisals of the Aircraft and Spare Engines included in Appendix II provide projected future base values of such Collateral that were used to calculate the projected future loan-to-value statistics included in this prospectus supplement. Projected values are, by their nature, less accurate than current base values as they are based on dynamics that exist at the time the appraisal is prepared, which may be different than those that will exist at any time in the future.

The value of a Spare Part, Spare Engine or Aircraft if remedies are exercised under the applicable Security Documents will depend on market and economic conditions, the supply of similar spare parts, spare engines or aircraft, as the case may be, the availability of buyers, the condition of the Spare Part, Spare Engine or Aircraft, along with other factors. The supply of similar spare parts could be affected if a large operator of the equipment were to declare bankruptcy or liquidate its operations. Accordingly, there can be no assurance that the proceeds realized upon any such exercise of remedies would be sufficient to satisfy in full payments due on the Certificates. In addition, since spare parts are regularly used, refurbished, purchased, transferred and discarded in the ordinary course of business, the quantity of spare parts included in the Collateral and their appraised value may change over time. As the Appraisals and subsequent appraisal reports provide a collateral value as of a specific date, the actual value of the Collateral as of any other date may greatly differ from the value specified in such Appraisal or subsequent appraisal report.

#### Certain Limitations with respect to the Collateral

After the Issuance Date, United is required to provide to the Loan Trustee, on a semiannual basis, (i) in respect of the Spare Parts, an appraisal reflecting the current market value of the Spare Parts, (ii) in respect of the Spare Engines, an appraisal reflecting the maintenance-adjusted half-life base values of the Spare Engines, and (iii) in respect of the Aircraft, an appraisal reflecting the maintenance-adjusted half-life base value of each Aircraft. If any such subsequent appraisal indicates that the LTV Ratio with respect to any Collateral Group is greater than the Maximum LTV Threshold for such Collateral Group, United is required to provide additional collateral and/or to redeem some or all of the Equipment Note so that the LTV Ratio does not exceed such Maximum LTV Threshold. See "Description of the Collateral and the Appraisals—Semiannual LTV Test".

In order to satisfy this requirement, United may grant a lien for the benefit of the Equipment Note on Additional Collateral, or cash or certain investment securities. Section 1110 of the U.S. Bankruptcy Code, which provides special rights to holders of liens with respect to certain equipment (see "Description of the Equipment Note—Remedies"), would apply to any such Additional Collateral, but would not apply to any such cash or investment securities.

Any such grant of a lien or redemption of the Equipment Note by United could be subject to avoidance as a "preference" under Section 547 of the U.S. Bankruptcy Code if (1) it occurred within 90 days of a bankruptcy filing by United (or one year in the case of a redemption of the Equipment Note held by an "insider" of United within the meaning of the U.S. Bankruptcy Code and (2) it enabled the holder of such Equipment Note to receive more than it would receive if United were liquidated under Chapter 7 of the U.S. Bankruptcy Code and the grant of additional collateral or the redemption of such Equipment Note had not occurred, which would likely be the case if, at the time of the grant or redemption, such Equipment Note is undersecured.

The lien on the Spare Parts will not apply to any spare part for as long as it is installed on or being used in any aircraft, engine or other spare part so installed or being used. In addition, since spare parts are regularly used, refurbished, purchased, transferred and discarded in the ordinary course of United's business, the quantity and types of spare parts included in the Collateral and the appraised value of the Spare Parts will change over time. Furthermore, the security interest will not apply to a Spare Part not located at one of the designated locations specified pursuant to the Spare Parts Security Agreement.

On relevant test dates, United is required to keep certain levels of the Spare Parts at certain Designated Locations, subject to certain exceptions. See "Description of the Security Documents —Certain Provisions of the Spare Parts Security Agreement—Designated Locations". The lien of the Equipment Note will not apply to any spare part not located at a Designated Location.

# Inadequate levels of insurance may result in insufficient proceeds to repay the holder of the Equipment Note.

To the extent described in the Security Documents, we must maintain insurance on the Spare Parts, Spare Engines and Aircraft constituting Collateral. If we fail to maintain adequate levels of insurance, the proceeds that could be obtained upon an event of loss of any Spare Parts, a Spare Engine or an Aircraft may be insufficient to pay the amount required under the Security Documents.

# It may be difficult, expensive or impossible to exercise rights with respect to the Collateral.

There will be no general geographic restrictions on our ability to utilize the Spare Engines and the Aircraft. Subject to compliance with the terms of the Security Documents and applicable law, we may register and use any aircraft on which any Spare Engine is installed and the Aircraft in jurisdictions other than the United States. The Loan Trustee's rights and remedies in the event of acceleration of the Equipment Note could be significantly affected by the laws of the jurisdictions in which any aircraft on which any Spare Engine is installed or the Aircraft are registered or used as it may be more difficult (or, in some instances, impossible) as a practical or legal matter for the Loan Trustee to enforce its rights and remedies against any aircraft on which any Spare Engine is installed or the Aircraft, depending on the jurisdiction. Any such difficulty in enforcing a judgment or other rights against us, any Spare Engine or any Aircraft, or in repossessing, and subsequently selling such Spare Engine or Aircraft, could diminish the collateral proceeds available to repay amounts outstanding under the Equipment Note. In addition, upon repossession of a Spare Engine or Aircraft may need to be stored, insured, maintained, refurbished, perhaps modified and then remarketed. These enforcement costs can be significant and the incurrence of such costs could also result in less proceeds to repay the holder of the Equipment Note.

It may be difficult, time-consuming and expensive for the Trustee to exercise its remedies against the Spare Parts. The fact that the Spare Parts are not separately stored may introduce difficulties in identifying and separating them from other spare parts. Initially, there are 200 designated locations. Almost none of these designated locations are owned by United and it could be difficult for the Trustee to get access to these locations.

# Liens could impair the Loan Trustee's ability to repossess or resell the Collateral in a foreclosure.

In the normal course of business, liens that secure the payment of airport fees and taxes, custom duties, air navigation charges, landing charges, crew wages, repairer's charges, salvage or other obligations are likely, depending on the laws of the jurisdictions where the Collateral is located, to attach to Spare Parts, Spare Engines or Aircraft. The liens may secure substantial sums that may, in certain jurisdictions or for limited types of liens (particularly fleet liens), exceed the value of any particular Collateral to which the liens have attached. Until they are discharged, the liens described

above could impair the Loan Trustee's ability to repossess or resell the Collateral during foreclosure proceedings.

In some jurisdictions, liens may give the holder of such liens the right to detain or, in limited cases, sell or cause the forfeiture of Spare Parts, Spare Engines or Aircraft. If the Loan Trustee forecloses against the Collateral upon an acceleration of the Equipment Note, the Loan Trustee may, in some cases, find it necessary to pay the claims secured by such liens in order to repossess the Collateral or obtain the Collateral from another creditor.

# Certain Certificateholders may not participate in controlling the exercise of remedies in a default scenario.

If an Indenture Default is continuing, subject to certain conditions, the Loan Trustee will be directed by the "Controlling Party" in exercising remedies under the Security Documents, including accelerating the Equipment Note or foreclosing the lien on the Collateral securing such Equipment Note. See "Description of the Certificates—Indenture Defaults and Certain Rights Upon an Indenture Default".

The Controlling Party will be:

- The Class A Trustee.
- Under certain circumstances, and notwithstanding the foregoing, the Liquidity Provider (including, if any Class B Certificates or Class C Certificates are issued, any liquidity provider for the Class B Certificates and Class C Certificates) with the largest amount owed to it.

As a result of the foregoing, if the Trustee is not the Controlling Party, the Certificateholders will have no rights to participate in directing the exercise of remedies under the Security Documents.

# The Equipment Note may be redeemed without premium under certain circumstances.

Under certain circumstances, we can redeem a portion of the principal amount of the Equipment Note without premium. If an Event of Loss occurs with respect to a Spare Engine or Aircraft or we fail to satisfy the semiannual LTV test described under "Description of the Collateral and the Appraisals—Semiannual LTV Test", we may be required or choose to redeem a portion of the Equipment Note. If we are required or choose to redeem a portion of the Equipment Note under these circumstances, the redemption price will be equal to the principal amount of the note to be redeemed plus accrued and unpaid interest but without premium. The foregoing could have an adverse effect on an investor's expected return on the Certificates.

# The exercise of remedies over the Equipment Note may result in shortfalls without further recourse.

During the continuation of any Indenture Default, the Equipment Note may be sold, in whole or in part, in the exercise of remedies with respect to the Security Documents, subject to certain limitations. See "Description of the Intercreditor Agreement—Intercreditor Rights—Limitation on Exercise of Remedies". The market for the Equipment Note during any Indenture Default may be very limited, and there can be no assurance as to the price at which it could be sold. If the Equipment Note is sold for less than its outstanding principal amount, certain Certificateholders will receive a smaller amount of principal distributions under the Indenture than anticipated and will not have any claim for the shortfall against United, any Liquidity Provider or any Trustee.

# Cash collateral will not be entitled to the benefits of Section 1110.

Under certain circumstances, the Company is entitled to pledge cash or short-term investments as Cure Cash Collateral. However, any cash or investment collateral held under the Security Documents would not be entitled to the benefits of Section 1110 of the U.S. Bankruptcy Code.

# There are no restrictive covenants in the transaction documents relating to our ability to incur future indebtedness.

The Certificates, the Equipment Note and the underlying agreements will not (i) require us to maintain any financial ratios (other than as described under "Description of the Collateral and the Appraisals—Semiannual LTV Test") or specified levels of net worth, revenues, income, cash flow or liquidity and therefore do not protect Certificateholders in the event that we experience significant adverse changes in our financial condition or results of operations, (ii) limit our ability to incur additional indebtedness, pay dividends, repurchase our common stock or take other actions that may affect our financial condition or (iii) restrict our ability to pledge our assets other than the Collateral. In light of the absence of such restrictions, we may conduct our business in a manner that could cause the market price or liquidity of the Certificates to decline, could have a material adverse effect on our financial condition or the credit ratings of the Certificates or otherwise could restrict or impair our ability to pay amounts due under the Equipment Note and/or the related agreements.

# Any credit ratings assigned to the Certificates are not a recommendation to buy and may be lowered or withdrawn in the future.

Any credit rating assigned to the Certificates is not a recommendation to purchase, hold or sell the Certificates, because such rating does not address market price or suitability for a particular investor. A rating may change during any given period of time and may be lowered or withdrawn entirely by a rating agency if in its judgment circumstances in the future (including the downgrading of United or a Liquidity Provider) so warrant. Moreover, any change in a rating agency's assessment of the risks of aircraft-backed debt (and similar securities such as the Certificates) could adversely affect the credit rating issued by such rating agency with respect to the Certificates.

Any credit ratings assigned to the Certificates would be expected to be based primarily on the default risk of the Certificates, the availability of the Liquidity Facilities for the benefit of the holders of the Certificates, the value of the Collateral and the subordination provisions applicable to the Certificates under the Intercreditor Agreement. Such credit ratings would be expected to address the likelihood of timely payment of interest (at the applicable Stated Interest Rate and without any premium) when due on the Certificates and the ultimate payment of principal distributable under the Certificates by the applicable Final Maturity Date. Such credit ratings would not be expected to address the possibility of certain defaults, optional redemptions or other circumstances (such as an Event of Loss to any Collateral), which could result in the payment of the outstanding principal amount of the Certificates prior to the expected final Regular Distribution Date.

# There may be a limited market for resale of Certificates.

Prior to this Offering, there has been no public market for the Certificates. Neither United nor the Trust intends to apply for listing of the Certificates on any securities exchange or otherwise. The Underwriters may assist in resales of the Certificates, but they are not required to do so. A secondary market for the Certificates may not develop. If a secondary market does develop, it might not continue or it might not be sufficiently liquid to allow you to resell any of your Certificates.

# Credit risk retention regulation in Europe may adversely impact an investment in or the liquidity of the Certificates.

In Europe, there is increased political and regulatory scrutiny of the asset-backed securities industry. This has resulted in a number of measures for increased regulation which are currently at various stages of implementation and which may have an adverse impact on the regulatory capital charge to certain investors in securitization exposures or the incentives for certain investors to hold asset-backed securities and may thereby affect the price and liquidity of such securities.

Neither United nor any of its affiliates: (i) makes any representation as to compliance of the transactions contemplated herein with Regulation (EU) 2017/2402 (the "EU Securitization Regulation"), which has applied since January 1, 2019, or any guidelines or other materials published by the European Supervisory Authorities (jointly or individually) in relation thereto, the Draft Regulatory Technical Standards relating to risk retention published by the European Banking Authority on 31 July 2018 (the "Draft Securitization RTS") or any other delegated regulations of the European Commission (including the final enacted form of the Draft Securitization RTS) in each case as amended from time to time (the "EU Securitization Laws"), or any regulations, guidelines or other regulatory materials in respect of similar matters in the United Kingdom that are introduced following an exit of the United Kingdom from the European Union (the "UK Securitization Laws"), or regarding the regulatory capital treatment of the investment in the Certificates on the Issuance Date or at any time in the future; or (ii) undertakes to retain a material net economic interest in the Certificates in accordance with the EU Securitization Laws or UK Securitization Laws or provide any additional information or to take any other action that may be required to enable an affected investor to comply with any EU Securitization Laws or UK Securitization Laws or comply or enable compliance with the other requirements of the EU Securitization Laws or UK Securitization Laws; or (iii) accepts any responsibility to investors for the regulatory treatment of their investments in the Certificates by any regulatory authority in any jurisdiction. If the regulatory treatment of an investment in the Certificate is relevant to any investor's decision whether or not to invest, the investor should consult with its own legal, accounting and other advisors or its national regulator in determining its own regulatory position. Were the Certificates considered to be a "sec

Certain regulatory or legislative provisions applicable to certain investors may have the effect of limiting or restricting their ability to hold or acquire the Certificates, which, in turn, may adversely affect the ability of investors in the Certificates who are not subject to those provisions to resell their Certificates in the secondary market. No representation is made as to the proper characterization of the Certificates for legal, investment, financial institution regulatory, financial reporting or other purposes, as to the ability of particular investors to purchase the Certificates under applicable legal investment or other restrictions or as to the consequences of an investment in the Certificates for such purposes or under such restrictions.

Investors are themselves responsible for monitoring and assessing any changes to European risk retention laws and regulations (including UK Securitization Laws). There can be no assurances as to whether the transactions described herein will be affected by a change in law or regulation relating to the EU Securitization Laws or UK Securitization Laws, including as a result of any changes recommended in future reports or reviews. Investors should therefore make themselves aware of the EU Securitization Laws, the UK Securitization Laws, the EU Securitization (and any corresponding implementing rules of the relevant regulators), in addition to any other regulatory requirements that are (or may become) applicable to them or with respect to their investment in the Certificates.

## USE OF PROCEEDS

The proceeds from the sale of the Certificates being offered hereby will be used to purchase the Equipment Note issued by United on the Issuance Date.

United intends to use the proceeds from the sale of the Equipment Note to repay in full the \$2.0 billion aggregate principal amount outstanding under the term loan facility it entered into on March 9, 2020 (the "Used Aircraft Facility"), the \$500 million aggregate principal amount outstanding under the term loan facility it entered into on March 20, 2020 (the "Spare Parts Facility"), and the \$250 million aggregate principal amount outstanding under the term loan facility it entered into on April 7, 2020 (the "Spare Engines Facility" and together with the Used Aircraft Facility and the Spare Parts Facility, the "Bridge Facilities"). The proceeds from each Bridge Facility was used to pay certain transaction fees and expenses relating to such facility, and for working capital and other general corporate purposes of United. United will use any proceeds from the sale of the Equipment Note not used in connection with the repayment of the Bridge Facilities to pay fees and expenses relating to the Offering and for United's general corporate purposes.

The principal amount of the Used Aircraft Facility is payable in a single installment on March 7, 2021. Borrowings under the facility bear interest at a variable rate equal to LIBOR (but not less than 1% per annum), plus a margin per annum of 2.00%, 2.25% or 2.50% or (at United's election) another rate based on certain market interest rates, plus a margin of 1.00%, 1.25% or 1.50% per annum, in each case with such incremental increase to the margin occurring at 180 days and 270 days after closing under the facility, as applicable. The principal amount of the Spare Parts Facility is payable in a single installment on March 22, 2021. Borrowings under the facility bear interest at a variable rate equal to LIBOR (but not less than 1% per annum), plus a margin per annum of 2.75%, 3.00%, 3.25% or 3.50% or (at United's election) another rate based on certain market interest rates, plus a margin of 1.75%, 2.00%, 2.25% or 2.50% per annum, in each case with such incremental increase to the margin occurring at 90 days, 180 days and 270 days after closing under the facility, as applicable. The principal amount of the Spare Engines Facility is payable in a single installment on April 6, 2021. Borrowings under the facility bear interest at a variable rate equal to LIBOR (but not less than 1% per annum), plus a margin per annum of 3.00%, 3.25% or 3.50% or (at United's election) another rate based on certain market interest rates, plus a margin of 2.00%, 2.25% or 2.50% per annum, in each case with such incremental increase to the margin occurring at 180 days and 270 days after closing under the facility, as applicable. Certain of the underwriters are lenders under the Bridge Facilities and, as a result, may receive a significant portion of the net proceeds from this offering upon repayment of the Bridge Facilities.

The obligations of United under each of the Used Aircraft Facility, the Spare Parts Facility and the Spare Engines Facility are secured by liens on certain aircraft, spare parts and spare engines, respectively. Upon issuance of the Certificates and the Equipment Note and payment by United of amounts due under the Bridge Facilities, the liens on the collateral securing such applicable Bridge Facility will be released, including liens on assets that will serve as Collateral under the Equipment Note.

# THE COMPANY

United is a major U.S. commercial air carrier. The principal executive office of United is located at 233 S. Wacker Drive, Chicago, Illinois 60606, telephone (872) 825-4000.

### DESCRIPTION OF THE CERTIFICATES

The following summary describes the material terms of the Certificates. The summary does not purport to be complete and is qualified in its entirety by reference to all of the provisions of the Basic Agreement, which was included as an exhibit to the Company's Current Report on Form 8-K filed on October 9, 2012 with the Commission, and to all of the provisions of the Certificates, the Trust Supplement and the Intercreditor Agreement, each of which will be filed as an exhibit to a Current Report on Form 8-K to be filed by United with the Commission. The references to Sections in parentheses in the following summary are to the relevant Sections of the Basic Agreement unless otherwise indicated.

# General

Each Pass Through Certificate (collectively, the "Certificates") will represent a fractional undivided interest in the United Airlines 2020-1 Pass Through Trust (the "Trust"). (Section 2.01) The Trust will be formed pursuant to a pass through trust agreement between United and Wilmington Trust, National Association, as trustee (the "Trustee"), dated as of October 3, 2012 (the "Basic Agreement"), and the supplement thereto (the "Trust Supplement" and, together with the Basic Agreement, the "Pass Through Trust Agreement") between United and the Trustee, as trustee under the Trust.

The Trust Property of the Trust (the "Trust Property") will consist of:

- Subject to the Intercreditor Agreement, the Equipment Note acquired under the Note Purchase Agreement and issued on a recourse basis by United secured by the Collateral and all monies paid on such Equipment Note and any proceeds from any sale of such Equipment Note held in the Trust. The Equipment Note will be registered in the name of the Subordination Agent on behalf of the Trust for purposes of giving effect to the provisions of the Intercreditor Agreement.
- The rights of the Trust to acquire the Equipment Note under the Note Purchase Agreement.
- The rights of the Trust under the Intercreditor Agreement (including all monies receivable in respect of such rights).
- All monies receivable under the Liquidity Facilities for the Trust.
- Funds from time to time deposited with the Trustee in accounts relating to the Trust (such as interest and principal payments on the Equipment Note held in the Trust).

The Certificates will be issued in fully registered form only and will be subject to the provisions described below under "—Book-Entry; Delivery and Form". The Certificates will be issued only in denominations of \$1,000 or integral multiples thereof, except that one Certificate may be issued in a different denomination. (Section 3.01)

The Certificates represent interests in the Trust, and all payments and distributions thereon will be made only from the Trust Property. (Section 3.09) The Certificates do not represent an interest in or obligation of United, the Trustee, the Loan Trustee, any Liquidity Provider or any affiliate of any of the foregoing.

# **Investment Company Act Exemption**

The Trust is relying on an analysis that the Trust will not be deemed to be an "investment company" under Rule 3a-7 promulgated by the Commission under the Investment Company Act, although other exemptions or exclusions under the Investment Company Act may be available to the Trust.

# **Payments and Distributions**

Payments of principal, premium (if any) and interest on the Equipment Note or with respect to other Trust Property held in the Trust will be distributed by the Trustee to holders of the Certificates (the "Certificateholders") on the date receipt of such payment is confirmed, except in the case of certain types of Special Payments.

## Interest

The Equipment Note will accrue interest at the applicable rate per annum for Certificates set forth on the cover page of this Prospectus Supplement, payable on January 15, April 15, July 15 and October 15 of each year, commencing on January 15, 2021. Such interest payments will be distributed to Certificateholders on each such date until the final Distribution Date for such Trust, subject to the Intercreditor Agreement. Interest is calculated on the basis of a 360-day year consisting of twelve 30-day months.

Payments of interest applicable to the Certificates will be supported by the Liquidity Facilities to be provided by the Liquidity Providers for the benefit of the holders of such Certificates in an aggregate amount sufficient to pay interest thereon at the Stated Interest Rate for the Trust on up to six successive Regular Distribution Dates (without regard to any future payments of principal on such Certificates). The Liquidity Facilities do not provide for drawings or payments thereunder to pay for principal of or premium, if any, on the Certificates, any interest on the Certificates in excess of the Stated Interest Rate for such Certificates, or, notwithstanding the subordination provisions of the Intercreditor Agreement, principal of or interest or premium, if any, on any Additional Class of Certificates. Amounts available under the Liquidity Facilities are also not available to provide cash for the purposes of posting Cure Cash Collateral. Therefore, only the holders of the Certificates will be entitled to receive and retain the proceeds of drawings under the Liquidity Facilities. See "Description of the Liquidity Facilities".

# Principal

Payments of principal of the Equipment Note are scheduled to be received by the Trustee on January 15, April 15, July 15 and October 15 of each year, beginning on January 15, 2021.

## **Scheduled Payments**

Scheduled payments of interest or principal on the Equipment Note are herein referred to as "Scheduled Payments", and January 15, April 15, July 15 and October 15 of each year, commencing on January 15, 2021, until the final expected Regular Distribution Date are herein referred to as "Regular Distribution Dates". See "Description of the Equipment Note—Principal and Interest Payments". The "Final Maturity Date" for the Certificates is April 15, 2029.

## Distributions

The Trustee will distribute, subject to the Intercreditor Agreement, on each Regular Distribution Date to the Certificateholders all Scheduled Payments received in respect of the Equipment Note, the receipt of which is confirmed by the Trustee on such Regular Distribution Date. Each Certificateholder will be entitled to receive its proportionate share, based upon its fractional interest in the Trust, subject to the Intercreditor Agreement, of principal or interest on the Equipment Note. Each such distribution of Scheduled Payments will be made by the Trustee to the Certificateholders of record on the record date applicable to such Scheduled Payment subject to certain exceptions. (Sections 4.01 and 4.02(a)) If a Scheduled Payment is not received by the Trustee on a Regular Distribution Date but is received within five days thereafter, it will be distributed on the date received to such holders of record. If it is

received after such five-day period, it will be treated as a Special Payment and distributed as described below.

Any payment in respect of, or any proceeds of, the Equipment Note or Collateral under (and as defined in) the Indenture other than a Scheduled Payment (each, a "Special Payment") will be distributed on, in the case of an early redemption or a purchase of the Equipment Note, the date of such early redemption or purchase (which shall be a Business Day), and otherwise on the Business Day specified for distribution of such Special Payment pursuant to a notice delivered by the Trustee as soon as practicable after the Trustee has received funds for such Special Payment (each, a "Special Distribution Date"). Any such distribution will be subject to the Intercreditor Agreement.

"Triggering Event" means (x) the occurrence of an Indenture Default resulting in a PTC Event of Default with respect to the Certificates, (y) the acceleration of the outstanding Equipment Note or (z) certain bankruptcy or insolvency events involving United.

The Trustee, in the case of Trust Property, will mail a notice to the Certificateholders stating the scheduled Special Distribution Date, the related record date, the amount of the Special Payment and the reason for the Special Payment. In the case of a redemption or purchase of the Equipment Note or the occurrence of a Triggering Event, such notice will be mailed not less than 15 days prior to the date such Special Payment is scheduled to be distributed, and in the case of any other Special Payment, such notice will be mailed as soon as practicable after the Trustee has confirmed that it has received funds for such Special Payment. (Trust Supplement, Section 3.03) Each distribution of a Special Payment, other than a final distribution, on a Special Distribution Date will be made by the Trustee to the Certificateholders of record of the Trust on the record date applicable to such Special Payment. (Trust Supplement, 3.03) See "—Indenture Defaults and Certain Rights Upon an Indenture Default" and "Description of the Equipment Note—Redemption".

The Pass Through Trust Agreement requires that the Trustee establish and maintain, for the Trust and for the benefit of the Certificateholders, one or more non-interest bearing accounts (the "Certificate Account") for the deposit of payments representing Scheduled Payments received by the Trustee. The Pass Through Trust Agreement requires that the Trustee establish and maintain, for the Trust and for the benefit of the Certificateholders, one or more accounts (the "Special Payments Account") for the deposit of payments representing Special Payments received by the Trustee, which shall be non-interest bearing except in certain circumstances where the Trustee may invest amounts in such account in certain permitted investments. Pursuant to the terms of the Pass Through Trust Agreement, the Trustee is required to deposit any Scheduled Payments relating to the Trust received by it in the Certificate Account and to deposit any Special Payments so received by it in the Special Payments Account. (Section 4.01; Trust Supplement, Section 3.02) All amounts so deposited will be distributed by the Trustee on a Regular Distribution Date or a Special Distribution Date, as appropriate. (Section 4.02(a); Trust Supplement, Section 3.03)

The final distribution for the Trust will be made only upon presentation and surrender of the Certificates at the office or agency of the Trustee specified in the notice given by the Trustee of such final distribution. The Trustee will mail such notice of the final distribution to the Certificateholders, specifying the date set for such final distribution and the amount of such distribution. (Trust Supplement, Section 7.01(a)) See "—Termination of the Trust" below. Distributions in respect of Certificates issued in global form will be made as described in "—Book-Entry; Delivery and Form" below.

If any Distribution Date is a Saturday, Sunday or other day on which commercial banks are authorized or required to close in New York, New York, Chicago, Illinois or Wilmington, Delaware (any other day being a "Business Day"), distributions scheduled to be made on such Regular Distribution Date or Special Distribution Date will be made on the next succeeding Business Day without additional interest.

# **Pool Factors**

The "Pool Balance" for the Trust or for the Certificates indicates, as of any date, the original aggregate face amount of the Certificates less the aggregate amount of all payments as of such date made in respect of the Certificates other than payments made in respect of interest or premium or reimbursement of any costs or expenses incurred in connection therewith. The Pool Balance for the Trust or for the Certificates issued by the Trust as of any Distribution Date shall be computed after giving effect to any payment of principal of the Equipment Note or payment with respect to other Trust Property held in the Trust and the distribution thereof to be made on that date. (Trust Supplement, Section 2.01)

The "Pool Factor" for the Trust as of any Distribution Date is the quotient (rounded to the seventh decimal place) computed by dividing (i) the Pool Balance by (ii) the original aggregate face amount of the Certificates. The Pool Factor for the Trust or for the Certificates as of any Distribution Date shall be computed after giving effect to any special distribution with respect to any payment of principal of the Equipment Note or payments with respect to other Trust Property held in such Trust and the distribution thereof to be made on that date. (Trust Supplement, Section 2.01) The Pool Factor for the Trust will be 1.0000000 on the date of issuance of the Certificates; thereafter, the Pool Factor for the Trust will decline as described herein to reflect reductions in the Pool Balance of the Trust. The amount of a Certificateholder's pro rata share of the Pool Balance of the Trust can be determined by multiplying the face amount of the holder's Certificate by the Pool Factor for such Trust as of the applicable Distribution Date. Notice of the Pool Factor and the Pool Balance for the Trust will be mailed to Certificateholders on each Distribution Date. (Trust Supplement, Section 3.01)

The following table sets forth the expected aggregate principal amortization schedule for the Equipment Note (the "Assumed Amortization Schedule") and resulting Pool Factors with respect to the Trust. The scheduled distribution of principal payments for the Trust would be affected, if the Equipment Note is redeemed or purchased in whole or in part, or if a default in payment on such Equipment Note occurs. Accordingly, the aggregate principal amortization schedule applicable to the Trust and the resulting Pool Factors may differ from those set forth in the following table.

	Certificates	
Regular Distribution Date	Scheduled Principal Payments	Expected Pool Factor
At Issuance	\$ 0.00	1.0000000
January 15, 2021	72,525,000.00	0.9758250
April 15, 2021	72,525,000.00	0.9516500
July 15, 2021	72,525,000.00	0.9274750
October 15, 2021	72,525,000.00	0.9033000
January 15, 2022	84,687,500.00	0.8750708
April 15, 2022	84,687,500.00	0.8468417
July 15, 2022	84,687,500.00	0.8186125
October 15, 2022	84,687,500.00	0.7903833
January 15, 2023	107,550,000.00	0.7545333
April 15, 2023	107,550,000.00	0.7186833
July 15, 2023	107,550,000.00	0.6828333
October 15, 2023	107,550,000.00	0.6469833
January 15, 2024	144,037,500.00	0.5989708
April 15, 2024	144,037,500.00	0.5509583
July 15, 2024	144,037,500.00	0.5029458
October 15, 2024	144,037,500.00	0.4549333
January 15, 2025	86,156,250.00	0.4262146
April 15, 2025	86,156,250.00	0.3974958
July 15, 2025	86,156,250.00	0.3687771
October 15, 2025	86,156,250.00	0.3400583
January 15, 2026	43,356,250.00	0.3256063
April 15, 2026	43,356,250.00	0.3111542
July 15, 2026	43,356,250.00	0.2967021
October 15, 2026	43,356,250.00	0.2822500
January 15, 2027	43,356,250.00	0.2677979
April 15, 2027	43,356,250.00	0.2533458
July 15, 2027	43,356,250.00	0.2388938
October 15, 2027	716,681,250.00	0.0000000

The Pool Factor and Pool Balance of the Trust will be recomputed if there has been an early redemption or purchase of the Equipment Note in part, or default in the payment of principal or interest in respect of the Equipment Note, as described in "—Indenture Defaults and Certain Rights Upon an Indenture Default", "Description of the Equipment Note—Redemption" and "Description of the Collateral and the Appraisals—Semiannual LTV Test". In the event of any such redemption, purchase or default, the Pool Factors and the Pool Balances of the Trust so affected will be recomputed after giving effect thereto and notice thereof will be mailed by the Trustee to the Certificateholders promptly after the occurrence of any such event.

# Reports to Certificateholders

On each Distribution Date, the Trustee will include with each distribution by it of a Scheduled Payment or Special Payment to Certificateholders a statement setting forth the following information (per \$1,000 face amount of Certificate for the Trust, except as to the amounts described in items (a) and (d) below):

(a) The aggregate amount of funds distributed on such Distribution Date under the Pass Through Trust Agreement, indicating the amount allocable to each source, including any portion thereof paid by the Liquidity Providers.

- (b) The amount of such distribution under the Pass Through Trust Agreement allocable to principal and the amount allocable to premium, if any.
- (c) The amount of such distribution under the Pass Through Trust Agreement allocable to interest.
- (d) The Pool Balance and the Pool Factor for the Trust. (Trust Supplement, Section 3.01(a))

So long as the Certificates are registered in the name of DTC or its nominee, on the record date prior to each Distribution Date, the Trustee will request that DTC post on its Internet bulletin board a securities position listing setting forth the names of all DTC Participants reflected on DTC's books as holding interests in the Certificates on such record date. On each Distribution Date, the Trustee will mail to each such DTC Participant the statement described above and will make available additional copies as requested by such DTC Participant for forwarding to Certificate Owners. (Trust Supplement, Section 3.01(a))

In addition, after the end of each calendar year, the Trustee will furnish to each Certificateholder at any time during the preceding calendar year a statement containing the sum of the amounts determined pursuant to clauses (a), (b) and (c) above with respect to the Trust for such calendar year or, in the event such person was a Certificateholder during only a portion of such calendar year, for the applicable portion of such calendar year, and such other items as are readily available to such Trustee and which a Certificateholder shall reasonably request as necessary for the purpose of such Certificateholder's preparation of its U.S. federal income tax returns. (Trust Supplement, Section 3.01(b)) Such statement and such other items shall be prepared on the basis of information supplied to the Trustee by the DTC Participants and shall be delivered by the Trustee to such DTC Participants to be available for forwarding by such DTC Participants to Certificate Owners in the manner described above. (Trust Supplement, Section 3.01(b)) At such time, if any, as the Certificates are issued in the form of definitive certificates, the Trustee will prepare and deliver the information described above to each Certificateholder of record of the Trust as the name and period of ownership of such Certificateholder appears on the records of the registrar of the Certificates.

The Trustee is required to provide promptly to Certificateholders all material non-confidential information received by such Trustee from United. (Trust Supplement, Section 3.01(e))

### Indenture Defaults and Certain Rights Upon an Indenture Default

Upon the occurrence and continuation of an Indenture Default, the Controlling Party will direct the Subordination Agent, as the holder of the Equipment Note, which in turn will direct the Loan Trustee in the exercise of remedies under the Security Documents and may accelerate and sell all (but not less than all) of the Equipment Note or sell the collateral to any person, subject to certain limitations. See "Description of the Intercreditor Agreement—Intercreditor Rights—Limitation on Exercise of Remedies". The proceeds of any such sale will be distributed pursuant to the provisions of the Intercreditor Agreement. Any such proceeds so distributed to any Trustee upon any such sale shall be deposited in the applicable Special Payments Account and shall be distributed to the Certificateholders on a Special Distribution Date. (Section 4.01; Trust Supplement, Sections 3.02 and 3.03) The market for the Equipment Note at the time of the existence of an Indenture Default may be very limited and there can be no assurance as to the price at which it could be sold. If the Equipment Note is sold for less than its outstanding principal amount, certain Certificateholders will receive a smaller amount of principal distributions under the Indenture than anticipated and will not have any claim for the shortfall against United, any Liquidity Provider or the Trustee.

Any amount, other than Scheduled Payments received on a Regular Distribution Date or within five days thereafter, distributed to the Trustee by the Subordination Agent on account of the Equipment Note or Collateral under (and as defined in) the Indenture held in such Trust following an

Indenture Default will be deposited in the Special Payments Account for the Trust and will be distributed to the Certificateholders on a Special Distribution Date. (Section 4.01 Trust Supplement, Section 3.02) Any funds representing payments received with respect to the defaulted Equipment Note, or the proceeds from the sale of the Equipment Note, held by the Trustee in the Special Payments Account for the Trust will, to the extent practicable, be invested by the Trustee in certain permitted investments pending the distribution of such funds on a Special Distribution Date. (Section 4.04)

The Pass Through Trust Agreement provides that the Trustee will, within 90 days after the occurrence of any default known to such Trustee, give to the Certificateholders notice, transmitted by mail, of such uncured or unwaived default with respect to the Trust known to it, provided that, except in the case of default in a payment of principal, premium, if any, or interest on the Equipment Note, the Trustee will be protected in withholding such notice if it in good faith determines that the withholding of such notice is in the interests of such Certificateholders. The term "default" as used in this paragraph only with respect to the Trust means the occurrence of an Indenture Default, as described above, except that in determining whether any such Indenture Default has occurred, any grace period or notice in connection therewith will be disregarded. (Section 7.02)

The Pass Through Trust Agreement contains a provision entitling the Trustee, subject to the duty of such Trustee during a default to act with the required standard of care, to be offered reasonable security or indemnity by the holders of the Certificates before proceeding to exercise any right or power under such Pass Through Trust Agreement or the Intercreditor Agreement at the request of such Certificateholders. (Section 7.03(e))

Subject to certain qualifications set forth in the Pass Through Trust Agreement and to the Intercreditor Agreement, the Certificateholders holding Certificates evidencing fractional undivided interests aggregating not less than a majority in interest in the Trust shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or pursuant to the terms of the Intercreditor Agreement, or exercising any trust or power conferred on such Trustee under such Pass Through Trust Agreement or the Intercreditor Agreement, including any right of such Trustee as Controlling Party under the Intercreditor Agreement or as holder of the Equipment Note. (Section 6.04)

In certain cases, the holders of the Certificates evidencing fractional undivided interests aggregating not less than a majority in interest of the Trust may on behalf of the holders of all the Certificates waive any past "event of default" under the Trust (i.e., any Indenture Default) and its consequences or, if the Trustee is the Controlling Party, may direct such Trustee to instruct the Loan Trustee to waive any past Indenture Default and its consequences, except (i) a default in the deposit of any Scheduled Payment or Special Payment or in the distribution thereof, (ii) a default in payment of the principal, premium, if any, or interest with respect to the Equipment Note and (iii) a default in respect of any covenant or provision of the Pass Through Trust Agreement that cannot be modified or amended without the consent of each Certificateholder affected thereby. (Section 6.05) The Indenture will provide that, with certain exceptions, the holders of the majority in aggregate unpaid principal amount of the Equipment Note issued thereunder may on behalf of all such holders waive any past default or Indenture Default. (Indenture, Section 5.06) Notwithstanding such provisions of the Indenture, pursuant to the Intercreditor Agreement after the occurrence and during the continuance of an Indenture Default only the Controlling Party will be entitled to waive any such past default or Indenture Default. See "Description of the Intercreditor Agreement—Intercreditor Rights—Controlling Party".

# **Purchase Rights of Certificateholders**

Upon the occurrence and during the continuation of a Certificate Buyout Event, with 15 days' written notice to the Trustee and each Certificateholder:

• If any Class of Additional Junior Certificates has been issued, the holders of such Additional Junior Certificates will have the right to purchase all but not less than all of the Certificates and any other Class of Additional Junior Certificates ranking senior in right of payment to such Class of Additional Junior Certificates and, if Refinancing Certificates have been issued, holders of such Refinancing Certificates will have the same right to purchase Certificates as the holders of the Class that they refinanced had. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

In the case of the purchase of the Certificates, the purchase price will be equal to the Pool Balance of the Certificates to be purchased plus accrued and unpaid interest thereon to the date of purchase, without premium, but including any other amounts then due and payable to the Certificateholders. Such purchase right may be exercised by any Certificateholder entitled to such right. In each case, if prior to the end of the 15-day notice period, any other Certificateholder notifies the purchasing Certificateholder that the other Certificateholder wants to participate in such purchase, then such other Certificateholder may join with the purchasing Certificateholder to purchase the Certificates pro rata based on the fractional undivided interest in the Trust held by each Certificateholder. If United or any of its affiliates is a Certificateholder or holder of Additional Junior Certificates or Refinancing Certificates, it will not have the purchase rights described above. (Trust Supplement, Section 4.01)

A "Certificate Buyout Event" means that a United Bankruptcy Event has occurred and is continuing and the following events have occurred: (A) (i) the 60-day period specified in Section 1110(a)(2)(A) of the U.S. Bankruptcy Code (the "60-Day Period") has expired and (ii) United has not entered into one or more agreements under Section 1110(a)(2)(A) of the U.S. Bankruptcy Code to perform all of its obligations under the Security Documents or, if it has entered into such agreements, has at any time thereafter failed to cure any default under the Security Documents in accordance with Section 1110(a)(2)(B) of the U.S. Bankruptcy Code; or (B) if prior to the expiry of the 60-Day Period, United shall have abandoned any Collateral.

#### PTC Event of Default

A Pass Through Certificate Event of Default (a "PTC Event of Default") under the Pass Through Trust Agreement means the failure to pay:

- The outstanding Pool Balance of the Certificates within ten Business Days of the Final Maturity Date for such Certificates.
- Interest due on the Certificates within ten Business Days of any Distribution Date (unless the Subordination Agent shall have made Interest Drawings, or withdrawals from the Cash Collateral Account for such Certificates, with respect thereto in an aggregate amount sufficient to pay such interest and shall have distributed such amount to the Trustee). (Section 1.01)

Any failure to make expected principal distributions with respect to the Certificates on any Regular Distribution Date (other than the Final Maturity Date) will not constitute a PTC Event of Default with respect to such Certificates. A PTC Event of Default with respect to the most senior outstanding Class of Certificates resulting from an Indenture Default will constitute a Triggering Event

# Merger, Consolidation and Transfer of Assets

United will be prohibited from consolidating with or merging into any other person or transferring all or substantially all of its assets as an entirety to any other person unless:

- The surviving successor or transferee person shall be organized and validly existing under the laws of the United States or any state thereof or the District of Columbia.
- The surviving successor or transferee person shall be a "citizen of the United States" (as defined in Title 49 of the United States Code relating to aviation (the "Transportation Code")) holding an air carrier operating certificate issued pursuant to Chapter 447 of Title 49, United States Code, if, and so long as, such status is a condition of entitlement to the benefits of Section 1110 of the U.S. Bankruptcy Code.
- The surviving successor or transferee person shall expressly assume all of the obligations of United contained in the Basic Agreement and the Trust Supplement, the Equipment Note, the Note Purchase Agreement, the Indenture, the other Security Documents and any other operative documents.
- United shall have delivered a certificate and an opinion or opinions of counsel indicating that such transaction, in effect, complies with such conditions.

In addition, after giving effect to such transaction, no Indenture Default shall have occurred and be continuing. (Section 5.02; Indenture, Section 4.07)

The Basic Agreement, the Trust Supplement, the Note Purchase Agreement, the Indenture, the other Security Documents and any other operative documents will not contain any covenants or provisions that may afford the Trustee or any Certificateholder protection in the event of a highly leveraged transaction, including transactions effected by management or affiliates, which may or may not result in a change in control of United.

# Modifications of the Pass Through Trust Agreement and Certain Other Agreements

The Pass Through Trust Agreement contains provisions permitting, at the request of United, the execution of amendments or supplements to such Pass Through Trust Agreement or, if applicable, to the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities, without the consent of the holders of any of the Certificates:

- To evidence the succession of another corporation to United and the assumption by such corporation of United's obligations under such Pass Through Trust Agreement or the Note Purchase Agreement.
- To add to the covenants of United for the benefit of holders of such Certificates or to surrender any right or power conferred upon United in such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities.
- To correct or supplement any provision of such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities which may be defective or inconsistent with any other provision in such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities, as applicable, or to cure any ambiguity or to modify any other provision with respect to matters or questions arising under such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities, provided that such action shall not materially adversely affect the interests of the holders of such Certificates; to correct any mistake in such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the

Liquidity Facilities; or, as provided in the Intercreditor Agreement, to give effect to or provide for a Replacement Facility.

- To comply with any requirement of the Commission, any applicable law, rules or regulations of any exchange or quotation system on which the Certificates are listed, or any regulatory body.
- To modify, eliminate or add to the provisions of such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities to such extent as shall be necessary to continue the qualification of such Pass Through Trust Agreement (including any supplemental agreement) under the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"), or any similar federal statute enacted after the execution of such Pass Through Trust Agreement, and to add to such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities such other provisions as may be expressly permitted by the Trust Indenture Act.
- To evidence and provide for the acceptance of appointment under such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities by a successor Trustee and to add to or change any of the provisions of such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities as shall be necessary to provide for or facilitate the administration of the Trust under the Basic Agreement by more than one trustee.
- To provide for the issuance of Additional Junior Certificates or Refinancing Certificates on or after the initial issuance date of the Certificates (the "Issuance Date"), subject to certain terms and conditions. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

In each case, such modification or supplement may not adversely affect the status of the Trust as a grantor trust under Subpart E, Part I of Subchapter J of Chapter 1 of Subtitle A of the Internal Revenue Code of 1986, as amended (the "Code"), for U.S. federal income tax purposes. (Section 9.01; Trust Supplement, Section 6.02)

The Pass Through Trust Agreement also contains provisions permitting the execution, with the consent of the holders of the Certificates evidencing fractional undivided interests aggregating not less than a majority in interest of the Trust, of amendments or supplements adding any provisions to or changing or eliminating any of the provisions of such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities to the extent applicable to such Certificateholders or of modifying the rights and obligations of such Certificateholders under such Pass Through Trust Agreement, the Intercreditor Agreement, the Note Purchase Agreement or the Liquidity Facilities. No such amendment or supplement may, without the consent of the holder of each outstanding Certificate so affected thereby:

- Reduce in any manner the amount of, or delay the timing of, any receipt by the Trustee of payments with respect to the Equipment Note or distributions in respect of any Certificate related to the Trust, or change the date or place of any payment in respect of any Certificate, or make distributions payable in coin or currency other than that provided for in such Certificates, or impair the right of any Certificateholder to institute suit for the enforcement of any such payment when due.
- Permit the disposition of the Equipment Note, except as provided in such Pass Through Trust Agreement, or otherwise deprive such Certificateholder of the benefit of the ownership of the Equipment Note.
- Alter the priority of distributions specified in the Intercreditor Agreement in a manner materially adverse to such Certificateholders.

- Reduce the percentage of the aggregate fractional undivided interests of the Trust provided for in such Pass Through Trust Agreement, the consent of the holders of which is required for any such supplemental agreement or for any waiver provided for in such Pass Through Trust Agreement.
- Modify any of the provisions relating to the rights of the Certificateholders to consent to the amendments or supplements referred to in this paragraph or in respect of certain
  waivers of Indenture Defaults, except to increase any such percentage or to provide that certain other provisions of such Pass Through Trust Agreement cannot be modified or
  waived without the consent of each Certificateholder affected thereby.
- Adversely affect the status of any Trust as a grantor trust under Subpart E, Part I of Subchapter J of Chapter 1 of Subtitle A of the Code for U.S. federal income tax purposes. (Section 9.02; Trust Supplement, Section 6.03)

In the event that the Trustee, as holder (or beneficial owner through the Subordination Agent) of the Equipment Note in trust for the benefit of the Certificateholders or as Controlling Party under the Intercreditor Agreement, receives (directly or indirectly through the Subordination Agent) a request for a consent to any amendment, modification, waiver or supplement under the Indenture, any other Security Document, any Equipment Note or any other related document, such Trustee shall forthwith send a notice of such proposed amendment, modification, waiver or supplement to each Certificateholder as of the date of such notice, except in the case when consent of Certificateholders is not required under the Pass Through Trust Agreement. The Trustee shall request from the Certificateholders a direction as to:

- Whether or not to take or refrain from taking (or direct the Subordination Agent to take or refrain from taking) any action which a holder of the Equipment Note or the Controlling Party has the option to direct.
- Whether or not to give or execute (or direct the Subordination Agent to give or execute) any waivers, consents, amendments, modifications or supplements as a holder of the Equipment Note or as Controlling Party.
- · How to vote (or direct the Subordination Agent to vote) the Equipment Note if a vote has been called for with respect thereto.

Provided such a request for Certificateholder direction shall have been made, in directing any action or casting any vote or giving any consent as the holder of the Equipment Note (or in directing the Subordination Agent in any of the foregoing):

- Other than as Controlling Party, the Trustee shall vote for or give consent to any such action with respect to the Equipment Note in the same proportion as that of (x) the aggregate face amount of all Certificates actually voted in favor of or for giving consent to such action by such direction of Certificateholders to (y) the aggregate face amount of all outstanding Certificates.
- As the Controlling Party, the Trustee shall vote as directed in such Certificateholder direction by the Certificateholders evidencing fractional undivided interests aggregating not less than a majority in interest in the Trust.

For purposes of the immediately preceding paragraph, a Certificate shall have been "actually voted" if the Certificateholder has delivered to the Trustee an instrument evidencing such Certificateholder's consent to such direction prior to one Business Day before such Trustee directs such action or casts such vote or gives such consent. Notwithstanding the foregoing, but subject to certain rights of the Certificateholders under the Pass Through Trust Agreement and subject to the Intercreditor Agreement, the Trustee may, in its own discretion and at its own direction, consent and notify the Loan Trustee of such consent (or direct the Subordination Agent to consent and notify the

Loan Trustee of such consent) to any amendment, modification, waiver or supplement under the Indenture, any other Security Document, any relevant Equipment Note or any other related document, if an Indenture Default shall have occurred and be continuing, or if such amendment, modification, waiver or supplement will not materially adversely affect the interests of the Certificateholders. (Section 10.01)

In determining whether the Certificateholders of the requisite fractional undivided interests of Certificates have given any direction under the Pass Through Trust Agreement, Certificates owned by United or any of its affiliates will be disregarded and deemed not to be outstanding for purposes of any such determination. Notwithstanding the foregoing, (i) if any such person owns 100% of the Certificates, such Certificates shall not be so disregarded, and (ii) if any amount of Certificates so owned by any such person have been pledged in good faith, such Certificates shall not be disregarded if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Certificates and that the pledgee is not United or an affiliate of United

# **Obligation to Purchase Equipment Note**

On the Issuance Date, the Trustee will purchase the Equipment Note issued by United, subject to the terms and conditions of a note purchase agreement among United, the Trustee, and the Subordination Agent, to be entered into on the Issuance Date (the "Note Purchase Agreement").

# **Termination of the Trust**

The obligations of United and the Trustee with respect to the Trust will terminate upon the distribution to Certificateholders of all amounts required to be distributed to them pursuant to the Pass Through Trust Agreement and the disposition of all property held in the Trust. The Trustee will send to each Certificateholder notice of the termination of the Trust, the amount of the proposed final payment and the proposed date for the distribution of the final payment for such Trust. The final distribution to any Certificateholder will be made only upon surrender of such Certificateholder's Certificates at the office or agency of the Trustee specified in such notice of termination. (Trust Supplement, Section 7.01(a))

### The Trustee

The Trustee will be Wilmington Trust, National Association. The Trustee's address is Wilmington Trust, National Association, 1100 North Market Street, Wilmington, Delaware 19890-1605, Attention: Corporate Trust Administration.

#### **Book-Entry**; Delivery and Form

## General

On the Issuance Date, the Certificates will be represented by one or more fully registered global certificates. Each global certificate will be deposited with, or on behalf of, The Depository Trust Company ("DTC") and registered in the name of Cede & Co. ("Cede"), the nominee of DTC. DTC was created to hold securities for its participants ("DTC Participants") and facilitate the clearance and settlement of securities transactions between DTC Participants through electronic book-entry changes in accounts of the DTC Participants, thereby eliminating the need for physical movement of certificates. DTC Participants include securities brokers and dealers, banks, trust companies and clearing corporations and certain other organizations. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly ("Indirect DTC Participants").

So long as such book-entry procedures are applicable, no person acquiring an interest in the Certificates ("Certificate Owner") will be entitled to receive a certificate representing such person's interest in such Certificates. Unless and until definitive certificates are issued under the limited circumstances described below under "—Physical Certificates", all references to actions by Certificateholders shall refer to actions taken by DTC upon instructions from DTC Participants, and all references herein to distributions, notices, reports and statements to Certificateholders shall refer, as the case may be, to distributions, notices, reports and statements to DTC or Cede, as the registered holder of such Certificates, or to DTC Participants for distribution to Certificate Owners in accordance with DTC procedures.

DTC is a limited purpose trust company organized under the laws of the State of New York, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Under the New York Uniform Commercial Code, a "clearing corporation" is defined as:

- a person that is registered as a "clearing agency" under the federal securities laws;
- a federal reserve bank; or
- any other person that provides clearance or settlement services with respect to financial assets that would require it to register as a clearing agency under the federal securities laws but for an exclusion or exemption from the registration requirement, if its activities as a clearing corporation, including promulgation of rules, are subject to regulation by a federal or state governmental authority.

A "clearing agency" is an organization established for the execution of trades by transferring funds, assigning deliveries and guaranteeing the performance of the obligations of parties to trades.

Under the rules, regulations and procedures creating and affecting DTC and its operations, DTC is required to make book-entry transfers of the Certificates among DTC Participants on whose behalf it acts with respect to the Certificates and to receive and transmit distributions with respect to the Certificates. DTC Participants and Indirect DTC Participants with which Certificate Owners have accounts similarly are required to make book-entry transfers and receive and transmit the payments on behalf of their respective customers. Certificate Owners that are not DTC Participants or Indirect DTC Participants but desire to purchase, sell or otherwise transfer ownership of, or other interests in, the Certificates may do so only through DTC Participants and Indirect DTC Participants. In addition, Certificate Owners will receive all distributions with respect to the Certificates from the Trustees through DTC Participants or Indirect DTC Participants, as the case may be.

Under a book-entry format, Certificate Owners may experience some delay in their receipt of payments, because payments with respect to the Certificates will be forwarded by the Trustees to Cede, as nominee for DTC. DTC will forward payments in same-day funds to each DTC Participant who is credited with ownership of the Certificates in an amount proportionate to the face amount of that DTC Participant's holdings of beneficial interests in the Certificates, as shown on the records of DTC or its nominee. Each such DTC Participant will forward payments to its Indirect DTC Participants in accordance with standing instructions and customary industry practices. DTC Participants and Indirect DTC Participants will be responsible for forwarding distributions to Certificate Owners for whom they act. Accordingly, although Certificate Owners will not possess physical certificates, DTC's rules provide a mechanism by which Certificate Owners will receive payments on the Certificates and will be able to transfer their interests.

Unless and until physical certificates are issued under the limited circumstances described under "—Physical Certificates" below, the only Certificateholder of physical certificates will be Cede, as

nominee of DTC. Certificate Owners will not be recognized by the Trustee as registered owners of Certificates under the Pass Through Trust Agreement. Certificate Owners will be permitted to exercise their rights under the Pass Through Trust Agreement only indirectly through DTC. DTC will take any action permitted to be taken by a Certificateholder under the Pass Through Trust Agreement only at the direction of one or more DTC Participants to whose accounts with DTC the Certificates are credited. In the event any action requires approval by Certificateholders of a certain percentage of the beneficial interests in the Trust, DTC will take action only at the direction of and on behalf of DTC Participants whose holdings include undivided underests that satisfy the required percentage. DTC may take conflicting actions with respect to other undivided interests to the extent that the actions are taken on behalf of DTC Participants whose holdings include those undivided interests. DTC will convey notices and other communications to DTC Participants, and DTC Participants will convey notices and other communications to Indirect DTC Participants in accordance with arrangements among them. Arrangements among DTC and its direct and indirect participants are subject to any statutory or regulatory requirements as may be in effect from time to time. DTC's rules applicable to itself and DTC Participants are on file with the Commission.

A Certificate Owner's ability to pledge its Certificates to persons or entities that do not participate in the DTC system, or otherwise to act with respect to its Certificates, may be limited due to the lack of a physical certificate to evidence ownership of the Certificates, and because DTC can only act on behalf of DTC Participants, who in turn act on behalf of Indirect DTC Participants.

Neither United nor the Trustee will have any liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the Certificates held by Cede, as nominee for DTC, for maintaining, supervising or reviewing any records relating to the beneficial ownership interests or for the performance by DTC, any DTC Participant or any Indirect DTC Participant of their respective obligations under the rules and procedures governing their obligations.

As long as the Certificates are registered in the name of DTC or its nominee, United will make all payments to the Loan Trustee under the Indenture in immediately available funds. The Trustee will pass through to DTC in immediately available funds all payments received from United, including the final distribution of principal with respect to the Certificates.

Any Certificates registered in the name of DTC or its nominee will trade in DTC's Same-Day Funds Settlement System until maturity. DTC will require secondary market trading activity in the Certificates to settle in immediately available funds. No assurance can be given as to the effect, if any, of settlement in same-day funds on trading activity in the Certificates.

### **Physical Certificates**

Physical certificates will be issued in paper form to Certificateholders or their nominees, rather than to DTC or its nominee, only if:

- United advises the Trustee in writing that DTC is no longer willing or able to discharge properly its responsibilities as depository with respect to the Certificates and United is unable to locate a qualified successor;
- United elects to terminate the book-entry system through DTC; or
- after the occurrence of an Indenture Default, Certificate Owners owning at least a majority in fractional undivided interests in the Trust advise the Trustee, United and DTC through DTC Participants that the continuation of a book-entry system through DTC or a successor to DTC is no longer in the Certificate Owners' best interest.

Upon the occurrence of any of the events described in the three subparagraphs above, the Trustee will notify all applicable Certificate Owners through DTC Participants of the occurrence of such event

and the availability of physical certificates. Upon surrender by DTC of the global certificates and receipt of instructions for re-registration, the Trustee will reissue the Certificates as physical certificates to the applicable Certificate Owners.

In the case of the physical certificates that are issued, the Trustee or a paying agent will make distributions with respect to such Certificates directly to holders in whose names the physical certificates were registered at the close of business on the applicable record date. Except for the final payment to be made with respect to a Certificate, the Trustee or a paying agent will make distributions by check mailed to the addresses of the registered holders as they appear on the register maintained by such Trustee. The Trustee or a paying agent will make the final payment with respect to any Certificate only upon presentation and surrender of the applicable Certificate at the office or agency specified in the notice of final distribution to Certificateholders.

Physical certificates will be freely transferable and exchangeable at the office of the Trustee upon compliance with the requirements set forth in the Pass Through Trust Agreement. Neither the Trustee nor any transfer or exchange agent will impose a service charge for any registration of transfer or exchange. However, the Trustee or transfer or exchange agent will require payment of a sum sufficient to cover any tax or other governmental charge attributable to a transfer or exchange.

# DESCRIPTION OF THE LIQUIDITY FACILITIES

The following summary describes the material terms of the Liquidity Facilities and certain provisions of the Intercreditor Agreement relating to the Liquidity Facilities. The summary does not purport to be complete and is qualified in its entirety by reference to all of the provisions of the Liquidity Facilities and the Intercreditor Agreement, each of which will be filed as an exhibit to a Current Report on Form 8-K to be filed by United with the Commission. The provisions of the Liquidity Facilities are substantially identical except as otherwise indicated.

# General

Each of Goldman Sachs Bank USA and potentially, one or more banks (which may include one or more of the Underwriters or their respective affiliates) (each, a "Liquidity Provider"), will enter into separate revolving credit agreements (each, a "Liquidity Facility") with the Subordination Agent with respect to the Trust. Goldman Sachs Bank USA intends to syndicate all or a portion of its commitments under the initial Liquidity Facility extended by it (which may occur prior to the Issuance Date) to other banks (which may include one or more of the Underwriters or their respective affiliates) that will satisfy the Liquidity Threshold Rating at the time of syndication, and any such bank entering into an applicable Replacement Liquidity Facility a described in "Replacement Liquidity Facility" below will thereafter constitute a "Liquidity Provider" and its Replacement Liquidity Facility will constitute a "Liquidity Facility". On any Regular Distribution Date, if, after giving effect to the subordination provisions of the Intercreditor Agreement, the Subordination Agent does not have sufficient funds for the payment of interest on the Certificates, the Liquidity Provider under each Liquidity Facility will make an advance (an "Interest Drawing") equal to the lesser of (x) the product of (1) the amount needed to fund such interest shortfall and (2) the Proportionate Share of such Liquidity Facility and (y) the Maximum Available Commitment for such Liquidity Facility. The maximum amount of Interest Drawings available under each Liquidity Facility in the aggregate is expected to provide an amount sufficient for the Subordination Agent to pay interest on the Certificates on up to six consecutive quarterly Regular Distribution Dates (without regard to any expected future payments of principal on such Certificates) at the interest rate shown on the cover page of this Prospectus Supplement for the Certificates (the "Stated Interest Rate"). If interest payment defaults occur which exceed the amount covered by and available unde

"Proportionate Share" means with respect to any Liquidity Facility, a fraction, the numerator of which is the Stated Amount of such Liquidity Facility, and the denominator of which is the sum of the Stated Amounts under all Liquidity Facilities with respect to the Certificates.

#### **Drawings**

Except as otherwise provided below, each Liquidity Facility will enable the Subordination Agent to make Interest Drawings thereunder promptly on or after any Regular Distribution Date if, after giving effect to the subordination provisions of the Intercreditor Agreement, there are insufficient funds available to the Subordination Agent to pay interest on the Certificates at the Stated Interest Rate; provided, however, that the maximum amount available to be drawn under any Liquidity Facility on any Regular Distribution Date to fund any shortfall of interest on Certificates will not exceed the then Maximum Available Commitment under such Liquidity Facility. The "Maximum Available Commitment" at any time under any Liquidity Facility is an amount equal to the then Maximum Commitment of such Liquidity Facility less the aggregate amount of each Interest Drawing outstanding under such Liquidity Facility at such time, provided that following a Downgrade Drawing (subject to reinstatement of the obligations of any applicable Liquidity Provider if any such Liquidity Provider has

a Long-Term Rating specified for each Rating Agency in the definition of "Liquidity Threshold Rating" or higher at any time after the occurrence of a Downgrade Event and so notifies the Subordination Agent), a Special Termination Drawing, a Final Drawing or a Non-Extension Drawing under a Liquidity Facility, the Maximum Available Commitment under such Liquidity Facility shall be zero.

"Maximum Commitment" means, with respect to any Liquidity Facility, the maximum amount available to be drawn thereunder, as the same may be reduced from time to time as described below. The aggregate Maximum Commitment for all of the initial Liquidity Facilities is \$258,010,416.67.

"Required Amount" means, in relation to any Liquidity Facility for any day, the sum of the aggregate amount of interest, calculated at the rate per annum equal to the Stated Interest Rate, that would be payable on the Certificates on each of the six successive Regular Distribution Dates immediately following such day or, if such day is a Regular Distribution Date, on such day and the succeeding five Regular Distribution Dates, in each case calculated on the basis of the Pool Balance on such day and without regard to expected future payments of principal on the Certificates and, where there is more than a single Liquidity Facility for the Certificates, calculated with respect to each such Liquidity Facility by reference to its respective Proportionate Share.

No Liquidity Facility will provide for drawings thereunder to pay for principal of or premium on the Certificates or any interest on the Certificates in excess of the Stated Interest Rate or more than six quarterly installments of interest thereon or principal of or interest or premium on any Additional Junior Certificates. (Liquidity Facilities, Section 2.02; Intercreditor Agreement, Section 3.5)

Each payment by a Liquidity Provider reduces by the same amount the Maximum Available Commitment under the related Liquidity Facility, subject to reinstatement as described below. With respect to any Interest Drawing, upon reimbursement of the applicable Liquidity Provider in full or in part for the amount of such Interest Drawing plus interest thereon, the Maximum Available Commitment under the applicable Liquidity Facility will be reinstated by an amount equal to the amount of such Interest Drawing so reimbursed to an amount not to exceed the then Required Amount of such Liquidity Facility. However, the Maximum Available Commitment under such Liquidity Facility will not be so reinstated at any time if (i) a Liquidity Event of Default with respect to such Liquidity Facility shall have occurred and be continuing and the Equipment Note is not a Performing Equipment Note or (ii) a Final Drawing, Downgrade Drawing, Special Termination Drawing or Non-Extension Drawing shall have been made or an Interest Drawing shall have been converted into a Final Drawing. The Maximum Available Commitment under any Liquidity Facility will not be reinstated after a Final Drawing, Downgrade Drawing (except as described above), Special Termination Drawing or Non-Extension Drawing thereunder. On (or, if applicable, immediately following) the first Regular Distribution Date and promptly following each date on which the Pool Balance of the Trust shall have been reduced by payments made to the related Certificateholders pursuant to the Intercreditor Agreement, the Maximum Commitment of such Liquidity Facility will be automatically reduced from time to time to an amount equal to its then Required Amount. (Liquidity Facilities, Section 2.04(a); Intercreditor Agreement, Section 3.5(j))

"Performing Equipment Note" means an Equipment Note with respect to which no payment default has occurred and is continuing (without giving effect to any acceleration); provided that in the event of a bankruptcy proceeding under the U.S. Bankruptcy Code in which United is a debtor, any payment default existing during the 60-day period under Section 1110(a)(2)(A) of the U.S. Bankruptcy Code (or such longer period as may apply under Section 1110(b) of the U.S. Bankruptcy Code or as may apply for the cure of such payment default under Section 1110(a)(2)(B) of the U.S. Bankruptcy Code) shall not be taken into consideration until the expiration of the applicable period.

If at any time a Liquidity Provider is downgraded, or any applicable rating of a Liquidity Provider is suspended or withdrawn, by any Rating Agency such that after such downgrading, suspension or withdrawal such Liquidity Provider does not have a Long-Term Rating from such Rating Agency of the

applicable Liquidity Threshold Rating or higher (any such downgrading, suspension or withdrawal, a "Downgrade Event"), and such Liquidity Facility is not replaced with a Replacement Facility within 35 days of the occurrence of such Downgrade Event (or, if earlier, the expiration date of such Liquidity Facility), such Liquidity Facility will be drawn up to the then Maximum Available Commitment under such Liquidity Facility (the "Downgrade Drawing"), unless no later than 30 days after the occurrence of such Downgrade Event (or, if earlier, the expiration date of such Liquidity Facility), the Rating Agency whose downgrading, suspension or withdrawal of such Liquidity Provider resulted in the occurrence of such Downgrade Event provides a written confirmation to the effect that such downgrading, suspension or withdrawal will not result in a downgrading, withdrawal or suspension of the rating by such Rating Agency for the Certificates. The proceeds of a Downgrade Drawing will be deposited into a cash collateral account (the "Cash Collateral Account") for the applicable Liquidity Facility and used for the same purposes and under the same circumstances and subject to the same conditions as cash payments of Interest Drawings under such Liquidity Facility would be used. If at any time after the occurrence of a Downgrade Event with respect to a Liquidity Provider, such Liquidity Provider has a Long-Term Rating specified by each Rating Agency in the definition of "Liquidity Threshold Rating" or higher and so notifies the Subordination Agent, amounts on deposit in the applicable Cash Collateral Account that have not been applied to the payment of interest will be reimbursed to such Liquidity Provider and the obligations of such Liquidity Provider under the related Liquidity Facility shall be reinstated to the extent of such amounts which have been reimbursed to such Liquidity Provider. For the avoidance of doubt, the foregoing requirements shall apply to each occurrence of a Downgrade Event with respect to a Liquidity Provi

"Liquidity Threshold Rating" means: (a) in the case of S&P Global Ratings ("S&P"), a Long-Term Rating of BBB, and (b) in the case of Moody's Investors Service, Inc. ("Moody's"), a Long-Term Rating of Baa2.

"Long-Term Rating" means, for any entity, (a) in the case of S&P, long-term issuer credit rating of such entity and (b) in the case of Moody's, the long-term unsecured debt rating of such entity.

If at any time during the 18-month period prior to the final expected Regular Distribution Date, the Pool Balance for the Trust is greater than the aggregate outstanding principal amount of the Equipment Note (other than any portion of the Equipment Note previously sold or any reduction in the aggregate outstanding principal amount of the Equipment Note in connection with the disposition of collateral securing the Equipment Note), any Liquidity Provider may, in its discretion, give notice of special termination under the applicable Liquidity Facility (a "Special Termination Notice"). The effect of the delivery of such Special Termination Notice will be to cause (i) such Liquidity Facility to expire on the fifth Business Day after the date on which such Special Termination Notice is received by the Subordination Agent, (ii) the Subordination Agent to promptly request, and such Liquidity Provider to promptly make, a special termination are drawing (a "Special Termination Drawing") in an amount equal to the Maximum Available Commitment thereunder and (iii) all amounts owing to such Liquidity Provider automatically to become accelerated. The proceeds of a Special Termination Drawing will be deposited into the applicable Cash Collateral Account and used for the same purposes under the same circumstances and subject to the same conditions as cash payments of Interest Drawings under such Liquidity Facility would be used. (Liquidity Facilities, Section 6.02; Intercreditor Agreement, Section 3.5(m))

Each Liquidity Facility provides that the applicable Liquidity Provider's obligations thereunder will expire on the earliest of:

- With respect to the initial Liquidity Facilities, the first anniversary of the Issuance Date.
- The date on which the Subordination Agent delivers to such Liquidity Provider a certification that all of the Certificates have been paid in full.
- The date on which the Subordination Agent delivers to such Liquidity Provider a certification that a Replacement Facility has been fully substituted for such Liquidity Facility.
- The fifth Business Day following receipt by the Subordination Agent of a Termination Notice from such Liquidity Provider (see "—Liquidity Events of Default").
- The fifth Business Day following receipt by the Subordination Agent of a Special Termination Notice from such Liquidity Provider.
- The date on which no amount is or may (by reason of reinstatement) become available for drawing under such Liquidity Facility.

Each Liquidity Facility provides that it will be extended automatically for additional one-year periods unless the applicable Liquidity Provider advises the Subordination Agent 25 days prior to its then-scheduled expiration date that the expiration date will not be extended. The Intercreditor Agreement will provide that any Liquidity Facility may be replaced if such Liquidity Facility is scheduled to expire earlier than 15 days after the Final Maturity Date for the Certificates and the expiration date of such Liquidity Facility is not extended by the 25th day prior to its then-scheduled expiration date. If such Liquidity Facility is not so extended or replaced by the 25th day prior to its then-scheduled expiration date, such Liquidity Facility will be drawn in full up to the then Maximum Available Commitment under such Liquidity Facility (the "Non-Extension Drawing"). The proceeds of the Non-Extension Drawing under any Liquidity Facility will be deposited in the Cash Collateral Account for the related Liquidity Facility to be used for the same purposes and under the same circumstances, and subject to the same conditions, as cash payments of Interest Drawings under such Liquidity Facility would be used. (Liquidity Facilities, Section 2.02(b); Intercreditor Agreement, Section 3.5(d))

Upon receipt by the Subordination Agent of a Termination Notice with respect to any Liquidity Facility from the relevant Liquidity Provider, the Subordination Agent shall request a final drawing (a "Final Drawing") under such Liquidity Facility, in an amount equal to the then Maximum Available Commitment thereunder. The Subordination Agent will hold the proceeds of the Final Drawing in the Cash Collateral Account for such Liquidity Facility as cash collateral to be used for the same purposes and under the same circumstances, and subject to the same conditions, as cash payments of Interest Drawings under such Liquidity Facility would be used. (Liquidity Facilities, Section 2.02(d); Intercreditor Agreement, Section 3.5(i))

Drawings under any Liquidity Facility will be made by delivery by the Subordination Agent of a certificate in the form required by such Liquidity Facility. Upon receipt of such a certificate, the relevant Liquidity Provider is obligated to make payment of the drawing requested thereby in immediately available funds. Upon payment by such Liquidity Provider of the amount specified in any drawing under such Liquidity Facility, such Liquidity Provider will be fully discharged of its obligations under such Liquidity Facility with respect to such drawing and will not thereafter be obligated to make any further payments under such Liquidity Facility in respect of such drawing to the Subordination Agent or any other person.

# Replacement Liquidity Facility

A "Replacement Facility" for any Liquidity Facility will mean (i) with respect to the Liquidity Facility being replaced other than in connection with a transfer covered by clause (ii) below, an irrevocable liquidity facility (or liquidity facilities) in substantially the form of the replaced Liquidity Facility, including reinstatement provisions, or in such other form (which may include a letter of credit) as shall permit the Rating Agencies to confirm in writing their respective ratings then in effect for the Certificates of the Trust (before downgrading of such ratings, if any, as a result of the downgrading of the replaced Liquidity Provider), in a face amount (or in an aggregate face amount) equal to the then Required Amount for the replaced Liquidity Facility and issued by a person (or persons) having a Long-Term Rating issued by each applicable Rating Agency which is equal to or higher than the applicable Liquidity Threshold Rating, or (ii) with respect to any Liquidity Facility for which all or any portion of the commitments thereunder have been transferred and reduced pursuant to the Intercreditor Agreement, an irrevocable revolving credit agreement (or agreements) in substantially the form of the replaced Liquidity Facility (or, as applicable, the Liquidity Facility as to which commitments have been transferred), including reinstatement provisions, or an agreement (or agreements) in such other form (which may include a letter of credit) as shall permit the Rating Agencies to confirm in writing their respective ratings then in effect for the related Certificates and issued by a person (or persons) having a Long-Term Rating issued by each applicable Rating Agency which is equal to or higher than the applicable Liquidity Threshold Rating. (Intercreditor Agreement, Section 1.1) The provider of any Replacement Facility will have the same rights (including, without limitation, priority distribution rights and rights as "Controlling Party" under the Intercreditor Agreement) as the Liquidity Provider being rep

Subject to certain limitations, United may, at its option, arrange for a Replacement Facility at any time to replace any Liquidity Facility (including without limitation any Replacement Facility described in the following sentence). In addition, if a Liquidity Provider shall determine not to extend any Replacement Facility, then such Liquidity Provider may, at its option, arrange for another Replacement Facility to replace such Replacement Facility (i) during the period no earlier than 40 days and no later than 25 days prior to the then scheduled expiration date of such Replacement Facility and (ii) at any time after a Non-Extension Drawing has been made under such Liquidity Facility. A Liquidity Provider may also arrange for a Replacement Facility to replace any of its Liquidity Facility is provided at any time after a Downgrade Drawing under such Liquidity Facility. If any Replacement Facility is provided at any time after a Downgrade Drawing, a Special Termination Drawing or a Non-Extension Drawing under any Liquidity Facility, the funds with respect to such Liquidity Facility on deposit in the Cash Collateral Account for such Liquidity Facility will be returned to the Liquidity Provider being replaced. (Intercreditor Agreement, Section 3.5(e))

## Reimbursement of Drawings

The Subordination Agent must reimburse amounts drawn under any Liquidity Facility by reason of an Interest Drawing, Final Drawing, Downgrade Drawing, Special Termination Drawing or Non-Extension Drawing and interest thereon, but only to the extent that the Subordination Agent has funds available therefor. See "Description of the Intercreditor Agreement—Priority of Distributions"

# Interest Drawings, Special Termination Drawing and Final Drawing

Amounts drawn by reason of an Interest Drawing, Special Termination Drawing or Final Drawing will be immediately due and payable, together with interest on the amount of such drawing. From the date of the drawing to (but excluding) the third business day following the applicable Liquidity Provider's receipt of the notice of such Interest Drawing or Final Drawing, interest will accrue at the Base Rate plus 4.25% per annum. Thereafter, interest will accrue at LIBOR for the applicable interest period (or, as described in the sixth paragraph under "—
Reimbursement of Drawings—Interest

Drawings, Special Termination Drawing and Final Drawing", the Base Rate) plus 4.25% per annum. Any Special Termination Drawing under the Liquidity Facilities, other than any portion thereof applied to the payment of interest on the Certificates, will bear interest (x) subject to clause (y) below, in an amount equal to the investment earnings on amounts deposited in the Cash Collateral Account for such Liquidity Facility plus a specified rate per annum on the outstanding amount from time to time of such Special Termination Drawing and (y) from and after the date, if any, on which it is converted into a Final Drawing as described below under "—Liquidity Events of Default", at a rate equal to LIBOR for the applicable interest period (or, as described in the sixth paragraph under "—Interest Drawings, Special Termination Drawing and Final Drawing", the Base Rate) plus 4.25% per annum.

"Base Rate" means, on any day, a fluctuating interest rate per annum in effect from time to time, which rate per annum shall at all times be equal to (a) the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System arranged by Federal funds brokers, as published for such day (or, if such day is not a business day, for the next preceding business day) by the Federal Reserve Bank of New York, or if such rate is not so published for any day that is a business day, the average of the quotations for such day for such transactions received by the applicable Liquidity Provider from three Federal funds brokers of recognized standing selected by it, plus (b) one-quarter of one percent (1/4 of 1%).

"LIBOR" means, with respect to any interest period, (i) the rate per annum equal to the London Interbank Offered Rate per annum administered by ICE Benchmark Administration Limited (or any other successor person which takes over administration of that rate) appearing on display page Reuters Screen LIBOR01 Page (or any successor or substitute therefor) at approximately 11:00 a.m. (London time) two business days before the first day of such interest period, as the rate for dollar deposits with a maturity comparable to such interest period, or (ii) if the rate calculated pursuant to clause (i) above is not available, the average (rounded upwards, if necessary, to the next \(^{1}/16\) of 1%) of the rates per annum at which deposits in dollars are offered for the relevant interest period by three banks of recognized standing selected by the applicable Liquidity Provider in the London interbank market at approximately 11:00 a.m. (London time) two business days before the first day of such interest period in an amount approximately equal to the principal amount of the drawing to which such interest period is to apply and for a period comparable to such interest period, or (iii) if both the rate calculated pursuant to clause (i) is not available and the Liquidity Provider is unable, using customary reasonable means of determination, to determine a rate pursuant to clause (ii), the Base Rate; *provided* that that if a Benchmark Replacement Event has occurred (or an applicable Benchmark Replacement Rate has otherwise been established with agreed effectiveness prior to such Benchmark Replacement Event), LIBOR shall be the lower of (A) the Base Rate and (B) the Benchmark Replacement Rate has otherwise been established with agreed effectiveness prior to such Benchmark Replacement Event), LIBOR shall be the lower of (A) the Base Rate and (B) the Benchmark Replacement Rate has otherwise been established with agreed effectiveness prior to such Benchmark Replacement Event), LIBOR determined as provided above with respect to any

"Benchmark Replacement Event" means, subject to clause (y) of the last sentence of the definition of "LIBOR", in respect of the London Interbank Offered Rate or any successor Benchmark Replacement Rate, an event where the applicable administrator (or other applicable source) for such rate permanently or indefinitely ceases to provide such rate, without any successor administrator (or other applicable source) continuing to provide such rate.

"Benchmark Replacement Rate" means, subject to clause (y) of the last sentence of the definition of "LIBOR", following the occurrence of a Benchmark Replacement Event (with respect to the London Interbank Offered Rate or any then applicable successor Benchmark Replacement Rate (the "Terminating Rate")), or at the request of United or the Liquidity Provider in anticipation thereof following any applicable public statement from the administrator or regulatory supervisor (or other

applicable authority or source) identifying a specific date for occurrence of such Benchmark Replacement Event, an applicable alternate rate of interest (including any relevant adjusting spread) to such Terminating Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for U.S. dollar-denominated credit facilities at such time (as the applicable market replacement for such Terminating Rate), as determined pursuant to mutual written agreement of United and the Liquidity Provider, each acting reasonably.

If at any time, a Liquidity Provider shall have determined (which determination shall be conclusive and binding upon the Subordination Agent, absent manifest error) that, by reason of circumstances affecting the relevant interbank lending market generally (other than a Benchmark Replacement Event), LIBOR determined or to be determined for the current or the immediately succeeding interest period will not adequately and fairly reflect the cost to such Liquidity Provider (as conclusively certified by such Liquidity Provider, absent manifest error) of making or maintaining LIBOR advances, such Liquidity Provider shall give notice thereof (a "Rate Determination Notice") to the Subordination Agent. If such notice is given, then the outstanding principal amount of the LIBOR advances under the applicable Liquidity Facility shall be converted to Base Rate advances effective from the date of the Rate Determination Notice; provided that the rate then applicable in respect of such Base Rate advances shall be increased by one percent (1.00%). Each applicable Liquidity Provider shall withdraw a Rate Determination Notice given under the applicable Liquidity Facility when such Liquidity Provider determines that the circumstances giving rise to such Rate Determination Notice no longer apply to such Liquidity Provider, and the Base Rate advances under the applicable Liquidity Facility shall be converted to LIBOR advances effective as of the first day of the next succeeding interest period after the date of such withdrawal. Each change in the Base Rate shall become effective immediately. (Liquidity Facilities, Section 3.07(g))

# Downgrade Drawings and Non-Extension Drawings

The amount drawn under any Liquidity Facility by reason of a Downgrade Drawing or a Non-Extension Drawing will be treated as follows:

- · Such amount will be released on any Distribution Date to the applicable Liquidity Provider to the extent that such amount exceeds the Required Amount.
- Any portion of such amount withdrawn from the Cash Collateral Account for such Liquidity Facility to pay interest on the Certificates will be treated in the same way as Interest
  Drawings.
- The balance of such amount will be invested in certain specified eligible investments.

Any Downgrade Drawing under a Liquidity Facility, other than any portion thereof applied to the payment of interest on the Certificates, will bear interest (x) subject to clause (y) below, in an amount equal to the investment earnings on amounts deposited in the Cash Collateral Account for such Liquidity Facility plus a specified rate per annum on the outstanding amount from time to time of such Downgrade Drawing and (y) from and after the date, if any, on which it is converted into a Final Drawing as described below under "—Liquidity Events of Default", at a rate equal to LIBOR for the applicable interest period (or, as described in the sixth paragraph under "—Interest Drawings, Special Termination Drawing and Final Drawing", the Base Rate) plus 4.25% per annum.

Any Non-Extension Drawing under a Liquidity Facility, other than any portion thereof applied to the payment of interest on the Certificates, will bear interest (x) subject to clause (y) below, in an amount equal to the investment earnings on amounts deposited in the Cash Collateral Account for such Liquidity Facility plus a specified rate per annum on the outstanding amount from time to time of such Non-Extension Drawing and (y) from and after the date, if any, on which it is converted into a Final Drawing as described below under "—Liquidity Events of Default", at a rate equal to LIBOR for

the applicable interest period (or, as described in the sixth paragraph under "—Interest Drawings, Special Termination Drawing and Final Drawing", the Base Rate) plus 4.25% per annum.

# **Liquidity Events of Default**

Events of default under each Liquidity Facility (each, a "Liquidity Event of Default") will consist of:

- The acceleration of the Equipment Note.
- Certain bankruptcy or similar events involving United. (Liquidity Facilities, Section 1.01)

If (i) any Liquidity Event of Default under any Liquidity Facility has occurred and is continuing and (ii) the Equipment Note is not a Performing Equipment Note, the applicable Liquidity Provider may, in its discretion, give a notice of termination of such Liquidity Facility to the Subordination Agent (a "Termination Notice"). The Termination Notice will have the following consequences:

- Such Liquidity Facility will expire on the fifth Business Day after the date on which such Termination Notice is received by the Subordination Agent.
- The Subordination Agent will promptly request, and the applicable Liquidity Provider will make, a Final Drawing thereunder in an amount equal to the then Maximum Available Commitment thereunder.
- · Any drawing remaining unreimbursed as of the date of termination will be automatically converted into a Final Drawing under such Liquidity Facility.
- All amounts owing to the applicable Liquidity Provider automatically will be accelerated.

Notwithstanding the foregoing, the Subordination Agent will be obligated to pay amounts owing to the applicable Liquidity Provider only to the extent of funds available therefor after giving effect to the payments in accordance with the provisions set forth under "Description of the Intercreditor Agreement—Priority of Distributions". (Liquidity Facilities, Section 2.09) Upon the circumstances described below under "Description of the Intercreditor Agreement—Intercreditor Rights", such Liquidity Provider may become the Controlling Party with respect to the exercise of remedies under the Security Documents. (Intercreditor Agreement, Section 2.6(c))

# **Liquidity Provider**

The initial Liquidity Providers will be Goldman Sachs Bank USA and potentially, one or more banks and the initial Liquidity Providers meets the Liquidity Threshold Rating.

# DESCRIPTION OF THE INTERCREDITOR AGREEMENT

The following summary describes the material provisions of the Intercreditor Agreement (the "Intercreditor Agreement") among the Trustees, the Liquidity Providers and Wilmington Trust, National Association, as subordination agent (the "Subordination Agent"). The summary does not purport to be complete and is qualified in its entirety by reference to all of the provisions of the Intercreditor Agreement, which will be filed as an exhibit to a Current Report on Form 8-K to be filed by United with the Commission.

# **Intercreditor Rights**

# **Controlling Party**

The Loan Trustee will be directed in taking, or refraining from taking, any action under a Security Document or with respect to the Equipment Note, by the holders of at least a majority of the outstanding principal amount of the Equipment Note, so long as no Indenture Default shall have occurred and be continuing. For so long as the Subordination Agent is the registered holder of the Equipment Note, the Subordination Agent will act with respect to the preceding sentence in accordance with the directions of the Trustee, to the extent constituting, in the aggregate, directions with respect to the required principal amount of Equipment Note.

After the occurrence and during the continuance of an Indenture Default, the Loan Trustee will be directed in taking, or refraining from taking, any action under a Security Document or with respect to the Equipment Note, including acceleration of the Equipment Note or foreclosing the lien on the Collateral, by the Controlling Party, subject to the limitations described below. See "Description of the Certificates—Indenture Defaults and Certain Rights Upon an Indenture Default" for a description of the rights of the Certificateholders of each Trust to direct the respective Trustees.

The "Controlling Party" will be:

- The Class A Trustee.
- If any Additional Junior Certificates have been issued, upon payment of final distributions to the holders of Class A Certificates, the trustee for the Additional Trust related to the most senior class of Additional Junior Certificates.
- Under certain circumstances, and notwithstanding the foregoing, the Liquidity Provider with the largest amount owed to it, as discussed in the next paragraph.

At any time after 18 months from the earliest to occur of (x) the date on which the entire available amount under any Liquidity Facility shall have been drawn (for any reason other than a Downgrade Drawing, Special Termination Drawing or Non-Extension Drawing that has not been converted into a Final Drawing) and shall remain unreimbursed, (y) the date on which the entire amount of any Downgrade Drawing, Special Termination Drawing or Non-Extension Drawing shall have been withdrawn from the Cash Collateral Account for such Liquidity Facility to pay interest on the Certificates and shall remain unreimbursed and (z) the date on which the Equipment Note shall have been accelerated, the Liquidity Provider (including, if any Class B Certificates are issued, any liquidity provider for the Class B Certificates) with the highest outstanding amount of Liquidity Obligations (so long as such Liquidity Provider has not defaulted in its obligation to make any drawing under any Liquidity Facility) shall have the right to become the Controlling Party; provided, that, non-defaulting Liquidity Providers of any Class of Certificates may, among themselves and by notice to the parties to the Intercreditor Agreement, agree to different voting rights with respect to becoming the Controlling Party.

For purposes of giving effect to the rights of the Controlling Party, the Trustee (to the extent not the Controlling Party) shall irrevocably agree, and the Certificateholders (other than the

Certificateholders represented by the Controlling Party) will be deemed to agree by virtue of their purchase of Certificates, that the Subordination Agent, as record holder of the Equipment Note, shall exercise its voting rights in respect of the Equipment Note as directed by the Controlling Party. (Intercreditor Agreement, Section 2.6) For a description of certain limitations on the Controlling Party's rights to exercise remedies, see "Description of the Equipment Note—Remedies".

"Final Distributions" means, with respect to the Certificates of the Trust on any Distribution Date, the sum of (x) the aggregate amount of all accrued and unpaid interest on such Certificates and (y) the Pool Balance of such Certificates as of the immediately preceding Distribution Date. For purposes of calculating Final Distributions with respect to the Certificates of the Trust, any premium paid on the Equipment Note held in the Trust which has not been distributed to the Certificateholders of the Trust (other than such premium or a portion thereof applied to the payment of interest on the Certificates of the Trust or the reduction of the Pool Balance of the Trust) shall be added to the amount of such Final Distributions.

## Limitation on Exercise of Remedies

So long as any Certificates are outstanding, during the period ending on the date which is nine months after the earlier of (x) the acceleration of the Equipment Note and (y) the bankruptcy or insolvency of United, without the consent of the Trustee (and each Additional Trustee, if any Additional Junior Certificates are outstanding), no Collateral subject to the lien of the Security Documents or the Equipment Note may be sold in the exercise of remedies under such Security Document, if the net proceeds from such sale would be less than the Minimum Sale Price for such Collateral or the Equipment Note.

"Minimum Sale Price" means, with respect to any Spare Part (or group of Spare Parts to be sold in a single transaction), Spare Engine or Aircraft, 75% of the Appraised Current Market Value of such Spare Part (or group of Spare Parts), Spare Engine or Aircraft or, with respect to the Equipment Note, 85% of the Appraised Current Market Value of the Collateral.

Following the occurrence and during the continuation of an Indenture Default, in the exercise of remedies pursuant to any Security Document, the Loan Trustee may be directed to lease any of the related Collateral to any person (including United) so long as the Loan Trustee in doing so acts in a "commercially reasonable" manner within the meaning of Article 9 of the Uniform Commercial Code as in effect in any applicable jurisdiction (including Sections 9-610 and 9-627 thereof).

If following certain events of bankruptcy, reorganization or insolvency with respect to United described in the Intercreditor Agreement (a "United Bankruptcy Event") and during the pendency thereof, the Controlling Party receives a proposal from or on behalf of United to restructure the financing of all or any part of the Collateral, the Controlling Party will promptly thereafter give the Subordination Agent and the Trustee (and each Additional Trustee, if any Additional Junior Certificates are outstanding) notice of the material economic terms and conditions of such restructuring proposal whereupon the Subordination Agent acting on behalf of the Trustee (and each Additional Trustee, if Additional Junior Certificates are outstanding) will endeavor using reasonable commercial efforts to make such terms and conditions of such restructuring proposal available to all Certificateholders (and, if then outstanding, holders of Additional Junior Certificates) (whether by posting on DTC's Internet board or otherwise) and to each Liquidity Provider that has not made a Final Drawing. Thereafter, neither the Subordination Agent nor the Trustee, whether acting on instructions of the Controlling Party or otherwise, may, without the consent of the Trustee (and each Additional Trustee, if any Additional Junior Certificates are outstanding), enter into any term sheet, stipulation or other agreement (whether in the form of an adequate protection stipulation, an extension under Section 1110(b) of the U.S. Bankruptcy Code or otherwise) to effect any such restructuring proposal with or on behalf of United unless and until the material economic terms and conditions of

such restructuring proposal shall have been made available to all Certificateholders (and, if then outstanding, holders of Additional Junior Certificates) and to each Liquidity Provider that has not made a Final Drawing for a period of not less than 15 calendar days (except that such requirement shall not apply to any such term sheet, stipulation or other agreement that is entered into on or prior to the expiry of the 60-Day Period and that is effective for a period not longer than three months from the expiry of the 60-Day Period).

If any Class of Additional Junior Certificates has been issued, in the event that any holder of Additional Junior Certificates gives irrevocable notice of the exercise of its right to purchase all (but not less than all) of the Class of Certificates represented by the then Controlling Party (as described in "Description of the Certificates—Purchase Rights of Certificateholders"), prior to the expiry of the 15-day notice period specified above, such Controlling Party may not direct the Subordination Agent or the Trustee to enter into any such restructuring proposal with respect to all or any part of the Collateral, unless and until such holder fails to purchase such Class of Certificates on the date that it is required to make such purchase.

## **Post Default Appraisals**

Upon the occurrence and continuation of an Indenture Default, the Subordination Agent will be required to obtain three desktop appraisals for Aircraft and Spare Engines, and one desktop appraisal for Spare Parts, from the appraisers selected by the Controlling Party setting forth the current market value, current lease rate (other than as to Spare Parts) and distressed value (in each case, as defined by the International Society of Transport Aircraft Trading) of the Collateral (each such appraisal, an "Appraisal" and the current market value appraisals being referred to herein as the "Post Default Appraisals"). For so long as any Indenture Default shall be continuing, and without limiting the right of the Controlling Party to request more frequent Appraisals, the Subordination Agent will be required to obtain additional Appraisals on the date that is 364 days from the date of the most recent Appraisal or if a United Bankruptcy Event shall have occurred and is continuing, on the date that is 180 days from the date of the most recent Appraisal.

"Appraised Current Market Value" of all or any Aircraft, Engine, or Spare Engine means the lower of the average and the median of the three most recent Post Default Appraisals of such Collateral, and with respect to Spare Parts, the most recent Post Default Appraisal.

# **Priority of Distributions**

All payments in respect of the Equipment Notes and certain other payments received on each Regular Distribution Date or Special Distribution Date (each, a "Distribution Date") will be promptly distributed by the Subordination Agent on such Distribution Date in the following order of priority:

- To the Subordination Agent, any Trustee, any Certificateholder and any Liquidity Provider to the extent required to pay certain out-of-pocket costs and expenses actually incurred by the Subordination Agent to the extent not previously reimbursed (or reasonably expected to be incurred by the Subordination Agent for the period ending on the next succeeding Regular Distribution Date, which shall not exceed \$150,000 unless approved in writing by the Controlling Party) or any Liquidity Provider or any Trustee or to reimburse any Certificateholder or any Liquidity Provider in respect of payments made to the Subordination Agent or any Trustee in connection with the protection or realization of the value of the Equipment Notes held by the Subordination Agent or any Collateral under (and as defined in) the Indenture (collectively, the "Administration Expenses").
- To each Liquidity Provider (a) to the extent required to pay the Liquidity Expenses or (b) in the case of a Special Payment on account of the redemption, purchase or prepayment of the Equipment Note (an "Equipment Note Special Payment"), so long as no Indenture Default has

occurred and is continuing, the amount of accrued and unpaid Liquidity Expenses that are not yet due, multiplied by the Section 2.4 Fraction or, if an Indenture Default has occurred and is continuing, clause (a) will apply.

- To each Liquidity Provider (a) to the extent required to pay interest accrued on the Liquidity Obligations and if a Special Termination Drawing has been made and has not been converted into a Final Drawing, to pay the outstanding amount of such Special Termination Drawing or (b) in the case of an Equipment Note Special Payment, so long as no Indenture Default has occurred and is continuing, to the extent required to pay accrued and unpaid interest then in arrears on the Liquidity Obligations plus an amount equal to the amount of accrued and unpaid interest on the Liquidity Obligations not in arrears, multiplied by the Section 2.4 Fraction and if a Special Termination Drawing has been made and has not been converted into a Final Drawing, the outstanding amount of such Special Termination Drawing or, if an Indenture Default has occurred and is continuing, clause (a) will apply.
- To (i) each Liquidity Provider to the extent required to pay the outstanding amount of all Liquidity Obligations and (ii) if applicable, with respect to any particular Liquidity Facility, unless (in the case of this clause (ii) only) (x) the Equipment Note is not a Performing Equipment Note and a Liquidity Event of Default shall have occurred and is continuing under such Liquidity Facility or (y) a Final Drawing shall have occurred under such Liquidity Facility or an Interest Drawing for such Liquidity Facility shall have been converted into a Final Drawing, the Subordination Agent to replenish the Cash Collateral Account with respect to such Liquidity Facility up to the Required Amount for the related Class of Certificates.
- To the Subordination Agent, the Trustee or any Certificateholder to the extent required to pay certain fees, taxes, charges and other amounts payable.
- To the Trustee (a) to the extent required to pay accrued and unpaid interest at the Stated Interest Rate on the Pool Balance of the Certificates or (b) in the case of an Equipment Note Special Payment, so long as no Indenture Default has occurred and is continuing, to the extent required to pay any such interest that is then due together with (without duplication) accrued and unpaid interest at the Stated Interest Rate on the outstanding principal amount of the Equipment Note held in the Trust being redeemed, purchased or prepaid or, if an Indenture Default has occurred and is continuing, clause (a) will apply.
- To the Trustee to the extent required to pay Expected Distributions on the Certificates.

If any Class B Certificates or Class C Certificates are issued, such Class B Certificates or Class C Certificates may have the benefit of credit support similar to the Liquidity Facilities or different therefrom and the priority of distributions in the Intercreditor Agreement may be revised so that claims for fees, interest, expenses, reimbursement of advances and other obligations arising from such credit support may rank equally with similar claims in respect of the Liquidity Facilities if certain conditions are met. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates"

If any Additional Junior Certificates have been issued, the priority of distributions in the Intercreditor Agreement may be revised such that certain obligations relating to such Additional Junior Certificates may rank ahead of certain obligations with respect to the Certificates. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates". Such priority may include, immediately prior to the payment of Expected Distributions (but after payment of interest) on the Certificates pursuant to the above priority of payments, the payment, as to any such Additional Junior Certificates, of (a) accrued and unpaid Adjusted Interest on such Additional Junior Certificates or (b) in the case of an Equipment Note Special Payment (determined for such Class with respect to its Additional Equipment Note), so long as no Indenture Default has occurred and is continuing, any such

Adjusted Interest that is then due or, if an Indenture Default has occurred and is continuing, with clause (a) being applicable.

"Section 2.4 Fraction" means, with respect to any Special Distribution Date, a fraction, the numerator of which shall be the amount of principal of the Equipment Note being redeemed, purchased or prepaid on such Special Distribution Date, and the denominator of which shall be the aggregate unpaid principal amount of the Equipment Note outstanding as of such Special Distribution Date.

"Liquidity Obligations" means the obligations of the Subordination Agent to reimburse or to pay any Liquidity Provider all principal, interest, fees and other amounts owing to it under each Liquidity Facility or certain other agreements.

"Liquidity Expenses" means the Liquidity Obligations other than any interest accrued on any Liquidity Obligations or the principal amount of any drawing under the Liquidity Facilities.

"Expected Distributions" means, with respect to the Certificates of the Trust on any Distribution Date (the "Current Distribution Date"), the difference between:

- (A) the Pool Balance of such Certificates as of the immediately preceding Distribution Date (or, if the Current Distribution Date is the first Distribution Date, the original aggregate face amount of the Certificates of such Trust), and
- (B) the Pool Balance of such Certificates as of the Current Distribution Date calculated on the basis that (i) the principal of the Equipment Notes other than Performing Equipment Notes (the "Non-Performing Equipment Notes") held in such Trust has been paid in full and such payments have been distributed to the holders of such Certificates, (ii) the principal of the Performing Equipment Notes held in such Trust has been paid when due (but without giving effect to any acceleration of Performing Equipment Notes) and such payments have been distributed to the holders of such Certificates and (iii) the principal of the Equipment Note formerly held in the Trust that have been sold pursuant to the Intercreditor Agreement has been paid in full and such payments have been distributed to the holders of such Certificates.

For purposes of calculating Expected Distributions with respect to the Certificates of the Trust, any premium paid on the Equipment Note held in the Trust that has not been distributed to the Certificateholders of the Trust (other than such premium or a portion thereof applied to the payment of interest on the Certificates of the Trust or the reduction of the Pool Balance of the Trust) shall be added to the amount of Expected Distributions.

"Adjusted Interest" means, with respect to any Additional Junior Certificates (and with applicable terms having the corresponding meanings as applied to, or taking into account, such Additional Junior Certificates and related Additional Equipment Note), as of any Current Distribution Date, (I) any interest described in clause (II) of this definition accruing prior to the immediately preceding Distribution Date which remains unpaid and (II) the sum of (A) interest determined at the Stated Interest Rate for such Additional Junior Certificates for the number of days during the period commencing on, and including, the immediately preceding Distribution Date (or, if the Current Distribution Date is the first Distribution Date, the Issuance Date) and ending on, but excluding, the current Distribution Date, on the Preferred Pool Balance for such Additional Junior Certificates on such Current Distribution Date and (B)(i) for any Aircraft or Spare Engine, or substantially all of the Spare Parts Collateral, in any case for which a disposition, distribution or sale (contemplated in clause (B)(i) of the definition of Preferred Pool Balance) has occurred since the immediately preceding Distribution Date (but only if (x) no such event has previously occurred with respect to such specific Collateral and (y) no sale or Deemed Note Disposition Event has occurred with respect to the Additional Equipment Note for such Class on or before the date of such disposition, distribution or sale), interest, determined at the Stated Interest Rate for such Additional Junior Certificates, for each

day during the period commencing on, and including, the immediately preceding Distribution Date (or, if the Current Distribution Date is the first Distribution Date, the Issuance Date) and ending on, but excluding, the date of disposition, distribution or sale, on the applicable portion of the principal amount of such Additional Equipment Note calculated pursuant to clause (B)(i) of the definition of Preferred Pool Balance with respect to such specific Collateral, and (ii) without duplication of any interest described in clause (i) above, in the event a sale or Deemed Noted Disposition Event with respect to such Additional Equipment Note has occurred since the immediately preceding Distribution Date (but only if no such event has previously occurred), interest at the Stated Interest Rate for such Additional Junior Certificates for each day during the period commencing on, and including, the immediately preceding Distribution Date (or, if the Current Distribution Date is the first Distribution Date, the Issuance Date) and ending on, but excluding, the date of the earliest of such sale or Deemed Note Disposition Event with respect to such Additional Equipment Note, on the principal amount of such Additional Equipment Note calculated pursuant to clause (B)(ii) or (iii), as applicable, of the definition of Preferred Pool Balance.

"Preferred Pool Balance" means, with respect to any Additional Junior Certificates (and with applicable terms having the corresponding meanings as applied to, or taking into account, such Additional Junior Certificates and related Additional Equipment Note), as of any date, the excess of (A) the Pool Balance of such Additional Junior Certificates as of the immediately preceding Distribution Date (or, if such date is on or before the first Distribution Date, the original aggregate face amount of such Additional Junior Certificates) (after giving effect to payments made on such date) over (B) (i) for so long as neither clause (ii) nor clause (iii) below is applicable, the sum of (x) with respect to each Aircraft and Spare Engine, and all or substantially all of the Spare Parts Collateral, in each case having been previously sold or disposed for cash by the Loan Trustee (in connection with its exercise of remedies), the portion, if any of the Allocable Amount of such specific Collateral that remains unpaid as of such date subsequent to such sale or disposition and after giving effect to any distributions of the proceeds of such sale or disposition applied under the Indenture to the payment of any Additional Equipment Note in respect of such Additional Junior Certificates (with any principal so applied to such Additional Equipment Note being deemed to be applied to payment of such Allocable Amount), and (y) with respect to each Aircraft and Spare Engine having suffered an Event of Loss requiring an applicable mandatory redemption (in respect of such specific Collateral) of such Additional Equipment Note pursuant to the Indenture or any Security Document, the portion, if any, of the Allocable Amount for such specific Collateral that remains unpaid as of such date subsequent to the scheduled date of such mandatory redemption after giving effect to the distributions of any proceeds in respect of such Event of Loss (and any other payments in respect of such mandatory redemption) applied under the Indenture to the payment of such Additional Equipment Note; provided, however, that if more than one of the foregoing clauses (i)(x) and (i)(y) is applicable to any specific Collateral, only the amount determined pursuant to the clause that first became applicable shall be counted with respect to such Collateral; (ii) the excess, if any, of (x) the outstanding amount of principal and interest as of the date of sale of such Additional Equipment Note previously sold over (y) the purchase price received with respect to the sale of such Additional Equipment Note (net of any applicable costs and expenses of sale); and (iii) if a Deemed Note Disposition Event has occurred, the outstanding principal amount of such Additional Equipment Note; provided, however, that if any one or more of the clauses (ii) and (iii) is applicable to such Additional Equipment Note, only the amount determined pursuant to the first such clause that became applicable shall be counted with respect to such Additional Equipment Note (and any amount determined pursuant to clause (i) shall be disregarded).

"Deemed Note Disposition Event" means, in respect of the Equipment Note, the continuation of an Indenture Default in respect of the Equipment Note without an Actual Disposition Event occurring in respect of the Equipment Note for a period of five years from the date of the occurrence of such Indenture Default.

"Actual Disposition Event" means, in respect of the Equipment Note, (i) the disposition of all or substantially all of the Collateral securing the Equipment Note, (ii) the occurrence of the mandatory redemption date for a mandatory redemption in full of the outstanding principal balance of the Equipment Note following an Event of Loss with respect to all or substantially all of the then remaining Collateral or (iii) the sale of the Equipment Note.

Interest Drawings under any Liquidity Facility and withdrawals from the applicable Cash Collateral Account for such Liquidity Facility in respect of interest on the Certificates of the Trust will be distributed to the Trustee for the Trust, notwithstanding the priority of distributions set forth in the Intercreditor Agreement or as otherwise described herein. All amounts on deposit in the Cash Collateral Account for any Liquidity Facility that is in excess of the Required Amount will be paid to the applicable Liquidity Provider.

# Voting of the Equipment Note

In the event that the Subordination Agent, as the registered holder of the Equipment Note, receives a request for its consent to any amendment, supplement, modification, consent or waiver under the Equipment Note, the Indenture or any other Security Document (or, if applicable, other related document), (i) if no Indenture Default shall have occurred and be continuing, the Subordination Agent shall request directions from the Trustee and shall vote or consent in accordance with such directions and (ii) if any Indenture Default shall have occurred and be continuing, the Subordination Agent will exercise its voting rights as directed by the Controlling Party, subject to certain limitations; provided that no such amendment, modification, consent or waiver shall, without the consent of each Liquidity Provider and each affected Certificateholder, reduce the amount of principal or interest payable by United under the Equipment Note or change the time of payments or method of calculation of any amount under the Equipment Note. (Intercreditor Agreement, Section 9.1(b))

### List of Certificateholders

Upon the occurrence of an Indenture Default, the Subordination Agent shall instruct the Trustee to, and the Trustee shall, request that DTC post on its Internet bulletin board a securities position listing setting forth the names of all the parties reflected on DTC's books as holding interests in the Certificates.

# Reports

Promptly after the occurrence of a Triggering Event or an Indenture Default resulting from the failure of United to make payments on the Equipment Note and on every Regular Distribution Date while the Triggering Event or such Indenture Default shall be continuing, the Subordination Agent will provide to the Trustee, each Liquidity Provider, the Rating Agencies and United a statement setting forth the following information:

- After a bankruptcy of United, with respect to the Collateral, whether such Collateral is or are (i) subject to the 60-day period of Section 1110 of the U.S. Bankruptcy Code, (ii) subject to an election by United under Section 1110(a) of the U.S. Bankruptcy Code, (iii) covered by an agreement contemplated by Section 1110(b) of the U.S. Bankruptcy Code or (iv) not subject to any of (i), (ii) or (iii).
- To the best of the Subordination Agent's knowledge, after requesting such information from United, (i) whether any Spare Engine or Aircraft is currently in service or in storage, (ii) the maintenance status of such Spare Engines or Aircraft, and (iii) the location of such Spare Engines or any Engine and of the Spare Parts Collateral. United has agreed to provide such information upon request of the Subordination Agent, but no more frequently than every three months with respect to each Aircraft so long as it is subject to the lien of the Indenture.

- The current Pool Balance of the Certificates, the Preferred Pool Balance of each Additional Class of Certificates (if issued) and outstanding principal amount of the Equipment Note.
- The expected amount of interest which will have accrued on the Equipment Note and on the Certificates as of the next Regular Distribution Date.
- The amounts paid to each person on such Distribution Date pursuant to the Intercreditor Agreement.
- Details of the amounts paid on such Distribution Date identified by reference to the relevant provision of the Intercreditor Agreement and the source of payment (by party and applicable Collateral).
- If the Subordination Agent has made a Final Drawing under any Liquidity Facility.
- The amounts currently owed to each Liquidity Provider.
- The amounts drawn under each Liquidity Facility.
- After a United Bankruptcy Event, any operational reports filed by United with the bankruptcy court which are available to the Subordination Agent on a non-confidential basis.

# The Subordination Agent

Wilmington Trust, National Association will be the Subordination Agent under the Intercreditor Agreement. United and its affiliates may from time to time enter into banking and trustee relationships with the Subordination Agent and its affiliates. The Subordination Agent's address is Wilmington Trust, National Association, 1100 North Market Street, Wilmington, Delaware 19890-1605, Attention: Corporate Trust Administration.

The Subordination Agent may resign at any time, in which event a successor Subordination Agent will be appointed as provided in the Intercreditor Agreement. The Controlling Party may remove the Subordination Agent for cause as provided in the Intercreditor Agreement. In such circumstances, a successor Subordination Agent will be appointed as provided in the Intercreditor Agreement. Any resignation or removal of the Subordination Agent and appointment of a successor Subordination Agent does not become effective until acceptance of the appointment by the successor Subordination Agent. (Intercreditor Agreement, Section 8.1)

# DESCRIPTION OF THE COLLATERAL AND THE APPRAISALS

The Equipment Note will initially be secured by substantially all of United's aircraft spare parts from time to time (the "Spare Parts"), as well as a designated group of 99 spare engines (the "Spare Engines") and 352 aircraft (the "Aircraft" and, together with the Spare Parts and the Spare Engines, as each may be supplemented, modified or substituted from time to time the "Collateral").

# The Spare Parts

The Spare Parts that are Collateral fall into three categories, "rotables," "repairables" and "expendables". "Rotables" are parts that wear over time and can be repeatedly restored to a serviceable condition over a period approximating the life of the flight equipment to which they relate. Examples of Rotables include thrust reversers, auxiliary power units and landing gear. "Repairables" are those parts that can be commonly economically restored to a serviceable condition, but that have a life that is shorter than the life of the flight equipment to which they relate. In addition, they can be overhauled or repaired only a limited number of times. Examples of repairable parts include engine cowling, fairings, engine blades, flap track assemblies, and certain bearings, duct assemblies and fittings. "Expendables" are parts that generally are used once and thereby consumed or thereafter discarded. Examples of consumable expendable parts, or expendables, include bolts, screws, tubes and hoses.

The security interest in a Spare Part will not apply for as long as it is installed on or being used in any aircraft, engine or other spare part so installed or being used. In addition, the security interest will not apply to a Spare Part not located at one of the designated locations specified pursuant to the Spare Parts Security Agreement. See "—Certain Spare Parts Covenants" regarding certain obligations of United with respect to designated locations.

# The Spare Engines

The Collateral will include the types of Spare Engines listed below:

Engine Model	Aggregate Number in the Collateral	Aircraft Model Used On
GEnx-1B70	9	787-8
GE90-115B	3	777-300ER
CFM56-7B26	12	737-800
LEAP-1B26/28	3	737 MAX 9
CFM56-7B24	9	737-700
GE90-90B	6	777-200ER
CFM56-7B26E	5	737-900ER
PW4090	16	777-200ER
V2527-A5	7	A319 / A320
RB211-535E4B	10	757-200, 757-300
V2524-A5	2	A319 / A320
PW4077	6	777-200
CF6-80C2B8F	3	767-400ER
V2522-A5	5	A319 / A320
PW4056	3	767-300ER

United may pledge additional eligible Spare Engines from time to time, subject to satisfaction of certain conditions. (Indenture, Section 4.1 to Annex C)

# The Aircraft

The Collateral will include the aircraft models listed below. Each Aircraft will be comprised of an airframe (the "Airframe") and two engines (the "Engines").

- **Boeing 737-700.** This is a narrowbody aircraft with a seating capacity of approximately 126 (in United's typical configuration for these aircraft). The engine type utilized on United's 737-700 aircraft is the CFM International CFM56. The Collateral will include 30 of these aircraft.
- **Boeing 737-800.** This is a narrowbody aircraft with a seating capacity of approximately 166 (in United's typical configuration for these aircraft). The engine type utilized on United's 737-800 aircraft is the CFM International CFM56. The Collateral will include 63 of these aircraft.
- **Boeing 737-900ER.** This is a narrowbody aircraft with a seating capacity of approximately 179 (in United's typical configuration for these aircraft). The engine type utilized on United's 737-900ER aircraft is the CFM International CFM56. The Collateral will include 7 of these aircraft.
- Airbus A319-100. This is a narrowbody aircraft with a seating capacity of approximately 126 (in United's typical configuration for these aircraft). The engine type utilized on United's A319-100 aircraft is the IAE V2500. The Collateral will include 52 of these aircraft.
- Airbus A320-200. This is a narrowbody aircraft with a seating capacity of approximately 150 (in United's typical configuration for these aircraft). The engine type utilized on United's A320-200 aircraft is the IAE V2500. The Collateral will include 71 of these aircraft.
- **Boeing 757-200.** This is a narrowbody aircraft with a seating capacity of approximately 176 (in United's typical configuration for these aircraft). The engine type utilized on United's 757-200 aircraft is the Rolls-Royce RB211. The Collateral will include 29 of these aircraft.
- **Boeing 757-300.** This is a narrowbody aircraft with a seating capacity of approximately 234 (in United's typical configuration for these aircraft). The engine type utilized on United's 757-300 aircraft is the Rolls-Royce RB211. The Collateral will include 9 of these aircraft.
- **Boeing 767-300ER.** This is a widebody aircraft with a seating capacity of approximately 214 (in United's typical configuration for these aircraft). The engine type utilized on United's 767-300ER aircraft is the Pratt & Whitney PW4000. The Collateral will include 14 of these aircraft.
- **Boeing 767-400ER.** This is a widebody aircraft with a seating capacity of approximately 240 (in United's typical configuration for these aircraft). The engine type utilized on United's 747-400ER aircraft is the General Electric CF6. The Collateral will include 14 of these aircraft.
- **Boeing 777-200.** This is a widebody aircraft with a seating capacity of approximately 364 (in United's typical configuration for these aircraft). The engine type utilized on United's 777-200 aircraft is the Pratt & Whitney PW 4000. The Collateral will include 15 of these aircraft.
- **Boeing 777-200ER.** This is a widebody aircraft with a seating capacity of approximately 276 (in United's typical configuration for these aircraft). The engine type utilized on United's 777-200ER aircraft is the General Electric GE90 or Pratt & Whitney PW4000. The Collateral will include 48 of these aircraft.

United may pledge additional eligible Airframes and Engines from time to time, subject to satisfaction of certain conditions. (Indenture, Section 4.1 to Annex C)

# The Appraisals

An appraisal of the Spare Parts that will initially secure the Equipment Note has been prepared by mba Aviation ("mba"). Appraisals of the Spare Engines and Aircraft that will initially secure the Equipment Note have been prepared by BK Associates, Inc. ("BK"), ICF SH&E Limited ("ICF") and mba (collectively with BK and ICF, the "Appraisers"). mba has prepared a report on the maintenance status of such Spare Engines and Aircraft. In addition, the appraisals provide values as of September 1,

2020, or, in the case of mba's appraisal of the Spare Parts, August 31, 2020 (in each case, the "Initial Appraisal Date"), and maintenance status of the Spare Engines and Aircraft is provided as of September 1, 2020. As noted in the mba report, some Aircraft and Spare Engine Maintenance Adjusted Base Values are floored at salvage value. As such, the maintenance adjustments used for calculating Appraised Value is derived by subtracting the Half-Life Base Value from the Maintenance Adjusted Base Value. Based on such appraisals, the aggregate appraised value of the Collateral initially securing the Equipment Note is approximately \$5.8 billion. Appraised value represents, with respect the Spare Parts, the appraised current market value as of the applicable Initial Appraisal Date, as determined by mba. Appraised value represents, with respect to each Spare Engine and Aircraft, the lesser of the mean and the median of its appraised base value as of the applicable Initial Appraisal Date, as determined by the three appraisers, assuming a half-life condition of such Spare Engine or Aircraft, adjusted for its maintenance status as provided by mba.

For these purposes, "base value" is the appraiser's opinion of the underlying economic value of an asset, in an open, unrestricted, stable market environment with a reasonable balance of supply and demand and full consideration is assumed of its "highest and best use." "Current market value" is the appraiser's opinion of the most likely trading price that may be generated for the Spare Parts under the market circumstances that are perceived to exist at the time in question. "Half-life" condition assumes that every component or maintenance service which has a prescribed interval that determines its service life, overhaul interval or interval between maintenance services, is at a condition which is one-half of the total interval.

As part of this process, each Appraiser performed "desktop" appraisals and mba prepared its report on maintenance status without any physical inspection of the applicable Collateral (except in the case of the Spare Parts, for which a virtual inspection as described therein was conducted) based on information provided by United. The Appraisals are based on various assumptions and methodologies, which vary among the appraisals. The appraised values were determined as of the applicable Initial Appraisal Date. The Appraisers have delivered letters summarizing their respective appraisals and mba has delivered a letter summarizing its maintenance report, copies of which are annexed to this prospectus supplement as Appendix II. For a discussion of the assumptions and methodologies used in each of the appraisals and maintenance report, reference is hereby made to such summaries.

An appraisal is only an estimate of value. The maintenance adjusted base value, in the case of the Spare Engines and Aircraft, and current market value, in the case of Spare Parts, should not be relied upon as a measure of realizable value. The proceeds realized upon a sale of any Collateral may be less than its appraisad value. In addition, the appraisals of the Aircraft and Spare Engines included in Appendix II provide projected future base values of the Collateral that were used to calculate the projected future loan-to-value statistics included in this prospectus supplement. Projected values are, by their nature, less accurate than current base values as they are based on dynamics that exist at the time the appraisal is prepared, which may be different than those that will exist at any time in the future.

The value of the Collateral in the event of the exercise of remedies under the Security Documents will depend on market and economic conditions, the availability of buyers, the condition of such Collateral, the number of similar assets available for sale at such time, and other similar factors. Accordingly, there can be no assurance that the proceeds realized upon any such exercise with respect to the Collateral pursuant to the Security Documents would equal the appraised value of the Collateral or be sufficient to satisfy in full payments due on the Equipment Note. The amount of time required to complete any such exercise with respect to some or all of the Collateral is unknown and there can be no assurance any such exercise will be completed in a timely manner, if at all. See "Risk Factors—Risk Factors relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value."

The table below sets forth the Appraised Value of the Spare Parts.

	Spare Parts Appraised Value(1)					
Fleet Type	Rotables	Repairables	Expendables	Total		
777	\$ 162,957,217.00	\$ 50,209,112.00	\$ 40,307,963.00	\$ 253,474,292.00		
737	134,588,053.00	62,736,547.00	43,037,002.00	240,361,602.00		
A320	111,790,608.00	56,220,661.00	34,238,665.00	202,249,934.00		
757	91,195,393.00	46,828,302.00	41,253,378.00	179,277,073.00		
Military	40,642,270.00	59,085,098.00	11,476,803.00	111,204,171.00		
767	51,846,241.00	24,506,065.00	27,250,155.00	103,602,461.00		
787	56,456,398.00	7,271,066.00	12,089,943.00	75,817,407.00		
Common	24,271,723.00	9,795,307.00	6,333,102.00	40,400,132.00		
Hardware/Software	0.00	53,680.00	42,299,533.00	42,353,213.00		
Retired	4,630,643.00	10,028,548.00	13,981,422.00	28,640,613.00		
Not Provided	0.00	24,272.00	88,355.00	112,627.00		

<sup>(1)</sup> This Appraised Value of Spare Parts used in preparing this table was determined as of the applicable Initial Appraisal Date. Since spare parts are regularly used, refurbished, purchased, transferred and discarded in the ordinary course of United's business, the quantity of Spare Parts included in the Collateral and the Appraised Value of the Spare Parts will change over time. United is required to provide to the Loan Trustee a semiannual appraisal of the Collateral and an officer's certificate setting forth certain details regarding the Spare Parts Collateral. See "—Semiannual LTV Test".

The table below sets forth the Appraised Values of each Spare Engine.

	Manufacturer's	Delivery	Appraiser's Valuati			iser's Valuation	ns			mba Maintenance	Appraised	
Engine Type	Serial Number	Month		BK		ICF		mba		Adjustment	Value	
CF6-80C2B8F	706368	Oct-2001	\$	4,632,889.66	\$	2,934,309.30	\$	2,500,000.00	\$	(1,920,000.00)	\$ 1,014,309.30	
CF6-80C2B8F	706439	Jul-2000		4,632,889.66		2,934,309.30		2,500,000.00		(1,920,000.00)	1,014,309.30	
CF6-80C2B8F	706323	May-2001		4,632,889.66		2,934,309.30		2,500,000.00		350,000.00	3,284,309.30	
CFM56-7B24	890202	Aug-2002		6,399,905.00		4,468,156.50		6,150,000.00		(1,930,000.00)	3,742,687.17	
CFM56-7B24	890307	Oct-2002		6,399,905.00		4,468,156.50		6,150,000.00		(490,000.00)	5,182,687.17	
CFM56-7B24	890418	Mar-2003		6,399,905.00		4,468,156.50		6,150,000.00		700,000.00	6,372,687.17	
CFM56-7B24	890436	Apr-2003		6,399,905.00		4,468,156.50		6,150,000.00		(2,130,000.00)	3,542,687.17	
CFM56-7B24	874219	Jan-1998		6,399,905.00		4,025,366.21		5,790,000.00		(1,910,000.00)	3,495,090.40	
CFM56-7B24	874792	May-1999		6,399,905.00		4,468,156.50		6,150,000.00		(1,100,000.00)	4,572,687.17	
CFM56-7B24	876266	Mar-2000		6,399,905.00		4,468,156.50		6,150,000.00		400,000.00	6,072,687.17	
CFM56-7B24	876563	Sep-2000		6,399,905.00		4,468,156.50		6,150,000.00		530,000.00	6,202,687.17	
CFM56-7B24	889320	Sep-2001		6,399,905.00		4,025,366.21		5,790,000.00		(250,000.00)	5,155,090.40	
CFM56-7B26	890452	May-2003		6,801,905.00		4,468,156.50		6,150,000.00		630,000.00	6,436,687.17	
CFM56-7B26	890516	Jun-2003		6,801,905.00		4,468,156.50		6,150,000.00		(1,880,000.00)	3,926,687.17	
CFM56-7B26	890612	Sep-2003		6,801,905.00		4,468,156.50		6,150,000.00		(1,080,000.00)	4,726,687.17	
CFM56-7B26	890652	Oct-2003		6,801,905.00		4,025,366.21		5,790,000.00		(670,000.00)	4,869,090.40	
CFM56-7B26	890684	Dec-2003		6,801,905.00		4,468,156.50		6,150,000.00		(2,320,000.00)	3,486,687.17	
CFM56-7B26	890775	Mar-2004		6,801,905.00		4,468,156.50		6,150,000.00		620,000.00	6,426,687.17	
CFM56-7B26	874336	Jul-1998		6,801,905.00		4,468,156.50		6,150,000.00		580,000.00	6,386,687.17	
CFM56-7B26	876213	Dec-1999		6,801,905.00		4,468,156.50		6,150,000.00		410,000.00	6,216,687.17	
CFM56-7B26	876633	Sep-2000		6,801,905.00		4,468,156.50		6,150,000.00		470,000.00	6,276,687.17	
CFM56-7B26	888436	May-2001		6,801,905.00		4,025,366.21		5,790,000.00		710,000.00	6,249,090.40	
CFM56-7B26	888868	Jan-2002		6,801,905.00		4,025,366.21		5,790,000.00		530,000.00	6,069,090.40	
CFM56-7B26	890339	Dec-2002		6,801,905.00		4,468,156.50		6,150,000.00		(2,410,000.00)	3,396,687.17	
CFM56-7B26E	660372	Sep-2014		9,415,796.39		7,513,727.80		6,420,000.00		140,000.00	7,653,727.80	
CFM56-7B26E	862250	Jun-2015		9,415,796.39		7,513,727.80		6,420,000.00		250,000.00	7,763,727.80	
CFM56-7B26E	862937	Feb-2016		9,415,796.39		6,115,496.49		6,330,000.00		320,000.00	6,650,000.00	
CFM56-7B26E	660119	Jun-2014		9,415,796.39		7,513,727.80		6,420,000.00		220,000.00	7,733,727.80	
CFM56-7B26E	660170	Jun-2014		9,415,796.39		7,754,591.85		6,420,000.00		630,000.00	8,384,591.85	
GE90-115B	901480	Oct-2019		27,550,000.00		18,282,308.85		20,400,000.00		9,470,000.00	29,870,000.00	
GE90-115B	901096	Nov-2016		27,550,000,00		18,282,308,85		20,400,000,00		6,190,000,00	26.590.000.00	

	Manufacturer's	Dolivory	Delivery Appra			mba Maintenance	Appraised
Engine Type	Serial Number	Month	BK	ICF	mba	Adjustment	Value
GE90-115B	901281	Nov-2017	27,550,000.00	18,282,308.85	20,400,000.00	6,370,000.00	26,770,000.00
GE90-90B	900272	Dec-1998	11,115,000.00	4,918,614.65	6,150,000.00	1,950,000.00	8,100,000.00
GE90-90B	900352	Sep-2001	11,115,000.00	4,918,614.65	6,150,000.00	1,550,000.00	7,700,000.00
GE90-90B	900361	Oct-2001	11,115,000.00	4,918,614.65	6,150,000.00	(3,840,000.00)	2,310,000.00
GE90-90B	900392	Sep-2002	11,115,000.00	4,918,614.65	6,150,000.00	(1,530,000.00)	4,620,000.00
GE90-90B	900242	Aug-1998	11,115,000.00	4,918,614.65	6,150,000.00	1,720,000.00	7,870,000.00
GE90-90B	900325	Jan-2000	11,115,000.00	4,918,614.65	6,150,000.00	2,170,000.00	8,320,000.00
GEnx-1B70	956883	Jan-2017	19,823,500.00	17,195,857.12	21,570,000.00	4,770,000.00	24,299,785.71
GEnx-1B70	956912	Mar-2017	19,823,500.00	15,265,236.47	17,060,000.00	5,350,000.00	22,410,000.00
GEnx-1B70	958090	Mar-2018	19,823,500.00	17,195,857.12	21,570,000.00	5,420,000.00	24,949,785.71
GEnx-1B70	958338	Mar-2019	19,823,500.00	18,240,770.35	22,820,000.00	6,860,000.00	26,683,500.00
GEnx-1B70	958576	Mar-2020	19,823,500.00	15,265,236.47	17,060,000.00	8,140,000.00	25,200,000.00
GEnx-1B70	956295	Dec-2013	19,823,500.00	15,265,236.47	17,060,000.00	2,000,000.00	19,060,000.00
GEnx-1B70	956322	Dec-2013	19,823,500.00	17,195,857.12	21,570,000.00	990,000.00	20,519,785.71
GEnx-1B70	956515	Mar-2015	19,823,500.00	17,195,857.12	21,570,000.00	2,970,000.00	22,499,785.71
GEnx-1B70	956679	Dec-2015	19,823,500.00	15,265,236.47	17,060,000.00	4,630,000.00	21,690,000.00
LEAP-1B26/28	603331	Apr-2019	11,899,567.40	10,147,755.06	12,400,000.00	3,850,000.00	15,332,440.82
LEAP-1B26/28	602853	Sep-2018	11,899,567.40	10,147,755.06	12,400,000.00	3,850,000.00	15,332,440.82
LEAP-1B26/28	602518	Apr-2018	11,899,567.40	10,147,755.06	12,400,000.00	3,850,000.00	15,332,440.82
PW4056	727787	Jun-1998	3,525,070.00	2,077,072.09	2,550,000.00	(2,050,000.00)	500,000.00
PW4056	727948	Oct-1999	3,525,070.00	2,077,072.09	2,550,000.00	(2,050,000.00)	500,000.00
PW4056	727569	Mar-1996	3,525,070.00	2,077,072.09	2,550,000.00	(2,050,000.00)	500,000.00
PW4077	P222309	Feb-2015	7,654,160.00	3,513,954.98	3,600,000.00	(880,000.00)	2,720,000.00
PW4077	P222310	Dec-2014	7,654,160.00	3,513,954.98	3,600,000.00	(1,250,000.00)	2,350,000.00
PW4077	P222311	Feb-2015	7,654,160.00	3,513,954.98	3,600,000.00	(1,210,000.00)	2,390,000.00
PW4077	222258	Apr-2007	7,654,160.00	3,513,954.98	3,600,000.00	(3,100,000.00)	500,000.00
PW4077	777067	Feb-1997	7,654,160.00	3,513,954.98	3,600,000.00	(2,640,000.00)	960,000.00
PW4077	P222308	Nov-2014	7,654,160.00	3,513,954.98	3,600,000.00	(1,450,000.00)	2,150,000.00
PW4090	222067	May-1998	9,944,474.60	4,253,734.98	4,800,000.00	(430,000.00)	4,370,000.00
PW4090	222068	May-1998	9,944,474.60	4,253,734.98	4,800,000.00	(910,000.00)	3,890,000.00
PW4090	222099	Mar-1999	9,944,474.60	4,253,734.98	4,800,000.00	(1,140,000.00)	3,660,000.00
PW4090	222108	Jul-2015	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222182	Dec-2001	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222215	Jun-2018	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222225	Dec-2012	9,944,474.60	4,253,734.98	4,800,000.00	(3,190,000.00)	1,610,000.00
PW4090	222254	May-2017	9,944,474.60	4,253,734.98	4,800,000.00	(2,570,000.00)	2,230,000.00
PW4090	222022	Jun-2016	9,944,474.60	4,253,734.98	4,800,000.00	(1,070,000.00)	3,730,000.00
PW4090	222025	May-1997	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222035	Apr-2016	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222036	Jan-2016	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222037	Jun-2016	9,944,474.60	4,253,734.98	4,800,000.00	(3,320,000.00)	1,480,000.00
PW4090	222043	May-1998	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
PW4090	222048	Oct-1997	9,944,474.60	4,253,734.98	4,800,000.00	(1,430,000.00)	3,370,000.00
PW4090	222056	Jan-1998	9,944,474.60	4,253,734.98	4,800,000.00	(4,300,000.00)	500,000.00
RB211-535E4B	31572	Jun-1998	2,999,147.50	2,539,478.79	2,520,000.00	430,000.00	2,969,478.79
RB211-535E4B	31620	Jan-1999	2,999,147.50	2,539,478.79	2,520,000.00	(1,630,000.00)	909,478.79
RB211-535E4B	31655	Jun-1999	2,999,147.50	2,539,478.79	2,520,000.00	(440,000.00)	2,099,478.79
RB211-535E4B	31849	Dec-2001	2,999,147.50	2,539,478.79	2,520,000.00	(1,140,000.00)	1,399,478.79
RB211-535E4B	31884	Dec-2003	2,999,147.50	2,539,478.79	2,520,000.00	(620,000.00)	1,919,478.79
RB211-535E4B	31900	Oct-2004	2,999,147.50	2,539,478.79	2,520,000.00	1,510,000.00	4,049,478.79
RB211-535E4B	31378	Jun-1995	2,999,147.50	2,539,478.79	2,520,000.00	890,000.00	3,429,478.79
RB211-535E4B	31379	Jun-1995	2,999,147.50	2,539,478.79	2,520,000.00	(2,130,000.00)	409,478.79
RB211-535E4B	31412	May-1996	2,999,147.50	2,539,478.79	2,520,000.00	(1,200,000.00)	1,339,478.79
RB211-535E4B	31515	Oct-1997	2,999,147.50	2,539,478.79	2,520,000.00	1,650,000.00	4,189,478.79
V2522-A5	V10327	Mar-1998	6,489,845.00	4,724,246.32	6,210,000.00	210,000.00	6,018,030.44
V2522-A5	V10824	Mar-2001	6,489,845.00	4,724,246.32	6,210,000.00	400,000.00	6,208,030.44
V2522-A5	V11050	Aug-2001	6,489,845.00	3,711,907.82	4,820,000.00	820,000.00	5,640,000.00
V2522-A5	V10232	Jun-1997	6,489,845.00	3,711,907.82	4,820,000.00	(760,000.00)	4,060,000.00
V2522-A5	V10316	Feb-1998	6,489,845.00	4,724,246.32	6,210,000.00	200,000.00	6,008,030.44
V2524-A5	V12173	Aug-2018	6,739,845.00	4,145,767.18	5,130,000.00	670,000.00	5,800,000.00
V2524-A5 V2524-A5	V12173 V11807	Aug-2018	6,739,845.00	4,724,246.32	6,210,000.00	440,000.00	6,331,363.77
V2527-A5	V11395	Mar-2017	7,139,845.00	4,145,767.18	5,130,000.00	690,000.00	5,820,000.00
V2527-A5 V2527-A5	V12083	Sep-1996	7,139,845.00	4,724,246.32	6,210,000.00	(3,530,000.00)	2,494,697.11
V2527-A5 V2527-A5	V12063 V12169	Dec-2005	7,139,845.00	4,724,246.32	6,210,000.00	(3,400,000.00)	2,624,697.11
V2527-A5 V2527-A5	V12109 V12521	Feb-2007	7,139,845.00	4,724,246.32	6,210,000.00	400,000.00	6,424,697.11
V2527-A5 V2527-A5	V12521 V10167	Jun-1996	7,139,845.00	4,724,246.32	6,210,000.00	(900,000.00)	5,124,697.11
V2527-A5 V2527-A5	V10167 V10372	May-1998	7,139,845.00	4,724,246.32	6,210,000.00	(310,000.00)	5,714,697.11
V2527-A5	V11394	Mar-2017	7,139,845.00	4,145,767.18	5,130,000.00	(360,000.00)	4,770,000.0

The table below sets forth the Appraised Values of each Aircraft.

	D 44 4	36 6	D.P.		Appr	aiser's Valuations		mba	
Aircraft Model	Registration Number	Manufacturer's Serial Number	Delivery Month	BK		ICF	mba	Maintenance Adjustment	Appraised Value
737-700	N25705	28766	May-1998	\$ 8,938,552.59	\$	11,866,331.90	\$ 8,650,000.00	\$ (2,560,000.00)	\$ 6,378,552.59
737-700	N24706	28767	May-1998	8,938,552.59		11,866,331.90	8,650,000.00	(3,770,000.00)	5,168,552.59
737-700	N23707	28768	May-1998	8,938,552.59		11,866,331.90	8,650,000.00	(350,000.00)	8,588,552.59
737-700	N23708	28769	Jun-1998	8,989,262.34		11,902,883.91	8,700,000.00	(400,000.00)	8,589,262.34
737-700	N16709	28779	Aug-1998	9,099,036.88		11,944,195.02	8,790,000.00	(1,830,000.00)	7,269,036.88
737-700	N15710	28780	Aug-1998	9,099,036.88		11,944,195.02	8,790,000.00	1,570,000.00	10,669,036.88
737-700	N54711	28782	Sep-1998	9,153,924.14		11,981,795.30	8,840,000.00	800,000.00	9,953,924.14
737-700	N15712	28783	Sep-1998	9,153,924.14		11,981,795.30	8,840,000.00	(2,860,000.00)	6,293,924.14
737-700	N33714	28785	Sep-1998	9,153,924.14		11,981,795.30	8,840,000.00	(4,400,000.00)	4,753,924.14
737-700	N24715	28786	Oct-1998	9,208,811.41		12,019,904.42	8,890,000.00	(460,000.00)	8,748,811.41
737-700	N13716	28787	Dec-1998	9,318,585.94		12,097,638.74	8,980,000.00	(2,860,000.00)	6,458,585.94
737-700	N29717	28936	Jan-1999	9,386,245.29		12,032,999.89	9,030,000.00	(820,000.00)	8,566,245.29
737-700	N13718	28937	Jan-1999	9,386,245.29		12,032,999.89	9,030,000.00	(3,590,000.00)	5,796,245.29
737-700	N17719	28938	Feb-1999	9,441,132.55		12,071,682.10	9,080,000.00	(4,570,000.00)	4,871,132.55
737-700	N13720	28939	Feb-1999	9,441,132.55		12,071,682.10	8,730,000.00	(640,000.00)	8,801,132.55
737-700	N23721	28940	Mar-1999	9,496,019.82		12,110,867.39	9,130,000.00	(3,330,000.00)	6,166,019.82
737-700	N27722	28789	Apr-1999	9,550,907.09		12,150,553.17	9,180,000.00	1,320,000.00	10,870,907.09
737-700	N21723	28790	Apr-1999	9,550,907.09		12,150,553.17	9,180,000.00	(3,440,000.00)	6,110,907.09
737-700	N39728	28944	Jul-1999	9,706,129.09		12,272,587.95	9,340,000.00	(2,540,000.00)	7,166,129.09
737-700	N24729	28945	Jul-1999	9,706,129.09		12,272,587.95	9,340,000.00	(3,490,000.00)	6,216,129.09
737-700	N14731	28799	Aug-1999	9,751,576.57		12,314,250.31	9,390,000.00	(1,950,000.00)	7,801,576.57
737-700 737-700	N16732	28948	Aug-1999	9,751,576.57		12,314,250.31	9,390,000.00	(2,670,000.00)	7,081,576.57
737-700	N27733	28800	Sep-1999	9,797,024.05		12,318,847.31	9,440,000.00	(1,510,000.00)	8,287,024.05
737-700	N27734 N14735	28949 28950	Sep-1999 Sep-1999	9,797,024.05 9,797,024.05		12,318,847.31 12,318,847.31	9,090,000.00 9,090,000.00	(1,800,000.00) 730,000.00	7,997,024.05 10,527,024.05
737-700	N24736	28803	Sep-1999	9,797,024.05		12,318,847.31	9,090,000.00	(1,650,000.00)	8,147,024.05
737-700	N15751	29047	Mar-1999	9,496,019.82		12,310,867.39	8,780,000.00	(3,650,000.00)	5,846,019.82
737-700	N17752	29048	May-1999	9,605,794.35		12,190,736.87	8,880,000.00	(2,710,000.00)	6,895,794.35
737-700	N7714B	32679	May-2004	12,464,264.66		13,941,451.99	11,930,000.00	6,780,000.00	19,244,264.66
737-700	N7703A	32653	Sep-2004	12,687,428.06		14,199,096.40	12,210,000.00	5,810,000.00	18,497,428.06
737-800	N25201	28958	Dec-1999	12,643,432.79		13,768,806.40	12,110,000.00	(120,000.00)	12,523,432.79
737-800	N33209	30581	Aug-2000	13,324,894.34		13,995,233.81	13,030,000.00	(2,940,000.00)	10,384,894,34
737-800	N26210	28770	Jun-1998	11,074,726.42		13,334,303.19	11,300,000.00	(2,300,000.00)	9,000,000.00
737-800	N24211	28771	Jun-1998	11,074,726.42		13,334,303.19	11,300,000.00	(2,810,000.00)	8,490,000.00
737-800	N24212	28772	Jun-1998	11,074,726.42		13,334,303.19	11,300,000.00	2,910,000.00	14,210,000.00
737-800	N27213	28773	Jul-1998	11,167,016.31		13,355,458.46	11,360,000.00	540,000.00	11,900,000.00
737-800	N14214	28774	Jul-1998	11,167,016.31		13,355,458.46	11,360,000.00	(1,100,000.00)	10,260,000.00
737-800	N26215	28775	Aug-1998	11,259,306.21		13,377,125.49	11,420,000.00	(2,610,000.00)	8,810,000.00
737-800	N12216	28776	Aug-1998	11,259,306.21		13,377,125.49	11,420,000.00	(790,000.00)	10,630,000.00
737-800	N16217	28777	Jul-1998	11,167,016.31		13,355,458.46	11,360,000.00	(40,000.00)	11,320,000.00
737-800	N12218	28778	Aug-1998	11,259,306.21		13,377,125.49	11,420,000.00	4,800,000.00	16,220,000.00
737-800	N14219	28781	Aug-1998	11,259,306.21		13,377,125.49	11,420,000.00	750,000.00	12,170,000.00
737-800	N18220	28929	Nov-1998	11,536,175.90		13,445,216.07	11,610,000.00	(1,140,000.00)	10,470,000.00
737-800	N12221	28930	Dec-1998	11,628,465.79		13,468,948.87	11,670,000.00	900,000.00	12,570,000.00
737-800	N34222	28931	Dec-1998	11,628,465.79		13,468,948.87	11,670,000.00	(2,350,000.00)	9,320,000.00
737-800	N18223	28932	Dec-1998	11,628,465.79		13,468,948.87	11,670,000.00	(670,000.00)	11,000,000.00
737-800	N13227	28788	May-1999	12,097,481.41		13,572,985.65	11,650,000.00	(1,280,000.00)	10,817,481.41
737-800	N14228	28792	May-1999	12,097,481.41		13,572,985.65	12,000,000.00	(1,910,000.00)	10,187,481.41
737-800	N26232	28942	Jun-1999	12,189,771.31		13,599,366.11	11,710,000.00	(360,000.00)	11,829,771.31
737-800	N16234	28946	Aug-1999	12,340,991.80		13,653,715.24	12,200,000.00	1,950,000.00	14,290,991.80
737-800	N14235	28947	Aug-1999	12,340,991.80		13,653,715.24	11,850,000.00	2,710,000.00	15,050,991.80
737-800	N35236	28801	Sep-1999	12,416,602.05		13,681,686.83	11,910,000.00	(2,130,000.00)	10,286,602.05
737-800	N14237	28802	Sep-1999	12,416,602.05		13,681,686.83	12,260,000.00	320,000.00	12,736,602.05
737-800	N14240	28952	Oct-1999	12,492,212.30		13,710,191.65	11,980,000.00	(900,000.00)	11,592,212.30
737-800	N18243	28806	Oct-1999	12,492,212.30		13,710,191.65	12,330,000.00	(400,000.00)	12,092,212.30
737-800	N17245	28955	Nov-1999	12,567,822.55		13,739,231.07	12,400,000.00	(1,090,000.00)	11,477,822.55
737-800	N14250	28957	Dec-1999	12,643,432.79		13,768,806.40	12,460,000.00	(2,690,000.00)	9,953,432.79
737-800	N37252	30583	Sep-2000	13,431,497.75		14,029,166.58	13,100,000.00	900,000.00	14,331,497.75
737-800	N37253	30584	Sep-2000	13,431,497.75		14,029,166.58	13,100,000.00	(1,950,000.00)	11,481,497.75
737-800	N76254	30779	Sep-2000	13,431,497.75		14,029,166.58	13,100,000.00	(1,990,000.00)	11,441,497.75
737-800	N77258	30802	Nov-2000	13,644,704.57		14,068,027.24	13,240,000.00	3,900,000.00	17,544,704.57
737-800	N35260	30855	Jun-2001	14,131,374.52		14,291,163.20	13,760,000.00	5,140,000.00	19,200,845.91
737-800 737-800	N33266	32403 31590	Aug-2001	14,317,118.87		14,368,477.26	13,910,000.00	(650,000.00)	13,548,532.04
	N36272	31590 31594	Nov-2001	14,595,735.40		14,488,602.42	14,140,000.00	3,010,000.00	17,418,112.61
737-800 737-800	N73276 N37277	31594	Feb-2002 Mar-2002	15,141,444.78 15,234,316.96		14,576,266.32 14,618,556.97	14,370,000.00 14,450,000.00	(3,430,000.00) 3,800,000.00	11,146,266.32 18,418,556.97
/3/-000	113/2//	21232	1VId1-2002	13,234,310.96		14,010,000.9/	14,430,000.00	3,000,000.00	10,410,330.9/

	D-si-tti	Manufacture	Delivery — Appraiser's Valuations mba Maintenance	Appraiser's Valuations				Appraised	
Aircraft Model	Registration Number	Manufacturer's Serial Number	Month	BK	ICF	mba	Adjustment	Value	
737-800	N73278	31596	Oct-2003	16,867,189.45	15,480,721.32	16,040,000.00	1,660,000.00	17,700,000.00	
737-800	N79279	31597	Nov-2003	16,964,313.99	15,533,674.17	16,130,000.00	1,210,000.00	17,340,000.00	
737-800	N36280	31598	Dec-2003	17,061,438.52	15,587,188.03	16,210,000.00	(1,900,000.00)	14,310,000.00	
737-800	N37281	31599	Dec-2003	17,061,438.52	15,587,188.03	16,210,000.00	(1,150,000.00)	15,060,000.00	
737-800	N33286	31600	May-2004	17,295,350.12	15,812,316.04	16,670,000.00	(4,150,000.00)	12,442,555.39	
737-800	N37287	31636	May-2004	17,295,350.12	15,812,316.04	16,670,000.00	(3,610,000.00)	12,982,555.39	
737-800	N76288	33451	Jun-2004	17,392,474.66	15,868,651.70	16,760,000.00	4,200,000.00	20,873,708.79	
737-800	N33289	31607	Jul-2004	17,472,258.36	15,925,546.88	16,860,000.00	(1,470,000.00)	15,282,601.75	
737-800	N37290	31601	Sep-2004	17,631,825.77	16,041,014.54	17,040,000.00	(150,000.00)	16,754,280.10	
737-800	N33292	33455	Dec-2004	17,871,176.87	16,218,403.67	17,320,000.00	550,000.00	17,686,526.85	
737-800	N77295	34001	Aug-2005	18,642,607.95	16,657,520.97	18,100,000.00	(280,000.00)	17,520,042.98	
737-800	N77296	34002	Sep-2005	18,733,936.97	16,721,661.37	18,200,000.00	(2,170,000.00)	15,715,199.45	
737-800	N78501	31602	Jul-2006	19,456,251.63	17,393,249.06	19,240,000.00	(3,670,000.00)	15,026,500.23	
737-800	N76502	31603	Aug-2006	19,515,304.37	17,463,404.46	19,340,000.00	(1,780,000.00)	16,992,902.95	
737-800	N76503	33461	Aug-2006	19,515,304.37	17,463,404.46	19,340,000.00	(1,540,000.00)	17,232,902.95	
737-800	N76504	31604	Aug-2006	19,515,304.37	17,463,404.46	19,340,000.00	80,000.00	18,852,902.95	
737-800	N76505	32834	Sep-2006	19,574,357.11	17,534,100.24	19,450,000.00	(2,960,000.00)	15,892,819.12	
737-800	N78506	32832	Oct-2006	19,633,409.85	17,605,335.13	19,550,000.00	(690,000.00)	18,239,581.66	
737-800	N76519	30132	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,680,000.00)	20,207,084.83	
737-800	N77520	31658	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(1,760,000.00)	22,127,084.83	
737-800	N79521	31662	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,860,000.00)	20,027,084.83	
737-800	N76522	31660	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,940,000.00)	19,947,084.83	
737-800	N76523	37101	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,950,000.00)	19,937,084.83	
737-800	N78524	31642	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,720,000.00)	20,167,084.83	
737-800	N77525	31659	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,450,000.00)	20,437,084.83	
737-800	N76526	38700	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,960,000.00)	19,927,084.83	
737-800	N87527	38701	Aug-2010	23,887,084.83	23,305,982.33	25,410,000.00	(3,540,000.00)	20,347,084.83	
737-900ER	N27421	37094	Apr-2008	21,221,104,56	23.126.054.75	22,270,000,00	1,100,000,00	23,305,719,77	
737-900ER	N37422	31620	May-2008	21,287,244.63	23,126,054.75	22,380,000,00	(3,420,000.00)	18,844,433.13	
737-900ER	N37434	33528	Oct-2009	22,746,827.58	24,575,784.94	24,470,000.00	(4,780,000.00)	19,150,870.84	
737-900ER	N57439	33534	Aug-2009	22,523,517.21	24,373,040.72	24,220,000.00	(3,110,000.00)	20,595,519.31	
737-900ER	N45440	33535	Aug-2009	22,523,517.21	24,373,040.72	24,220,000.00	(2,860,000.00)	20,845,519.31	
737-900ER	N53441	30131	Sep-2009	22,635,172.40	24,474,049.49	24,340,000.00	(3,280,000.00)	20,536,407.29	
737-900ER	N53442	33536	Sep-2009	22,635,172.40	24,474,049.49	24,340,000.00	(3,230,000.00)	20,586,407.29	
757-200	N21108	27298	Nov-1994	6,244,432.91	7,024,920.81	7,490,000.00	2,410,000.00	9,329,784.57	
757-200	N12109	27299	Dec-1994	6,298,900.20	7,050,917.92	7,530,000.00	3,700,000.00	10,659,939.37	
757-200	N13110	27300	Dec-1994	6,298,900.20	7,050,917.92	7,530,000.00	(930,000.00)	6,029,939.37	
757-200	N57111	27301	Dec-1994	6,298,900.20	7,050,917.92	7,530,000.00	(1,560,000.00)	5,399,939.37	
757-200	N18112	27302	Feb-1995	6,453,792.29	7,008,753.86	7,610,000.00	1,230,000.00	8,238,753.86	
757-200	N13113	27555	Apr-1995	6,562,726.87	7,060,078.78	7,690,000.00	(1,100,000.00)	5,960,078.78	
757-200	N12114	27556	Jul-1995	6,705,672.78	7,143,095.06	7,820,000.00	(1,410,000.00)	5,733,095.06	
757-200	N12114	27558	Mar-1996	7,083,625.19	7,245,734.83	8,150,000.00	10,000.00	7,255,734.83	
757-200	N19117	27559	Apr-1996	7,117,636.53	7,277,466.94	8,190,000.00	(1,500,000.00)	5,777,466.94	
757-200	N14118	27560	Mar-1997	7,455,920.56	7,532,447.66	8,690,000.00	(2,330,000.00)	5,202,447.66	
757-200	N18119	27561	May-1997	7,562,468.02	7,609,281.67	8,780,000.00	(4,240,000.00)	3,369,281.67	
757-200	N14120	27562	Jun-1997	7,615,741.75	7,686,322.40	8,830,000.00	(1,470,000.00)	6,216,322.40	
757-200	N14121	27563	Jul-1997	7,658,970.47	7,727,397.43	8,880,000.00	(3,480,000.00)	4,247,397.43	
757-200	N17122	27564	Aug-1997	7,702,199.18	7,769,233.09	8,920,000.00	(4,010,000.00)	3,759,233.09	
757-200	N17126	27566	Feb-1998	7,977,614.86	7,867,083.47	9,210,000.00	2,220,000.00	10,197,614.86	
757-200	N48127	28968	Feb-1998	7,977,614.86	7,867,083.47	9,210,000.00	(4,010,000.00)	3,967,614.86	
757-200	N17128	27567	Mar-1998	8,020,843.58	7,911,269.26	9,260,000.00	4,650,000.00	12,670,843.58	
757-200	N17126 N29129	28969	Mar-1998	8,020,843.58	7,911,269.26	9,260,000.00	(3,530,000.00)	4,490,843.58	
757-200	N19130	28970	May-1998	8,107,301.02	8,001,899.29	9,370,000.00	(2,210,000.00)	5,897,301.02	
757-200		28971	Jun-1998	8,150,529.73	8,048,340.08	9,420,000.00	(5,380,000.00)		
	N34131							2,770,529.73	
757-200	N33132	29281	Jun-1998	8,150,529.73	8,048,340.08	9,420,000.00	2,020,000.00	10,170,529.73	
757-200	N67134	29283	Feb-1999	8,585,918.36	8,254,555.43	9,840,000.00	(800,000.00)	7,785,918.36	
757-200	N41135	29284	Feb-1999	8,585,918.36	8,254,555.43	9,840,000.00	(3,790,000.00)	4,795,918.36	
757-200	N19136	29285	Mar-1999	8,639,124.09	8,304,802.78	9,890,000.00	(2,300,000.00)	6,339,124.09	
757-200	N34137	30229	Nov-1999	8,978,850.61	8,786,646.77	10,330,000.00	3,130,000.00	12,108,850.61	
757-200	N13138	30351	Dec-1999	9,014,872.48	8,844,204.23	10,390,000.00	830,000.00	9,844,872.48	
757-200	N17139	30352	Feb-2000	9,101,699.77	8,743,900.96	10,490,000.00	(1,090,000.00)	8,011,699.77	
757-200	N41140	30353	Feb-2000	9,101,699.77	8,743,900.96	10,490,000.00	1,130,000.00	10,231,699.77	
757-200	N19141	30354	Jun-2000	9,245,787.25	8,975,907.80	10,730,000.00	5,820,000.00	15,065,787.25	
757-300	N75851	32810	Dec-2001	13,330,754.25	10,591,763.63	13,890,000.00	(1,160,000.00)	11,444,172.63	
757-300	N57852	32811	Dec-2001	13,330,754.25	10,591,763.63	13,890,000.00	(2,060,000.00)	10,544,172.63	
757-300	N75853	32812	Feb-2002	13,766,476.15	10,540,248.92	14,050,000.00	(1,690,000.00)	11,095,575.02	
757-300	N75854	32813	Feb-2002	13,766,476.15	10,540,248.92	14,050,000.00	(3,570,000.00)	9,215,575.02	
		32814	Jan-2004	15,837,502.55	11,787,701.69	16,090,000.00	4,560,000.00	19,131,734.75	
757-300	N57855	32014		13,037,302.33					

				Appraiser's Valuations			mba			
Aircraft Model	Registration Number	Manufacturer's Serial Number	Delivery Month	ВК	ICF	mba	Maintenance Adjustment	Appraised Value		
757-300	N57857	32816	Feb-2004	15,945,133.02	11,868,456.14	16,190,000.00	1,080,000.00	15,747,863.05		
757-300	N75858	32817	Mar-2004	16,052,763.49	11,949,994.62	16,290,000.00	40,000.00	14,804,252.70		
757-300	N56859	32818	Apr-2004	16,160,393.96	12,032,317.12	16,390,000.00	1,220,000.00	16,080,903.69		
767-300ER	N664UA	29236	Jun-1998	12,942,306.92	8,925,981.15	10,750,000.00	(5,710,000.00)	5,040,000.00		
767-300ER	N666UA	29238	Aug-1998	13,177,836.06	9,074,305.08	10,870,000.00	(5,970,000.00)	4,900,000.00		
767-300ER	N667UA	29239	Aug-1998	13,177,836.06	9,074,305.08	10,870,000.00	(6,070,000.00)	4,800,000.00		
767-300ER	N668UA	30024	Mar-1999	13,980,020.11	9,476,625.24	11,330,000.00	(9,930,000.00)	1,400,000.00		
767-300ER	N669UA	30025	Jun-1999	14,333,313.82	9,729,118.07	11,530,000.00	(10,130,000.00)	1,400,000.00		
767-300ER	N670UA	29240	Aug-1999	14,536,649.02	9,904,067.89	11,670,000.00	(8,260,000.00)	3,410,000.00		
767-300ER	N671UA	30026	Oct-1999	14,739,984.22	10,084,309.49	11,810,000.00	(7,790,000.00)	4,020,000.00		
767-300ER	N673UA	29241	Jan-2000	15,036,984.75	10,097,538.78	12,010,000.00	(10,290,000.00)	1,720,000.00		
767-300ER	N674UA	29242	Apr-2000	15,341,987.56	10,378,041.30	12,230,000.00	(5,240,000.00)	6,990,000.00		
767-300ER	N675UA	29243	Aug-2000	15,822,586.14	10,770,516.13	12,530,000.00	(7,050,000.00)	5,480,000.00		
767-300ER	N676UA	30028	Apr-2001	16,572,831.93	11,408,394.61	13,140,000.00	(10,870,000.00)	2,270,000.00		
767-300ER	N684UA	33466	Sep-2002	18,890,947.94	13,196,450.16	14,540,000.00	(6,710,000.00)	7,830,000.00		
767-300ER	N685UA	33467	Nov-2002	19,096,067.20	13,455,682.22	14,710,000.00	(2,230,000.00)	12,480,000.00		
767-300ER	N686UA	33468	Jan-2003	19,340,626.56	13,466,495.28	14,880,000.00	(2,950,000,00)	11,930,000.00		
767-400ER	N66051	29446	Aug-2000	15,418,871.57	11,861,886.13	13,260,000.00	3,980,000.00	17,240,000.00		
767-400ER	N67052	29447	Sep-2000	15,555,729.21	11,946,148.98	13,350,000.00	(1,010,000.00)	12,340,000.00		
767-400ER	N59053	29448	Oct-2000	15,692,586.85	12,031,675.31	13,450,000.00	(5,170,000.00)	8,280,000.00		
767-400ER	N66056	29451	Jun-2001	16,451,183.12	12,586,281.71	14,250,000.00	(250,000.00)	14,000,000.00		
767-400ER	N66057	29452	Jan-2002	18,101,764.25	13,086,545.00	14,970,000.00	(2,450,000.00)	12,520,000.00		
767-400ER	N67058	29453	Jan-2002	18,101,764.25	13,086,545.00	14,970,000.00	3,060,000.00	18,030,000.00		
767-400ER	N69059	29454	Feb-2002	18,301,717.13	13,187,298.70	15,080,000.00	(2,660,000.00)	12,420,000.00		
767-400ER	N78060	29455	Feb-2002	18,301,717.13	13,187,298.70	15,080,000.00	550,000.00	15,630,000.00		
767-400ER 767-400ER	N68061	29456	Mar-2002	18,501,670.00	13,289,299.04	15,190,000.00	240,000.00	15,430,000.00		
767-400ER 767-400ER	N76062	29457	Mar-2002	18,501,670.00	13,289,299.04	15,190,000.00	(3,740,000.00)	11,450,000.00		
767-400ER 767-400ER	N69063	29458	Apr-2002	18,701,622.88	13,392,544.61	15,310,000.00	2.010.000.00	17,320,000.00		
		29459	Apr-2002 Apr-2002	18,701,622.88	13,392,544.61		4,280,000.00	19,590,000.00		
767-400ER 767-400ER	N76064 N76065	29460			13,497,033.99	15,310,000.00 15,420,000.00	(1,050,000.00)	14,370,000.00		
			May-2002	18,901,575.76						
767-400ER	N77066	29461	May-2002	18,901,575.76	13,497,033.99	15,420,000.00	(1,100,000.00)	14,320,000.00		
777-200	N210UA	30216	Jan-2000	22,047,563.83	10,928,481.61	10,890,000.00	(9,390,000.00)	1,538,481.61		
777-200	N215UA	30221	Aug-2000	23,444,438.83	10,982,224.93	11,230,000.00	(9,730,000.00)	1,500,000.00		
777-200	N768UA	26919	Jun-1995	11,604,030.12	10,777,161.09	8,550,000.00	(7,050,000.00)	3,260,397.07		
777-200	N769UA	26921	Jun-1995	11,604,030.12	10,777,161.09	8,550,000.00	1,650,000.00	11,960,397.07		
777-200	N771UA	26932	Nov-1995	12,597,780.12	10,777,161.09	8,740,000.00	(7,240,000.00)	3,464,980.40		
777-200	N772UA	26930	Sep-1995	12,200,280.12	10,777,161.09	8,670,000.00	(7,170,000.00)	3,379,147.07		
777-200	N773UA	26929	Jan-1996	13,117,038.39	10,777,161.09	8,820,000.00	(7,320,000.00)	3,457,161.09		
777-200	N774UA	26936	Mar-1996	13,514,538.39	10,777,161.09	8,900,000.00	(7,330,000.00)	3,447,161.09		
777-200	N775UA	26947	Jan-1996	13,117,038.39	10,777,161.09	8,820,000.00	(5,670,000.00)	5,107,161.09		
777-200	N776UA	26937	Apr-1996	13,713,288.39	10,777,161.09	8,940,000.00	(6,770,000.00)	4,007,161.09		
777-200	N777UA	26916	May-1995	11,405,280.12	10,777,161.09	8,510,000.00	(7,010,000.00)	3,220,813.73		
777-200	N778UA	26940	Jul-1996	14,309,538.39	10,777,161.09	9,060,000.00	(3,520,000.00)	7,257,161.09		
777-200	N779UA	26941	Jul-1996	14,309,538.39	10,777,161.09	9,060,000.00	(7,260,000.00)	3,517,161.09		
777-200	N780UA	26944	Aug-1996	14,508,288.39	10,777,161.09	9,100,000.00	(7,600,000.00)	3,177,161.09		
777-200	N781UA	26945	Sep-1996	14,707,038.39	10,777,161.09	9,140,000.00	(7,590,000.00)	3,187,161.09		
777-200ER	N78001	27577	Sep-1998	21,791,887.76	13,434,126.60	16,050,000.00	(720,000.00)	15,330,000.00		
777-200ER	N78002	27578	Sep-1998	21,791,887.76	13,434,126.60	16,050,000.00	6,500,000.00	22,550,000.00		
777-200ER	N78003	27579	Nov-1998	22,298,428.00	13,477,086.63	16,270,000.00	(570,000.00)	15,700,000.00		
777-200ER	N78004	27580	Nov-1998	22,298,428.00	13,477,086.63	16,270,000.00	(200,000.00)	16,070,000.00		
777-200ER	N78005	27581	Dec-1998	22,551,698.11	13,501,537.31	16,380,000.00	(2,070,000.00)	14,310,000.00		
777-200ER	N77006	29476	Dec-1998	22,551,698.11	13,501,537.31	16,380,000.00	3,170,000.00	19,550,000.00		
777-200ER	N74007	29477	Feb-1999	23,037,109.70	13,474,115.88	16,610,000.00	9,170,000.00	25,780,000.00		
777-200ER	N78008	29478	Mar-1999	23,290,379.82	13,496,775.95	16,730,000.00	1,860,000.00	18,590,000.00		
777-200ER	N78009	29479	Apr-1999	23,543,649.93	13,521,429.40	16,850,000.00	1,750,000.00	18,600,000.00		
777-200ER	N76010	29480	May-1999	23,796,920.05	13,548,108.78	16,960,000.00	1,990,000.00	18,950,000.00		
777-200ER 777-200ER	N79011	29859	Jun-1999	24,050,190.17	13,576,844.63	17,080,000.00	760,000.00	17,840,000.00		
777-200ER	N78013	29861	Sep-1999	24,699,524.32	13,645,917.32	17,440,000.00	6,720,000.00	24,160,000.00		
777-200ER	N27015	28678	Apr-2000	26,218,656.57	13,780,318.22	18,300,000.00	470,000.00	18,770,000.00		
777-200ER	N57016	28679	May-2000	26,435,101.29	13,822,225.15	18,420,000.00	3,600,000.00	22,020,000.00		
777-200ER	N78017	31679	Mar-2002	32,247,936.46	14,707,049.11	21,430,000.00	3,720,000.00	25,150,000.00		
777-200ER	N37018	31680	Apr-2002	32,503,375.88	14,784,800.89	21,590,000.00	1,720,000.00	23,310,000.00		
777-200ER	N77019	35547	Mar-2007	46,175,013.78	20,786,847.20	32,410,000.00	15,220,000.00	47,630,000.00		
777-200ER	N69020	31687	Apr-2007	46,444,423.84	21,171,367.49	32,640,000.00	8,260,000.00	40,900,000.00		
777-200ER	N76021	39776	Jul-2010	54,753,673.83	30,510,776.84	42,720,000.00	10,820,000.00	53,481,483.56		
777-200ER	N77022	39777	Jul-2010	54,753,673.83	30,510,776.84	42,720,000.00	4,320,000.00	46,981,483.56		
777-200ER	N204UA	28713	Feb-1999	22,682,854.10	11,786,709.35	16,510,000.00	(6,620,000.00)	9,890,000.00		
777-200ER	N206UA	30212	May-1999	23,442,664.45	11,859,268.73	16,860,000.00	(9,880,000.00)	6,980,000.00		
777-200ER	N209UA	30215	Dec-1999	24,994,602.87	12,064,760.06	17,690,000.00	(13,530,000.00)	4,160,000.00		

				Appraiser's Valuations		mba			
Aircraft Model	Registration Number	Manufacturer's Serial Number	Delivery Month	BK	ICF	mba	Maintenance Adjustment	Appraised Value	
777-200ER	N218UA	30222	Jan-2001	27,611,671.78	12,339,051.46	19,340,000.00	(13,920,000.00)	5,420,000.00	
777-200ER	N219UA	30551	Jan-2001	27,611,671.78	12,339,051.46	19,340,000.00	(15,530,000.00)	3,810,000.00	
777-200ER	N220UA	30223	May-2001	28,724,133.27	12,571,712.95	19,900,000.00	(11,640,000.00)	8,260,000.00	
777-200ER	N221UA	30552	Jun-2001	29,002,248.64	12,634,003.30	20,040,000.00	(900,000.00)	19,140,000.00	
777-200ER	N222UA	30553	Jul-2001	29,257,688.06	12,698,661.09	20,180,000.00	(5,020,000.00)	15,160,000.00	
777-200ER	N224UA	30225	Dec-2001	30,534,885.16	13,057,971.34	20,880,000.00	(7,020,000.00)	13,860,000.00	
777-200ER	N225UA	30554	Dec-2001	30,534,885.16	13,057,971.34	20,880,000.00	(11,870,000.00)	9,010,000.00	
777-200ER	N226UA	30226	Jan-2002	31,285,922.08	12,862,916.37	21,020,000.00	(13,080,000.00)	7,940,000.00	
777-200ER	N227UA	30555	Jan-2002	31,285,922.08	12,862,916.37	21,020,000.00	(13,880,000.00)	7,140,000.00	
777-200ER	N782UA	26948	Mar-1997	17,104,876.78	11,652,622.37	14,070,000.00	(12,570,000.00)	1,500,000.00	
777-200ER	N783UA	26950	Mar-1997	17,104,876.78	11,652,622.37	14,070,000.00	(12,570,000.00)	1,500,000.00	
777-200ER 777-200ER	N784UA N785UA	26951 26954	Apr-1997	17,348,863.62 17,592,850.46	11,652,622.37 11,652,622.37	14,170,000.00 14,270,000.00	(12,670,000.00)	1,500,000.00 1,500,000.00	
777-200ER 777-200ER	N786UA	26938	May-1997 Apr-1997	17,348,863.62	11,652,622.37	14,170,000.00	(12,770,000.00) (12,670,000.00)	1,500,000.00	
777-200ER	N787UA	26939	Jun-1997	17,836,837.31	11,652,622.37	14,370,000.00	(12,080,000.00)	2,290,000.00	
777-200ER 777-200ER	N788UA	26942	Jul-1997	18,080,824.15	11,652,622.37	14,480,000.00	(9,850,000.00)	4,630,000.00	
777-200ER	N791UA	26933	Aug-1997	18,324,810.99	11,653,602.32	14,580,000.00	(12,660,000.00)	1,920,000.00	
777-200ER	N792UA	26934	Sep-1997	18,568,797.84	11,655,903.61	14,680,000.00	(9,470,000.00)	5,210,000.00	
777-200ER	N793UA	26946	Oct-1997	18,812,784.68	11,659,655.87	14,780,000.00	(13,250,000.00)	1,530,000.00	
777-200ER	N794UA	26953	Nov-1997	19,056,771.52	11,664,693.77	14,880,000.00	(9,330,000.00)	5,550,000.00	
777-200ER	N795UA	26927	Dec-1997	19,300,758.37	11,671,893.43	14,980,000.00	(12,620,000.00)	2,360,000.00	
777-200ER	N796UA	26931	Jan-1998	19,488,280.01	11,655,903.61	15,080,000.00	(10,870,000.00)	4,210,000.00	
777-200ER	N797UA	26924	Feb-1998	19,732,266.85	11,659,861.73	15,190,000.00	(10,630,000.00)	4,560,000.00	
777-200ER	N798UA	26928	Feb-1998	19,732,266.85	11,660,013.08	15,190,000.00	(9,060,000.00)	6,130,000.00	
777-200ER	N799UA	26926	May-1998	20,464,227.38	11,685,617.45	15,520,000.00	(14,020,000.00)	1,500,000.00	
A319-100	N801UA	686	Jun-1997	7,510,820.21	11,702,661.64	6,640,000.00	(1,220,000.00)	6,290,820.21	
A319-100	N802UA	690	Jun-1997	7,510,820.21	11,702,661.64	6,640,000.00	(620,000.00)	6,890,820.21	
A319-100	N803UA	748	Nov-1997	7,832,485.80	11,764,875.59	6,860,000.00	(4,010,000.00)	3,822,485.80	
A319-100	N804UA	759	Dec-1997	7,896,818.92	11,781,382.69	6,900,000.00	(2,940,000.00)	4,956,818.92	
A319-100	N805UA	783	Feb-1998	7,999,691.56	11,766,340.25	6,990,000.00	(920,000.00)	7,079,691.56	
A319-100	N806UA	788	Feb-1998	7,999,691.56	11,766,340.25	6,990,000.00	(900,000.00)	7,099,691.56	
A319-100	N807UA	798	Mar-1998	8,064,024.67	11,781,153.33	7,030,000.00	(250,000.00)	7,814,024.67	
A319-100	N808UA	804	Mar-1998	8,064,024.67	11,781,153.33	7,030,000.00	(2,080,000.00)	5,984,024.67	
A319-100	N809UA	825	May-1998	8,192,690.91	11,813,704.43	7,120,000.00	(3,630,000.00)	4,562,690.91	
A319-100	N810UA	843	Jun-1998	8,257,024.03	11,831,396.07	7,170,000.00	(1,100,000.00)	7,157,024.03	
A319-100	N811UA	847	Jul-1998	8,313,313.21	11,850,005.31	7,220,000.00	1,350,000.00	9,663,313.21	
A319-100	N812UA	850	Jul-1998	8,313,313.21	11,850,005.31	7,220,000.00	(2,580,000.00)	5,733,313.21	
A319-100 A319-100	N813UA	858 862	Jul-1998	8,313,313.21	11,850,005.31	7,220,000.00 7,260,000.00	(1,980,000.00)	6,333,313.21	
A319-100 A319-100	N814UA N815UA	867	Aug-1998 Aug-1998	8,369,602.40 8,369,602.40	11,869,514.80 11,869,514.80	7,260,000.00	(1,450,000.00) (1,380,000.00)	6,919,602.40 6,989,602.40	
A319-100 A319-100	N816UA	871	Sep-1998	8,425,891.58	11,876,302.21	7,310,000.00	350,000.00	8,775,891.58	
A319-100	N817UA	873	Sep-1998	8,425,891.58	11,876,302.21	7,310,000.00	(30,000.00)	8,395,891.58	
A319-100	N818UA	882	Oct-1998	8,482,180.77	11,896,746.03	7,350,000.00	950,000.00	9,432,180.77	
A319-100	N819UA	893	Oct-1998	8,482,180.77	11,896,746.03	7,350,000.00	(3,380,000.00)	5,102,180.77	
A319-100	N820UA	898	Oct-1998	8,482,180.77	11,896,746.03	7,350,000.00	(710,000.00)	7,772,180.77	
A319-100	N821UA	944	Jan-1999	8,633,429.29	11,904,055.72	7,490,000.00	2,130,000.00	10,763,429.29	
A319-100	N822UA	948	Feb-1999	8,689,718.47	11,924,703.28	7,540,000.00	(740,000.00)	7,949,718.47	
A319-100	N823UA	952	Feb-1999	8,689,718.47	11,924,703.28	7,540,000.00	150,000.00	8,839,718.47	
A319-100	N824UA	965	Feb-1999	8,689,718.47	11,924,703.28	7,540,000.00	1,260,000.00	9,949,718.47	
A319-100	N825UA	980	Mar-1999	8,746,007.66	11,946,219.52	7,590,000.00	720,000.00	9,466,007.66	
A319-100	N826UA	989	Mar-1999	8,746,007.66	11,946,219.52	7,590,000.00	(2,090,000.00)	6,656,007.66	
A319-100	N827UA	1022	May-1999	8,858,586.03	11,975,838.44	7,690,000.00	(530,000.00)	8,328,586.03	
A319-100	N828UA	1031	Jun-1999	8,914,875.21	11,999,104.07	7,740,000.00	130,000.00	9,044,875.21	
A319-100	N829UA	1211	Apr-2000	9,406,808.19	12,166,446.37	8,240,000.00	(380,000.00)	9,026,808.19	
A319-100	N830UA	1243	Jun-2000	9,507,714.54	12,223,920.09	8,340,000.00	(1,520,000.00)	7,987,714.54	
A319-100	N831UA	1291	Aug-2000	9,655,438.37	12,284,446.30	8,450,000.00	(390,000.00)	9,265,438.37	
A319-100	N832UA	1321	Sep-2000	9,729,300.29	12,315,834.42	8,500,000.00	130,000.00	9,859,300.29	
A319-100	N833UA	1401	Jan-2001	9,799,190.96	12,325,992.94	8,720,000.00	2,020,000.00	11,819,190.96	
A319-100	N834UA	1420	Feb-2001	9,873,052.87	12,357,637.75	8,780,000.00	2,660,000.00	12,533,052.87	
A319-100	N835UA	1426	Feb-2001	9,873,052.87	12,357,637.75	8,780,000.00	(1,630,000.00)	8,243,052.87	
A319-100	N836UA	1460	Mar-2001	9,946,914.79	12,390,020.53	8,840,000.00	1,260,000.00	11,206,914.79	
A319-100	N837UA	1474	Apr-2001	10,020,776.71	12,423,134.02	8,890,000.00	230,000.00	10,250,776.71	
A319-100	N838UA	1477	Apr-2001	10,020,776.71	12,423,134.02	8,890,000.00	50,000.00	10,070,776.71	
A319-100	N839UA	1507	May-2001	10,094,638.62	12,456,971.20	8,950,000.00	(420,000.00)	9,674,638.62	
A319-100	N840UA	1522	Jun-2001	10,168,500.54	12,491,525.22	9,010,000.00	(1,810,000.00)	8,358,500.54	
A319-100	N841UA	1545	Jul-2001	10,231,708.14	12,526,789.40	9,070,000.00	(1,160,000.00)	9,071,708.14	
A319-100	N842UA	1569	Sep-2001	10,358,123.34	12,599,422.32	9,180,000.00	1,160,000.00	11,518,123.34	
A319-100	N843UA	1573	Aug-2001	10,294,915.74	12,562,757.22	9,120,000.00	(670,000.00)	9,624,915.74	
A319-100	N844UA	1581	Nov-2001	10,484,538.54	12,674,819.45	9,300,000.00	(100,000.00)	10,384,538.54	

				Appraiser's Valuations			mba		
Aircraft Model	Registration Number	Manufacturer's Serial Number	Delivery Month	ВК	ICF	mba	Maintenance Adjustment	Appraised Value	
A319-100	N845UA	1585	Nov-2001	10,484,538.54	12,674,819.45	9,300,000.00	4,200,000.00	14,684,538.54	
A319-100	N846UA	1600	Nov-2001	10,484,538.54	12,674,819.45	9,300,000.00	1,240,000.00	11,724,538.54	
A319-100	N847UA	1627	Nov-2001	10,484,538.54	12,674,819.45	9,300,000.00	(270,000.00)	10,214,538.54	
A319-100	N848UA	1647	Jan-2002	10,783,958.43	12,635,655.28	9,410,000.00	80,000.00	10,863,958.43	
A319-100	N849UA	1649	Feb-2002	10,847,166.03	12,673,209.55	9,470,000.00	2,570,000.00	13,417,166.03	
A319-100	N850UA	1653	Feb-2002	10,847,166.03	12,673,209.55	9,470,000.00	900,000.00	11,747,166.03	
A319-100	N851UA	1664	Mar-2002	10,910,373.63	12,682,519.00	9,530,000.00	1,570,000.00	12,480,373.63	
A319-100	N852UA	1671	Mar-2002	10,910,373.63	12,682,519.00	9,530,000.00	(700,000.00)	10,210,373.63	
A320-200	N1902U N423UA	2714 504	Feb-2006 Feb-1995	18,342,452.73	15,813,741.71	15,740,000.00	4,680,000.00	20,493,741.71	
A320-200 A320-200	N423UA N424UA	504 506	Feb-1995 Feb-1995	8,005,296.10	13,580,814.13 13,580,814.13	6,880,000.00 6,880,000.00	840,000.00 990,000.00	8,845,296.10 8,995,296.10	
A320-200 A320-200	N425UA N425UA	508	Mar-1995	8,005,296.10 8,099,137.48	13,585,712.32	6,920,000.00	(430,000.00)	7,669,137.48	
A320-200	N426UA	510	Mar-1995	8,099,137.48	13,585,712.32	6,920,000.00	(430,000.00)	7,669,137.48	
A320-200 A320-200	N427UA	512	Apr-1995	8,192,978.85	13,590,653.70	6,970,000.00	(3,160,000.00)	5,032,978.85	
A320-200	N428UA	523	May-1995	8,286,820.22	13,595,638.66	7,010,000.00	1,000,000.00	9,286,820.22	
A320-200	N429UA	539	Jun-1995	8,380,661.60	13,600,667.59	7,060,000.00	(2,500,000.00)	5,880,661.60	
A320-200	N430UA	568	Feb-1996	9,035,006.67	13,642,528.80	7,430,000.00	(2,140,000.00)	6,895,006.67	
A320-200	N431UA	571	Mar-1996	9,103,448.21	13,647,971.23	7,480,000.00	(3,860,000.00)	5,243,448,21	
A320-200	N432UA	587	May-1996	9,240,331.30	13,659,000.51	7,570,000.00	(460,000.00)	8,780,331.30	
A320-200	N433UA	589	Jun-1996	9,308,772.85	13,664,588.20	7,620,000.00	(460,000.00)	8,848,772.85	
A320-200	N434UA	592	Jun-1996	9,308,772.85	13,664,588.20	7,620,000.00	(2,380,000.00)	6,928,772.85	
A320-200	N435UA	613	Sep-1996	9,569,961.57	13,681,648.67	7,770,000.00	(540,000.00)	9,029,961.57	
A320-200	N436UA	638	Dec-1996	9,831,150.28	13,699,164.49	7,910,000.00	(4,080,000.00)	5,751,150.28	
A320-200	N437UA	655	Feb-1997	9,681,011.94	13,711,100.66	8,010,000.00	(3,560,000.00)	6,121,011.94	
A320-200	N438UA	678	May-1997	9,942,200.65	13,729,402.56	8,170,000.00	(5,500,000.00)	4,442,200.65	
A320-200	N439UA	683	Jun-1997	10,029,263.56	13,735,611.10	8,220,000.00	(1,870,000.00)	8,159,263.56	
A320-200	N440UA	702	Jul-1997	10,115,390.37	13,741,874.40	8,270,000.00	(3,690,000.00)	6,425,390.37	
A320-200	N441UA	751	Dec-1997	10,546,024.44	13,774,029.21	8,530,000.00	(2,680,000.00)	7,866,024.44	
A320-200	N442UA	780	Feb-1998	10,694,348.74	13,787,291.62	8,640,000.00	(3,550,000.00)	7,144,348.74	
A320-200	N443UA	820	May-1998	10,952,729.18	13,807,627.06	8,810,000.00	(3,970,000.00)	6,982,729.18	
A320-200	N444UA	824	May-1998	10,952,729.18	13,807,627.06	8,810,000.00	(2,380,000.00)	8,572,729.18	
A320-200	N445UA	826	Jun-1998	11,038,855.99	13,814,525.44	8,860,000.00	(2,070,000.00)	8,968,855.99	
A320-200	N446UA	834	Jun-1998	11,038,855.99	13,814,525.44	8,860,000.00	(1,280,000.00)	9,758,855.99	
A320-200	N447UA	836	Jul-1998	11,124,982.81	13,821,484.66	8,920,000.00	(4,990,000.00)	6,134,982.81	
A320-200	N448UA	842	Jul-1998	11,127,039.50	13,821,484.66	8,920,000.00	(4,780,000.00)	6,347,039.50	
A320-200	N449UA	851	Jul-1998	11,127,039.50	13,821,484.66	8,920,000.00	(3,250,000.00)	7,877,039.50	
A320-200	N451UA	865	Sep-1998	11,303,406.52	13,835,587.76	9,030,000.00	(2,560,000.00)	8,743,406.52	
A320-200	N452UA	955	Mar-1999	11,807,330.14	13,879,413.85	9,380,000.00	250,000.00	11,938,914.66	
A320-200	N453UA	1001	Apr-1999	11,895,513.65	13,886,945.30	9,440,000.00	130,000.00	11,870,819.65	
A320-200	N454UA	1104	Nov-1999	12,431,971.34	13,941,558.31	9,860,000.00	(510,000.00)	11,567,843.22	
A320-200	N455UA	1105	Nov-1999	12,431,971.34	13,941,558.31	9,860,000.00	1,530,000.00	13,607,843.22	
A320-200 A320-200	N456UA	1128 1146	Dec-1999 Jan-2000	12,503,989.48	13,949,637.80	9,920,000.00 9,980,000.00	(3,980,000.00)	8,144,542.43 11,707,393.46	
A320-200 A320-200	N457UA N458UA	1163	Feb-2000	12,564,391.86 12,636,410.00	13,957,788.53 13,966,011.15	10,050,000.00	(460,000.00) (2,750,000.00)		
A320-200 A320-200	N459UA N459UA	1192	Apr-2000	12,780,446.27	13,982,674.55	10,180,000.00	(570,000.00)	9,467,473.71 11,744,373.61	
A320-200 A320-200	N460UA	1248	Jun-2000	12,924,482.54	13,999,633.15	10,310,000.00	990,000.00	13,401,371.90	
A320-200	N461UA	1266	Jul-2000	13,027,419.37	14,008,224.78	10,370,000.00	(490,000.00)	11,978,548.05	
A320-200	N462UA	1272	Jul-2000	13,027,419.37	14,008,224.78	10,370,000.00	(530,000.00)	11,938,548.05	
A320-200	N463UA	1282	Aug-2000	13,130,356.20	14,016,892.18	10,440,000.00	(1,020,000.00)	11,509,082.79	
A320-200	N464UA	1290	Aug-2000	13,130,356.20	14,016,892.18	10,440,000.00	300,000.00	12,829,082.79	
A320-200	N465UA	1341	Nov-2000	13,439,166.68	14,043,355.68	10,630,000.00	(160,000.00)	12,544,174.12	
A320-200	N466UA	1343	Nov-2000	13,439,166.68	14,043,355.68	10,630,000.00	1,370,000.00	14,074,174.12	
A320-200	N467UA	1359	Dec-2000	13,542,103.51	14,053,123.31	10,700,000.00	(670,000.00)	12,095,075.60	
A320-200	N468UA	1363	Dec-2000	13,542,103.51	14,053,123.31	10,700,000.00	(370,000.00)	12,395,075.60	
A320-200	N469UA	1409	Feb-2001	13,440,772.95	14,070,525.49	10,830,000.00	(3,540,000.00)	9,240,432.81	
A320-200	N470UA	1427	Mar-2001	13,543,709.78	14,080,530.83	10,900,000.00	(570,000.00)	12,271,413.53	
A320-200	N471UA	1432	Mar-2001	13,543,709.78	14,080,530.83	10,900,000.00	2,770,000.00	15,611,413.53	
A320-200	N472UA	1435	Apr-2001	13,646,646.60	14,091,404.05	10,970,000.00	(1,660,000.00)	11,242,683.55	
A320-200	N473UA	1469	May-2001	13,749,583.43	14,103,143.90	11,040,000.00	730,000.00	13,694,242.44	
A320-200	N474UA	1475	May-2001	13,749,583.43	14,103,143.90	11,040,000.00	(2,460,000.00)	10,504,242.44	
A320-200	N475UA	1495	Jun-2001	13,852,520.26	14,115,749.12	11,110,000.00	(1,180,000.00)	11,846,089.79	
A320-200	N476UA	1508	Jul-2001	13,942,323.83	14,129,218.39	11,180,000.00	1,520,000.00	14,603,847.41	
A320-200	N477UA	1514	Jul-2001	13,942,323.83	14,129,218.39	11,180,000.00	(1,910,000.00)	11,173,847.41	
A320-200	N478UA	1533	Aug-2001	14,032,127.40	14,143,550.39	11,250,000.00	(2,680,000.00)	10,461,892.60	
A320-200	N479UA	1538	Aug-2001	14,032,127.40	14,143,550.39	11,250,000.00	(980,000.00)	12,161,892.60	
A320-200	N480UA	1555	Sep-2001	14,121,930.97	14,158,743.75	11,320,000.00	(2,070,000.00)	11,130,224.91	
A320-200	N486UA	1620	Dec-2001	14,391,341.69	14,209,477.94	11,530,000.00	(510,000.00)	12,866,939.88	
A320-200	N487UA	1669	Jan-2002	14,716,047.66	14,211,683.91	11,600,000.00	2,460,000.00	15,969,243.86	
A320-200	N488UA	1680	Feb-2002	14,805,851.23	14,229,615.06	11,680,000.00	(1,580,000.00)	11,991,822.10	

	<b>5</b>	N	D. II	A	praiser's Valuations		mba	
Aircraft Model	Registration Number	Manufacturer's Serial Number	Delivery Month	BK	ICF	mba	Maintenance Adjustment	Appraised Value
A320-200	N4901U	2680	Feb-2006	18,342,452.73	15,813,741.71	15,740,000.00	4,520,000.00	20,333,741.71
A320-200	N490UA	1728	Apr-2002	14,985,458.38	14,268,042.35	11,830,000.00	(570,000.00)	13,124,500.24
A320-200	N491UA	1741	Apr-2002	14,985,458.38	14,268,042.35	11,830,000.00	(940,000.00)	12,754,500.24
A320-200	N492UA	1755	Apr-2002	14,985,458.38	14,268,042.35	11,830,000.00	(120,000.00)	13,574,500.24
A320-200	N493UA	1821	Jul-2002	15,235,254.23	14,332,072.06	12,050,000.00	(610,000.00)	13,262,442.10
A320-200	N494UA	1840	Sep-2002	15,375,631.66	14,378,998.54	12,200,000.00	(460,000.00)	13,524,876.73
A320-200	N495UA	1842	Aug-2002	15,305,442.95	14,355,112.43	12,130,000.00	(2,090,000.00)	11,840,185.13
A320-200	N496UA	1845	Sep-2002	15,375,631.66	14,378,998.54	12,200,000.00	2,680,000.00	16,664,876.73
A320-200	N497UA	1847	Sep-2002	15,375,631.66	14,378,998.54	12,200,000.00	(70,000.00)	13,914,876.73
A320-200	N498UA	1865	Oct-2002	15,445,820.37	14,403,728.64	12,280,000.00	180,000.00	14,223,183.00

### Semiannual LTV Test

For purposes of certain covenants relating to this Offering, including the determination of the LTV Ratio with respect to the different types of Collateral, the Collateral has been divided into five groups based on the type of Collateral in such group:

- (1) Spare Parts (the "Spare Parts Collateral");
- (2) Spare Engines (the "Spare Engines Collateral");
- (3) the Spare Parts and Spare Engines combined (the "Spares Collateral");
- (4) Aircraft that as of August 31, 2020 are less than 20 years from the date of manufacture and are otherwise not a Tier II Aircraft as of such date (a "Tier I Aircraft" and, as Collateral, the "Tier I Aircraft Collateral"); and
- (5) Aircraft that (x) as of such date are 20 or more years from its date of manufacture, (y) are one of the following models: Boeing 737-700, 777-200 (other than 777-200ER) or a member of the Boeing 757 or 767 families or (z) consist of Additional Collateral, which as of August 31, 2020, are less than 20 years from their date of manufacture, but as of the applicable date of determination have been designated by United as Tier II Aircraft (a "Tier II Aircraft", as Collateral, the "Tier II Aircraft Collateral"). These groups are referred to herein as the "Spare Parts Collateral Group", the "Spare Engines Collateral Group", the "Spares Collateral Group" and the "Tier II Aircraft Collateral Group" and each as a "Collateral Group".

In addition, the original aggregate principal amount of the Equipment Note will be allocated among three of the Collateral Groups (principally for the purpose of determining the LTV Ratio with respect to such Collateral Groups) as follows (with respect to any Collateral Group and less any payments of principal made with respect to such Collateral Group, the "Debt Balance"):

	Equipment
Group	Note
Spares Collateral Group	\$ 1,171,000,000
Tier I Aircraft Collateral	\$ 856,000,000
Tier II Aircraft Collateral	\$ 973,000,000

Payments of the principal amount of the Equipment Note with respect to the Spares Collateral Group will be allocated pro rata between the Spare Parts Collateral Group and the Spare Engines Collateral Group.

On or prior to each May 15 and November 15 of each year, commencing in May 2021 (each such date, a "Collateral Test Date"), United will be required to deliver to the Loan Trustee (i) in respect of the Spare Parts Collateral, an Appraisal from an Appraisal from an Appraisal from an Appraisar reflecting the current market value of the Spare Parts Collateral; (ii) in respect of the Spare Engines Collateral, an Appraisal from an Appraisar reflecting the Maintenance Adjusted Base Values of the Spare Engines Collateral; (iii) in respect of the Tier I Aircraft Collateral, an Appraisal from an Appraisar reflecting the Maintenance Adjusted Base Values of the Tier I Aircraft Collateral; and (iv) in respect of the Tier II Aircraft Collateral, an Appraisar reflecting the Maintenance Adjusted Base Values of the Tier II Aircraft Collateral (each such Appraisal to be dated a date no earlier than 60 days prior to the applicable Collateral Test Date).

United will also be required to deliver to the Loan Trustee in connection with the delivery of the Appraisals a certificate of United with a calculation demonstrating whether or not with respect to the Spares Collateral Group, the Tier I Aircraft Collateral Group or the Tier II Aircraft Collateral Group, the ratio (expressed as a percentage (the "LTV Ratio")) of (a) the Debt Balance with respect to such Collateral Group, after giving effect to all principal payments made in respect of the Equipment Note on or prior to such date (reduced by the amount of any Cure Cash Collateral then allocated to such Collateral Group) to (b) the Aggregate Appraised Value of such Collateral Group as of such date is greater than the applicable Maximum LTV Threshold (if greater, a "Collateral Trigger Event" shall be deemed to have occurred). For purposes of any determination of the LTV Ratio (and existence of a Collateral Trigger Event) as of any date of determination, the amount of any Cure Cash Collateral shall be allocated (without duplication) by United in its sole discretion to one or more Collateral Groups.

"Maximum LTV Threshold" means, (i) with respect to the Spares Collateral, (a) 75% from the Issuance Date to, but excluding the fifth anniversary of the Issuance Date and (b) 65% thereafter, (ii) with respect to Tier I Aircraft Collateral (a) 65% from the Issuance Date to, but excluding the third anniversary thereof, (b) 55% from the third anniversary of the Issuance Date to, but excluding the fourth anniversary of the Issuance Date and (d) 30% thereafter and (iii) with respect to Tier II Aircraft Collateral, (a) 65% from the Issuance Date to, but excluding the first anniversary thereof, (b) 60% from the first anniversary of the Issuance Date to, but excluding the second anniversary thereof, (c) 55% from the second anniversary of the Issuance Date to, but excluding the third anniversary of the Issuance Date and (d) 40% thereafter.

If United's certificate delivered to the Loan Trustee with respect to any Collateral Test Date demonstrates that a Collateral Trigger Event shall have occurred with respect to the Spares Collateral Group, the Tier I Aircraft Collateral Group or the Tier II Aircraft Collateral Group, United will be required to on a date that is no later than 90 days after such Collateral Test Date (such ninetieth day, the "Collateral Cure End Date"):

- (I) grant a security interest to the Loan Trustee in Additional Collateral with respect to such Collateral Group having an Aggregate Appraised Value (based on the Maintenance Adjusted Base Value of such Additional Collateral) such that the Aggregate Appraised Value of such Collateral Group (including such Additional Collateral and after giving effect to any action taken by United in connection with such Collateral Trigger Event pursuant to clause (II) and (III) of this sentence) is greater than or equal to the applicable Minimum Collateral Value upon the grant of such security interest and provided that no failure to comply with a Composition Test shall have occurred and be continuing at the time of such grant or result therefrom (unless such grant would improve compliance or otherwise not worsen any noncompliance);
- (II) deposit cash or permitted investments or a combination of cash and permitted investments ("Cure Cash Collateral") into an eligible securities account established pursuant to the Indenture with the Loan Trustee and subject to the lien of the Loan Trustee (the "Cure Cash

Collateral Account") in a sufficient amount such that the Aggregate Appraised Value of such Collateral Group after giving effect to any action taken by United in connection with such Collateral Trigger Event pursuant to clause (I) and (III) of this sentence, is greater than or equal to the applicable Minimum Collateral Value (after giving effect to such deposit); or

(III) pay to the Loan Trustee an amount not less than the difference of (i) the applicable Minimum Collateral Value *minus* (ii) the Aggregate Appraised Value of the applicable Collateral Group after giving effect to any action taken by United in connection with such Collateral Trigger Event pursuant to clause (I) and (II) of this sentence. Any amounts paid pursuant to this clause (III) will, solely for purposes of the foregoing clauses (I) and (II) in connection with such Collateral Trigger Event, be deemed a deposit of Cure Cash Collateral and be applied to redeem the Equipment Note and applied to reduce the remaining scheduled amortization payments (and the Debt Balance for such Collateral Group) in inverse order of maturity, provided, with respect to Tier II Aircraft Collateral, such amounts shall be applied in inverse order of maturity to reduce the remaining scheduled amortization payments ending on the sixteenth payment date. The redemption price in such case will be the principal amount of such Equipment Note required to be redeemed, together with accrued interest, but without any premium. In addition to clause (I) above, in the case of a Collateral Trigger Event with respect to the Tier I Aircraft Collateral Group and Tier II Aircraft Collateral Group one or more Tier I Aircraft may be added as Additional Collateral with an aggregate Appraised Value sufficient to cure the Collateral Trigger Events with respect to both such Collateral Groups, and United may designate a specified percentage of such Tier I Aircraft to be included as Tier I Aircraft Collateral (without duplication) for so long as such Tier I Aircraft remains part of the Collateral and the Debt Balance with respect to the Tier II Aircraft Collateral is greater than zero.

If United fails to cure a Collateral Trigger Event on or prior to the Collateral Cure End Date, a "Collateral Cure Failure" will occur, which would result in an Indenture Default, provided that in the event that such Collateral Trigger Event ceases to exist at any time for any reason, including as a result of United delivering to the Loan Trustee updated Appraisals for any Collateral within the Collateral Group subject to such Collateral Trigger Event or the reduction of the outstanding principal amount of the Equipment Note, United will not be required to take any actions with respect to such Collateral Trigger Event and no Collateral Cure Failure (or Indenture Default) will result therefrom. For the avoidance of doubt, United may, at its option, obtain and deliver to the Loan Trustee additional Appraisals from an applicable Appraiser with respect to any Collateral at any other time, and from time to time, and each such additional Appraisal shall constitute an "Appraisal" of such Collateral for all purposes of the Indenture.

For purposes of this Prospectus Supplement, the terms set forth below have the respective indicated meanings:

"Additional Collateral" means (i) with respect to Spare Parts Collateral, Section 1110 eligible spare parts at an additional designated location specified by United after the occurrence of the relevant Collateral Trigger Event, (ii) with respect to Spare Engines Collateral, Section 1110 eligible engines, (iii) with respect to Tier I Aircraft Collateral, Section 1110 eligible Tier I Aircraft and (iv) with respect to Tier II Aircraft, Section 1110 eligible Tier I Aircraft or Tier II Aircraft.

"Appraisal" means an appraisal setting forth, as to any Collateral covered thereby, the Appraised Value (or, if applicable with respect to the initial determinations for Aircraft or Spare Engines, the Half-Life Base Value from the applicable Appraiser, together with, or with separate delivery of, any required Maintenance Report), in each case determined without a physical inspection (other than, on an annual basis as to Spare Parts, an applicable limited inspection, in accordance with the Spare Parts appraisal methodology, of at least two locations as selected by the Appraiser, where one such location shall be one of the top three locations at which the largest number of Spare Parts are kept) and with

any required maintenance condition for purposes of relevant adjustments being based on maintenance information provided by United.

"Appraised Value" means, (i) with respect to Spare Parts Collateral, the current market value as most recently determined by an Appraiser; provided that the Appraised Value of any individual spare part shall be the portion of the Appraised Value of all of United's spare parts allocated thereto by United on a reasonable basis for such type of part, (ii) with respect to the Spare Engines Collateral, for the initial determination (on or before the Issuance Date), the lower of the median and mean of the Half-Life Base Values provided by the Maintenance Adjustment factor as provided by an Appraiser, and for any determination from and after delivery of the first Appraisal covering such Spare Engines Collateral following the Issuance Date, the lower of the median and mean of the Half-Life Base Values provided by three Appraisers as modified by the maintenance adjustment factor as provided by an Appraiser, and for any determination from and after delivery of the first Appraisal covering such Aircraft Collateral following the Issuance Date, the Maintenance Adjusted Base Value as most recently provided by an Appraiser; provided that if at the relevant time United has not previously given to the Mortgagee an Appraisal of an Airframe or an Engine, but has given to Loan Trustee an Appraisal that includes the Appraised Value of the Aircraft that includes the Airframe and Engine, United shall allocate the Appraised Value of such Airframe or Engine on a reasonable basis, and such allocated amounts shall be the Appraised Value of such Airframe and Engine, except that this proviso shall not be applicable in a case where the Indenture expressly requires that United obtain an Appraisal with respect to such Airframe or Engine, and (iv) 100% of the face value of all cash, cash equivalents and permitted investments (other than in connection with an applicable determination of the Appraised Value or Aggregate Appraised Value in relation to a determination of the LTV Ratio or existence of a Collateral Trigger Event, to the extent such

"Appraiser" means, (a) as to Spare Parts Collateral, any of mba, ICF and Alton Aviation Consultancy, (b) as to Spare Engines Collateral or Aircraft Collateral, any of mba, BK, Aircraft Information Services, Inc. and ICF for Half-Life Base Values and either of mba and ICF for Maintenance Adjusted Base Values (or applicable maintenance adjustment factor for determination of such Maintenance Adjusted Base Value) and in each case (for (a) and (b)), if United is -unable to engage any of the foregoing appraisers after using reasonable efforts, any other nationally recognized independent ISTAT-certified appraisal firm, as selected and retained by United.

"Aggregate Appraised Value" means, with respect to any Collateral Group or any other group of Collateral, the sum of the Appraised Values of all Collateral included in such Collateral Group or other group of Collateral.

"Composition Test" means, as of any date of determination:

- (1) the sum of the Aggregate Appraised Value of all Spares Collateral (including applicable Additional Collateral and any Cure Cash Collateral then allocated to any such Collateral Group) is greater than or equal to 25% of the sum of the Aggregate Appraised Value of all Collateral (including all Additional Collateral and cash Collateral);
- (2) the sum of the Aggregate Appraised Value of all Aircraft Collateral corresponding to a narrowbody Airframe is greater than or equal to 60% of the sum of the Aggregate Appraised Value of all Aircraft Collateral;

- (3) the sum of the Aggregate Appraised Value of all Eligible Regional Aircraft included in the Aircraft Collateral does not exceed 15% of the Aggregate Appraised Value of all Aircraft Collateral; and
- (4) the sum of the Aggregate Appraised Value of all Rotables and Spare Engines included in the Spares Collateral is greater than or equal to 55% of the sum of the Aggregate Appraised Value of the Spares Collateral.

"Eligible Regional Aircraft" means any commercial jet aircraft that (a) is an Embraer ERJ 175, Embraer ERJ 190, Embraer ERJ 195, Bombardier CRJ 900 or any other comparable or improved model of regional commercial jet aircraft commonly configured to have at least 70 passenger seats and (b) has a date of manufacture of 2014 or later.

"Half-Life Base Value" means, with respect to any aircraft, airframe or engine, the base value of such aircraft, airframe or engine assuming half-time maintenance condition, as specified in the most recent Appraisal thereof.

"Maintenance Adjusted Base Value" means, with respect to any aircraft or engine (or any substitute or additional aircraft, airframe or engine, as applicable), the Half-Life Base Value thereof, adjusted to account for its maintenance status, as provided in the Maintenance Report or listed in an Appraisal, as applicable.

"Maintenance Report" means a report provided by an Appraiser reflecting the initial Maintenance Adjusted Base Value (or applicable maintenance adjustment factor for determination of such Maintenance Adjusted Base Value) of the Spare Engines Collateral or Aircraft Collateral.

"Minimum Collateral Value" means, as of any date of determination, with respect to any Collateral Group, the quotient of (i) the difference of (x) the Debt Balance with respect to such Collateral Group, less (y) the amount of any Cure Cash Collateral then allocated to such Collateral Group, divided by (ii) the applicable Maximum LTV Threshold as of the relevant date of determination.

### Release of Collateral

United may request that Spare Engines Collateral or Aircraft Collateral specified by United be released from the lien of the applicable Security Document on any date following the first anniversary of the Issuance Date (or, in the case of a Technical Impairment, on any date following the Issuance Date) (any such date, a "Release Request Date").

The Loan Trustee shall effect such release so long as:

- United shall state in such request for release that it reasonably expects the Collateral to be released would not otherwise be utilized as part of its in-service fleet, that the Collateral to be released is of a model that has been retired by United or that United has announced will be retired or that the Collateral to be released is subject to a Technical Impairment and, in the case of a Technical Impairment, United shall describe in such request the terms of such Technical Impairment;
- United delivers to the Loan Trustee one Appraisal from an applicable Appraiser dated a date no earlier than 90 days prior to such Release Request Date with respect to the Aggregate Appraised Value of the Collateral to be released (and otherwise based on the most recent Appraised Values of remaining applicable Collateral);
- The Aggregate Appraised Value of the Collateral to be released does not exceed, together with all other Spare Engines Collateral and Aircraft Collateral (excluding Cure Cash Collateral

allocated to any such Collateral Group) released pursuant to this provision during the same Relevant Period, the applicable Release Threshold;

- United delivers to the Loan Trustee a certificate of United with a calculation demonstrating that on the applicable Release Request Date no Collateral Trigger Event exists, or after
  giving effect to any release being requested by United hereunder, will occur, on such Release Request Date using the Aggregate Appraised Value of all Spare Engines Collateral
  and Aircraft Collateral to be released on such Release Request Date;
- No Indenture Default exists on the applicable Release Request Date or will occur as a result of such release; and
- No failure to comply with a Composition Test shall have occurred and be continuing at the time of such release (unless such release would improve compliance or otherwise not worsen any noncompliance).

"Release Threshold" means, with respect to any Release Request Date, (i) from the Issuance Date to, but excluding the second anniversary of the Issuance Date, \$100,000,000, provided that from the Issuance Date to, but excluding the first anniversary of the Issuance Date to, but excluding the first anniversary of the Issuance Date to, but excluding the third anniversary of the Issuance Date, \$100,000,000, (iii) from the third anniversary of the Issuance Date to, but excluding the fourth anniversary of the Issuance Date to, but excluding the fifth anniversary thereof, \$50,000,000, (iv) from the fifth anniversary of the Issuance Date to, but excluding the sixth anniversary thereof, \$40,000,000 (and (vi) following the sixth anniversary of the Issuance Date to, but excluding the seventh anniversary thereof, \$40,000,000 (each such period, a "Relevant Period"). Notwithstanding the foregoing, with respect to any Relevant Period (a) after the initial Relevant Period, the Release Threshold shall be increased by the unused portion of the Release Threshold for the immediately preceding Relevant Period (including as such preceding Release Threshold may previously have been increased pursuant to this proviso), and (b) prior to and including the Relevant Period ending on the fourth anniversary of the Issuance Date, up to 40% of the applicable Release Threshold (as it may have been increased pursuant to clause (a)) will be available for Spare Engines Collateral, up to 40% will be available for Tier I Aircraft Collateral and up to 70% will be available for Spare Engines Collateral and Tier I Aircraft Collateral on an aggregate basis.

"Technical Impairment" means, with respect to any Aircraft or Spare Engine, any circumstance that exists solely with respect to such Aircraft or Spare Engine, which, with the giving of notice or passing of time (or both), would, in the reasonable judgment of United, constitute an Indenture Default and, in the reasonable judgment of United is not reasonably likely to be cured within the applicable cure period after use of commercially reasonable efforts. If an Aircraft or Spare Engine is subject to a Technical Impairment, in lieu of seeking the release of such Aircraft or Spare Engine pursuant to the foregoing release provisions, United may elect to treat it as having been subject to an Event of Loss. See "—Certain Provisions of the Spare Engines Security Agreement—Event of Loss" and "—Certain Provisions of the Indenture—Events of Loss" under "Description of Security Documents".

If, on any date of determination, Cure Cash Collateral is held by the Loan Trustee or the amount of such Cure Cash Collateral exceeds the amount necessary for avoiding a Collateral Trigger Event for such Collateral Group (in each case if determined as of such date), upon request by United the Loan Trustee will promptly release from the lien of the Security Documents all such (or all such excess) Cure Cash Collateral and pay it to United, so long as:

No Indenture Default then exists or will occur as a result of such release with respect to such Collateral Group;

- No Collateral Trigger Event then exists or would result from such release (in each case after taking into account any Additional Collateral being provided by United in connection with such release); and
- No failure to comply with a Composition Test shall have occurred and be continuing at the time of such release (unless such release would improve compliance or otherwise not worsen any noncompliance).

If the Debt Balance with respect to the Tier II Aircraft Collateral is zero, upon request by United the Loan Trustee will promptly release from the lien of the Indenture all such Tier II Aircraft Collateral, so long as:

- No Indenture Default then exists or will occur as a result of such release;
- No Collateral Trigger Event then exists or will occur as a result of such release; and
- No failure to comply with a Composition Test shall have occurred and be continuing at the time of such release (unless such release would improve compliance or otherwise not worsen any noncompliance).

Any aircraft partially allocated to both the Tier I Aircraft Collateral and the Tier II Aircraft Collateral shall thereafter automatically fully constitute Tier I Aircraft Collateral.

United may use, install, dispose of, transfer or move its Spare Parts, in each case in any manner consistent with United's ordinary course of business. Furthermore, United may remove any location from the list of "designated locations" if such location does not then contain any Spare Parts (including as a result of a concurrent permitted ordinary course disposition or transfer of any Spare Parts located therein). Any such permitted use, installation, move, disposition, transfer or removal shall result in a release of the lien of the Security Documents, and any such permitted installation or disposition shall be made free and clear of the lien of the Security Documents.

# **Certain Spare Parts Covenants**

United will be required to maintain, as of each Collateral Test Date, Spare Parts representing at least 85% (by Aggregate Appraised Value) of its spare parts then available for use in its fleet at a "designated location". Failure of United to comply with such obligation that continues for 90 days after the applicable Collateral Test Date will be deemed to be an Indenture Default.

If any location owned or leased by United (other than a "designated location") shall as of any Collateral Test Date have 1.5% or more by Appraised Value of United's spare parts then available for use in its fleet, United shall use reasonable commercial efforts cause such location to be added as a "designated location".

Spare parts associated exclusively with aircraft models that have fully exited United's fleet will be given a value of zero for purposes of calculating the LTV Ratios for the Spares Collateral Group (and thereafter such spare parts shall be disregarded for determinations with respect to any Spare Parts Covenants, and, so long as any resulting or then existing Collateral Trigger Event has been cured, such spare parts shall be deemed excluded and released from the Collateral, with United having the right to freely use, maintain, dispose and otherwise transfer such spare parts).

Spare parts other than Rotables and Repairables in excess of 25% (by Appraised Value) of the Aggregate Appraised Value of the Spare Parts Collateral shall be deemed to have a value of zero for purposes of calculating the LTV Ratios with respect to the Spares Collateral Group and all Collateral collectively.

United will be required to deliver a certificate of United reflecting certain appraised value and other information regarding its spare parts and the Spare Parts Collateral, attaching a parts inventory report and reflecting compliance with the spare parts covenants reflected above, in each case, as of the applicable Collateral Test Date. (Indenture, Section 2.3 to Annex C)

# DESCRIPTION OF THE EQUIPMENT NOTE

The following summary describes the material terms of the Equipment Note. The summary makes use of terms defined in, and is qualified in its entirety by reference to all of the provisions of, the Equipment Note, the Indenture, the other Security Documents and the Note Purchase Agreement. The Note Purchase Agreement and the form of the Equipment Note, the Indenture and the other Security Documents each will be filed as an exhibit to a Current Report on Form 8-K to be filed by United with the Commission.

# General

On the Issuance Date, the Series A equipment note will be issued by United pursuant to the Indenture (the "Equipment Note") and purchased for the benefit of the Trust. United may elect to issue one or more series of Additional Equipment Notes secured by the Collateral at any time, which will be funded from sources other than this Offering and will be subordinated in right of payment to the Equipment Note. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates". The Equipment Note will be issued under the Indenture, among United and Wilmington Trust, National Association, as indenture trustee thereunder (the "Loan Trustee") to be entered into on the Issuance Date (the "Indenture").

United's obligations under the Equipment Note will be general obligations of United.

### Subordination

If United elects to issue Additional Equipment Notes, they will be subordinated in right of payment to the Equipment Note. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

# **Principal and Interest Payments**

Subject to the provisions of the Intercreditor Agreement, interest paid on the Equipment Note will be passed through to the Certificateholders on the dates and at the rate per annum set forth on the cover page of this Prospectus Supplement with respect to Certificates until the final expected Regular Distribution Date. Subject to the provisions of the Intercreditor Agreement, principal paid on the Equipment Note will be passed through to the Certificateholders of such Trust in scheduled amounts on the dates set forth herein until the expected final Regular Distribution Date.

Interest will be payable on the unpaid principal amount of the Equipment Note at the rate applicable to such Equipment Note on January 15, April 15, July 15 and October 15 of each year, commencing on January 15, 2021. Such interest will be computed on the basis of a 360-day year of twelve 30-day months.

Scheduled principal payments on the Equipment Note will be made on January 15, April 15, July 15 and October 15 of each year, commencing on January 15, 2021. See "Description of the Certificates—Pool Factors" for a discussion of the scheduled payments of principal of the Equipment Note and possible revisions thereto.

If any date scheduled for a payment of principal, premium (if any) or interest with respect to the Equipment Note is not a Business Day, such payment will be made on the next succeeding Business Day, without any additional interest.

United is also required to pay under the Indenture:

 the fees, the interest payable on drawings under each Liquidity Facility in excess of earnings on cash deposits from such drawings plus certain other amounts and certain other payments due to the Liquidity Provider under each Liquidity Facility and

compensation and certain expenses payable to the Pass Through Trustee and the Subordination Agent.

# Redemption

If an Event of Loss occurs with respect to a Spare Engine or Aircraft, United will be required either (i) to redeem a *pro rata* portion of the outstanding principal amount of the Equipment Note based on the Appraised Value of such Spare Engine or Aircraft compared to the Aggregate Appraised Value of all Collateral, which shall be applied to reduce each remaining scheduled amortization payment of such Equipment Note in inverse order of maturity, provided that if the aggregate principal amount of the Equipment Note required to be redeemed in connection with such Event of Loss is less than \$50,000,000, in lieu of such redemption United may elect to deposit cash or permitted investments or a combination thereof into an eligible securities account established pursuant to the Indenture with the Loan Trustee to be held as Collateral for the applicable Collateral Group until such time as the amount deposited into such account exceeds \$50,000,000, at which time such amount shall be used to redeem the Equipment Note as aforesaid, provided that, such loss proceeds may be released on the same basis that the Collateral subject to the Event of Loss could have been released prior to such Event of Loss and subject to the applicable Release Threshold for the Relevant Period or (ii) to replace such Spare Engine or Aircraft under the related Security Documents. See "Description of the Security Documents—Certain Provisions of the Indenture—Events of Loss" for a description of certain requirements with respect to any such replacement. The redemption price in such case will be the principal amount of the Equipment Note required to be redeemed, together with accrued interest, but without any premium.

The Equipment Note may be redeemed in full prior to maturity at any time, at the option of United. The redemption price for any optional redemption will be the unpaid principal amount of the Equipment Note, together with accrued and unpaid interest thereon to, but not including, the date of redemption, plus a Make-Whole Premium. (Indenture, Section 2.11) See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates".

"Make-Whole Premium" means, with respect to the Equipment Note, an amount (as determined by an independent investment bank of national standing) equal to the excess, if any, of (a) the present value of the remaining scheduled payments of principal and interest to maturity of such Equipment Note computed by discounting such payments on a quarterly basis on each payment date under the Indenture (assuming a 360-day year of twelve 30-day months) using a discount rate equal to the Treasury Yield plus the applicable Make-Whole Spread over (b) the outstanding principal amount of such Equipment Note plus accrued interest to the date of determination. The "Make-Whole Spread" applicable to the Equipment Note is 0.50%.

For purposes of determining the Make-Whole Premium, "Treasury Yield" means, at the date of determination with respect to the Equipment Note, the interest rate (expressed as a decimal and, in the case of United States Treasury bills, converted to a bond equivalent yield) determined to be the per annum rate equal to the semiannual yield to maturity for United States Treasury securities mattering on the Average Life Date of such Equipment Note and trading in the public securities markets either as determined by interpolation between the most recent weekly average yield to maturity for two series of United States Treasury securities trading in the public securities markets, (A) one maturing as close as possible to, but earlier than, the Average Life Date of such Equipment Note, in each case as published in the most recent H.15 Page or, if a weekly average yield to maturity for United States Treasury securities maturing on the Average Life Date of such Equipment Note is reported in the most recent H.15 Page, such weekly average yield to maturity as published in such H.15 Page. "H.15 Page" means the H.15 page, published by the Board of Governors of the Federal Reserve System on its website (or successor publication of such information by such Board of Governors). The

date of determination of a Make-Whole Premium shall be the third Business Day prior to the applicable payment or redemption date and the "most recent H.15 Page" means the H.15 Page published prior to the close of business on the third Business Day prior to the applicable payment or redemption date.

"Average Life Date" for the Equipment Note shall be the date which follows the time of determination by a period equal to the Remaining Weighted Average Life of such Equipment Note.

"Remaining Weighted Average Life" on a given date with respect to the Equipment Note shall be the number of days equal to the quotient obtained by dividing (a) the sum of each of the products obtained by multiplying (i) the amount of each then remaining scheduled payment of principal of such Equipment Note by (ii) the number of days from and including such determination date to but excluding the date on which such payment of principal is scheduled to be made, by (b) the then outstanding principal amount of such Equipment Note.

#### Limitation of Liability

Except as otherwise provided in the Security Documents, the Loan Trustee, in its individual capacity, will not be answerable or accountable under the Security Documents or under the Equipment Note under any circumstances except, among other things, for its own willful misconduct or gross negligence. (Indenture, Section 7.01)

### Indenture Defaults, Notice and Waiver

Events of default under the Security Documents ("Indenture Defaults") will include:

- The failure by United to pay any amount, when due, under the Equipment Note, the Note Purchase Agreement or any Security Document that continues for more than ten Business Days, in the case of principal, interest or Make-Whole Premium, and, in all other cases, ten Business Days after United receives written notice from the Loan Trustee.
- Any representation or warranty made by United in the Note Purchase Agreement, any Security Document or certain related documents furnished to the Loan Trustee or any
  holder of the Equipment Note pursuant thereto being false or incorrect in any material respect when made that continues to be material and adverse to the interests of the Loan
  Trustee or registered holder of the Equipment Note (in such capacity, the "Note Holder") and remains unremedied after notice and specified cure periods.
- Failure by United to perform or observe any covenant or obligation for the benefit of the Loan Trustee or holder of the Equipment Note under the Security Documents or certain related documents that continues after notice and specified cure periods.
- The lapse or cancellation of insurance required under the Security Documents.
- The occurrence of certain events of bankruptcy, reorganization or insolvency of United. (Indenture, Section 5.01)

The holder of a majority in principal amount of the outstanding Equipment Note, by notice to the Loan Trustee, may on behalf of all the holders waive any existing default and its consequences under the Security Documents, except a default in the payment of the principal of, or premium or interest on any such Equipment Note or a default in respect of any covenant or provision of any Security Document that cannot be modified or amended without the consent of each holder of the Equipment Note. (Indenture, Section 5.06) See "Description of the Intercreditor Agreement—Voting of the Equipment Note" regarding the persons entitled to direct the vote of Equipment Note.

# Remedies

If an Indenture Default (other than certain events of bankruptcy, reorganization or insolvency) occurs and is continuing, the Loan Trustee or the holder of a majority in principal amount of the Equipment Note outstanding under the Indenture may declare the principal of the Equipment Note issued thereunder immediately due and payable, together with all accrued but unpaid interest thereon. If certain events of bankruptcy, reorganization or insolvency occur with respect to United, such amounts shall be due and payable without any declaration or other act on the part of the Loan Trustee or holder of the Equipment Note. The holder of a majority in principal amount of the Equipment Note outstanding under the Indenture may rescind any declaration of acceleration of such Equipment Note at any time before the judgment or decree for the payment of the money so due shall be entered if (i) there has been paid to the Loan Trustee an amount sufficient to pay all principal, interest and premium, if any, on such Equipment Note, to the extent such amounts have become due otherwise than by such declaration of acceleration and (ii) all other Indenture Defaults and incipient Indenture Defaults with respect to any covenant or provision of any Security Document have been cured. (Indenture, Section 5.02(b))

The Security Documents provide that if an Indenture Default has occurred and is continuing, the Loan Trustee may exercise certain rights or remedies available to it under the Security Documents or under applicable law.

In the case of Chapter 11 bankruptcy proceedings in which an air carrier is a debtor, Section 1110 of the U.S. Bankruptcy Code ("Section 1110") provides special rights to holders of security interests with respect to "equipment" (defined as described below). Under Section 1110, the right of such holders to take possession of such equipment in compliance with the provisions of a security agreement is not affected by any provision of the U.S. Bankruptcy Code or any power of the bankruptcy court. Such right to take possession may not be exercised for 60 days following the date of commencement of the reorganization proceedings. Thereafter, such right to take possession may be exercised during such proceedings unless, within the 60-day period or any longer period consented to by the relevant parties, the debtor agrees to perform its future obligations and cures all existing and future defaults on a timely basis. Defaults resulting solely from the financial condition, bankruptcy, insolvency or reorganization of the debtor need not be cured.

"Equipment" is defined in Section 1110, in part, as an aircraft, aircraft engine, propeller, appliance, or spare part (as defined in Section 40102 of Title 49 of the U.S. Code) that is subject to a security interest granted by, leased to, or conditionally sold to a debtor that, at the time such transaction is entered into, holds an air carrier operating certificate issued pursuant to chapter 447 of Title 49 of the U.S. Code for aircraft capable of carrying ten or more individuals or 6,000 pounds or more of cargo. Rights under Section 1110 are subject to certain limitations in the case of equipment first placed in service on or prior to October 22, 1994.

It is a condition to the Trustee's obligation to purchase the Equipment Note that outside counsel to United, which is expected to be Hughes Hubbard & Reed LLP, provide its opinion to the Trustee that the Loan Trustee will be entitled to the benefits of Section 1110 with respect to the Spare Parts, the Spare Engines and the airframe and engines comprising each Aircraft, assuming that, at the time of such transaction, United holds an air carrier operating certificate issued pursuant to chapter 447 of Title 49 of the U.S. Code for aircraft capable of carrying ten or more individuals or 6,000 pounds or more of cargo. For a description of certain limitations on the Loan Trustee's exercise of rights contained in the Security Documents, see "—Indenture Defaults, Notice and Waiture"

The opinion of Hughes Hubbard & Reed LLP will not address the possible replacement of a Spare Part, Spare Engine or Aircraft in the future, the consummation of which is conditioned upon the contemporaneous delivery of an opinion of counsel to the effect that the Loan Trustee will be entitled to Section 1110 benefits with respect to such replacement unless there is a change in law or court

interpretation that results in Section 1110 not being available. See "Description of the Security Documents—Certain Provisions of the Indenture—Events of Loss". The opinion of Hughes Hubbard & Reed LLP will also not address the availability of Section 1110 with respect to any possible lessee of a Spare Part, Spare Engine or Aircraft if it is leased by United.

If an Indenture Default occurs and is continuing, any sums held or received by the Loan Trustee may be applied to reimburse the Loan Trustee for any tax, expense or other loss incurred by it and to pay any other amounts due to the Loan Trustee prior to any payments to holder of the Equipment Note. (Indenture, Section 3.03)

### Modification of Indenture and other Security Documents

Without the consent of holder of a majority in principal amount of the Equipment Note outstanding, the provisions of the Indenture and the other Security Documents may not be amended or modified, except to the extent indicated below.

Without the consent of the Liquidity Providers and the holder of the Equipment Note if affected thereby, no amendment or modification of the Indenture or the other Security Documents may among other things (a) reduce the principal amount of, or premium, if any, or interest payable on, the Equipment Note or change the date on which any principal, premium, if any, or interest is due and payable, (b) permit the creation of any security interest with respect to the property subject to the lien of the Indenture or any other Security Document, except as provided in the Indenture or such other Security Document, upon the property subject thereto or (c) modify the percentage of the Equipment Note required to take or approve any action under the Indenture or such other Security Document. (Indenture, Section 10.01(a))

The Security Documents may be amended without the consent of the holder of Equipment Note to, among other things, cure any defect or inconsistency in a Security Document or the Equipment Note (provided that such change does not adversely affect the interests of any such holder), subject to the lien of a Security Document the initial or additional Spare Parts, Spare Engines or Airframe or Engines or a replacement airframe or engine in connection with an Event of Loss or exercise by United of its right of substitution under the Indenture, provide for the replacement of one or more Airframes by one or more substitute airframes and replacement of one or more Engines or Spare Engines by one or more substitute engines (see "Description of the Security Documents—Certain Provisions of the Indenture—Substitution of Airframe or Engine"), or provide for the issuance or successive repayment and issuance from time to time thereunder of one or more series of Additional Equipment Notes (and the issuance of one or more series of Additional Equipment Notes under the Indenture) and any related credit support arrangements. See "Possible Issuance of Additional Junior Certificates and Refinancing of Certificates". (Indenture, Section 10.01(b))

# Indemnification

United will be required to indemnify the Loan Trustee, each Liquidity Provider, the Subordination Agent and the Trustee, but not the holders of Certificates, for certain losses, claims and other matters.

# DESCRIPTION OF THE SECURITY DOCUMENTS

The following summary describes the material terms of the Security Documents. The summary does not purport to be complete and is qualified in its entirety by reference to all of the provisions of the Security Documents, which will be filed as exhibits to a Current Report on Form 8-K to be filed by United with the Commission. See "Description of the Collateral and the Appraisals" for a description of certain provisions of the Security Documents relating to the Collateral.

# General

The Equipment Note will be secured by all of the Collateral. This means that any proceeds from the exercise of remedies with respect to any Collateral will be available to cover, in accordance with the applicable priority of payments, payment shortfalls then due under the Equipment Note. The security interest in the Spare Parts will be granted under the Spare Parts Security Agreement between United and the Loan Trustee, as secured party, to be entered into on the Issuance Date (the "Spare Parts Security Agreement"), the security interest in the Spare Engines will be granted under the Spare Engines Security Agreement between United and the Loan Trustee, as secured party, to be entered into on the Issuance Date (the "Spare Engines Security Agreement") and the security interest in the Aircraft will be granted under the Indenture.

# Certain Provisions of the Spare Parts Security Agreement

### Liens

United is required to maintain the Spare Parts free of any liens, other than the rights of the Loan Trustee and United arising under the Spare Parts Security Agreement or the other operative documents related thereto, and other than certain limited liens permitted under such documents, including but not limited to (i) liens for taxes either not yet due or being contested in good faith by appropriate proceedings; (ii) materialmen's, mechanics' and other similar liens arising in the ordinary course of business that either are not yet delinquent for more than 60 days or are being contested in good faith by appropriate proceedings; (iii) judgment liens so long as such judgment is discharged or vacated within 60 days or the execution of such judgment is stayed pending appeal or discharged, vacated or reversed within 60 days after expiration of such stay; and (iv) any other lien as to which United has provided a bond or other security adequate in the reasonable opinion of the Loan Trustee; provided that in the case of each of the liens described in the foregoing clauses (i), (ii) and (iii), such liens and proceedings do not involve any material risk of the sale, forfeiture or loss of the Spare Parts or the interest of the Loan Trustee therein or impair the lien of the Spare Parts Security Agreement. (Spare Parts Security Agreement, Section 2.01)

#### Maintenance

United is required to maintain the Spare Parts in good working order and condition, excluding (i) Spare Parts that have become worn out or unfit for use and not reasonably repairable or obsolete, (ii) Spare Parts that are not required for United's normal operations and (iii) expendable parts that have been consumed or used in United's operations. In addition, United must maintain all records, logs and other materials required by the FAA or under the Federal Aviation Act to be maintained in respect of the Spare Parts. (Spare Parts Security Agreement, Section 2.02)

### Use and Possession

United has the right to deal with the Spare Parts in any manner consistent with its ordinary course of business. This includes the right to install on, or use in, any aircraft, engine or spare part leased to

or owned by United any Spare Part, free from the lien of the Spare Parts Security Agreement, (Spare Parts Security Agreement, Section 2.03)

United may not sell, lease, transfer or relinquish possession of any Spare Part, except as permitted by the Spare Parts Security Agreement. (Spare Parts Security Agreement, Section 2.03(c))

In the ordinary course of business, United may transfer possession of any Spare Part to the manufacturer thereof or any other organization for testing, overhaul, repairs, maintenance, alterations or modifications or to any person for the purpose of transport to any of the foregoing. In addition, United may dismantle any Spare Part that has become worn out or obsolete or unfit for use and may sell or dispose of any such Spare Part or any salvage resulting from such dismantling, free from the lien of the Spare Parts Security Agreement. United also may subject any Spare Part to a pooling, exchange, borrowing or maintenance servicing agreement arrangement customary in the airline industry and entered into in the ordinary course of business; provided, however, that if United's title to any such Spare Part shall be divested under any such agreement or arrangement, such divestiture shall be deemed to be a sale with respect to such Spare Part. (Spare Parts Security Agreement, Section 2.03(c))

### Designated Locations

United will be entitled to hold Qualified Spare Parts at locations other than the designated locations specified in the Spare Parts Security Agreement or added from time to time by United in accordance with the Spare Parts Security Agreement (the "Designated Locations"). The lien of the Spare Parts Security Agreement will not apply to any spare part not located at a Designated Location. United will be required to maintain, as of each Collateral Test Date, Spare Parts representing at least 85% (by Aggregate Appraised Value) of its spare parts then available for use in its fleet at a Designated Location.

### Insurance

United is required to maintain insurance covering physical damage to the Spare Parts. Such insurance must provide for the reimbursement of United's expenditure in repairing or replacing any damaged or destroyed Spare Part. If any such Spare Part is not repaired or replaced, such insurance must provide for the payment of the amount it would cost to repair or replace such Spare Part, on the date of loss, with proper deduction for obsolescence and physical depreciation. However, after giving effect to self-insurance permitted as described below, the amounts payable under such insurance may be less.

All insurance proceeds paid under such policies as a result of the occurrence of an "Event of Loss" with respect to any Spare Parts involving proceeds in excess of \$5,000,000, up to 110% of the Allocable Amount of such Spare Parts, will be paid to the Loan Trustee. The entire amount of any insurance proceeds not involving an "Event of Loss" with respect to any Spare Parts or involving proceeds of \$5,000,000 or less, and the amount of insurance proceeds in excess of the Allocable Amount, will be paid to United so long as no Payment Default, Event of Default or United Bankruptcy Event shall be continuing. For these purposes, "Event of Loss" means, with respect to any Pledge Spare Part, its destruction, damage beyond economic repair, damage that results in the receipt of insurance proceeds on the same basis as destruction, loss of possession by United for 90 consecutive days as a result of theft or disappearance or requisition by a government entity (other than the U.S. government) for more than 180 days. Any such proceeds held by the Loan Trustee will be disbursed to United to reimburse it for the purchase of additional Qualified Spare Parts after the occurrence of such Event of Loss. In addition, such proceeds will be disbursed to United so long as no Collateral Trigger Event is then continuing or would be caused by such disbursement.

United is also required to maintain third party liability insurance with respect to the Spare Parts, in an amount and scope as it customarily maintains for equipment similar to the Spare Parts. United

may self-insure the risks required to be insured against as described above in such amounts as shall be consistent with normal industry practice. (Spare Parts Security Agreement, Section 2.05 and Annex A)

# Certain Provisions of the Spare Engines Security Agreement

### Liens

United is required to maintain the Spare Engine free of any liens, other than the rights of the Loan Trustee and United arising under the Spare Engines Security Agreement or the other operative documents related thereto, and other than certain limited liens permitted under such documents, including but not limited to (i) liens for taxes either not yet due or being contested in good faith by appropriate proceedings; (ii) materialmen's, mechanics' and other similar liens arising in the ordinary course of business that either are not yet delinquent for more than 60 days or are being contested in good faith by appropriate proceedings; (iii) judgment liens so long as such judgment is discharged or vacated within 60 days or the execution of such judgment is stayed pending appeal or discharged, vacated or reversed within 60 days after expiration of such stay; and (iv) any other lien as to which United has provided a bond or other security adequate in the reasonable opinion of the Loan Trustee; provided that in the case of each of the liens described in the foregoing clauses (i), (ii) and (iii), such liens and proceedings do not involve any material risk of the sale, forfeiture or loss of the Spare Engines or the interest of the Loan Trustee therein or impair the lien of the Spare Engines Security Agreement. (Spare Engines Security Agreement, Section 2.01)

### Maintenance

United is required to maintain, service, repair and overhaul each Spare Engine so as to keep each Spare Engine in good operating condition, except during periods of storage, maintenance or governmental grounding. (Spare Engines Security Agreement, Section 2.02)

# Possession, Lease and Transfer

Each Spare Engine may be operated by United or, subject to certain restrictions, by certain other persons. Normal interchange, pooling and borrowing agreements with respect to any Spare Engine, in each case customary in the commercial airline industry, are permitted (provided that if United's title to any Spare Engine shall be divested under any such arrangement, such divestiture shall be deemed to be an Event of Loss with respect to such Spare Engine). Leases are also permitted to U.S. air carriers and foreign air carriers that have their principal executive office in certain specified countries, subject to a reasonably satisfactory legal opinion that, among other things, such country would recognize the Loan Trustee's security interest in respect of the applicable Spare Engine. In addition, a lessee may not be subject to insolvency or similar proceedings at the commencement of such lease. (Spare Engines Security Agreement, Section 2.02) Permitted foreign air carriers are not limited to those based in a country that is a party to the Convention or the Cape Town Treaty. It is uncertain to what extent the Loan Trustee's security interest would be recognized if a Spare Engine is located in a jurisdiction not a party to the Convention or the Cape Town Treaty. Moreover, in the case of an Indenture Default, the ability of the Loan Trustee to realize upon its security interest in a Spare Engine could be adversely affected as a legal or practical matter if such Spare Engine were located outside the United States.

# Replacement of Parts; Alterations

United is obligated to replace all parts at its expense that may from time to time be incorporated or installed in or attached to any Spare Engine and that may become lost, damaged beyond repair, worn out, stolen, seized, confiscated or rendered permanently unfit for use. Such replacement parts will become subject to the lien of the Spare Engines Security Agreement and such lien will terminate as to the replaced part. United or any permitted lessee has the right, at its own expense, to make such

alterations, modifications and additions with respect to each Spare Engine as it deems desirable in the proper conduct of its business and to remove parts which it deems to be obsolete or no longer suitable or appropriate for use, so long as such alteration, modification, addition or removal does not materially diminish the fair market value, utility or useful life of such Spare Engine. United or any permitted lessee may remove any part from a Spare Engine without replacing it if such part is in addition to (and not in replacement of) any part originally incorporated in a Spare Engine at the time of delivery original delivery by the manufacturer, is not required to be incorporated in such Spare Engine under applicable law, regulatory mandate or other obligation and may be removed without materially diminishing the fair market value, utility or useful life of such Spare Engine (assuming such part had not been incorporated in such Spare Engine). (Spare Engines Security Agreement, Section 2.03)

### Insurance

United is required to maintain, at its expense (or at the expense of a permitted lessee), all-risk aircraft hull insurance covering each aircraft on which a Spare Engine is installed and all-risk property damage insurance covering each Spare Engine while removed from an Aircraft, at all times in an amount not less than the Allocable Amount for such Spare Engine plus 10% thereof. However, after giving effect to self-insurance permitted as described below, the amount payable under such insurance may be less than such amounts payable with respect to the Equipment Note. In the event of a loss involving insurance proceeds in excess of \$5,000,000, such proceeds up to 110% of the Allocable Amount of the Spare Engine will be payable to the Loan Trustee, for so long as the Spare Engines Security Agreement shall be in effect. In the event of a loss involving insurance proceeds of up to \$5,000,000, such proceeds will be payable directly to United so long as no Indenture Default exists. So long as the loss does not constitute an Event of Loss, insurance proceeds will be applied to repair or replace the property. (Spare Engines Security Agreement, Section 2.05 and Annex A)

In addition, United is obligated to maintain commercial airline liability insurance at its expense (or at the expense of a permitted lessee), including, without limitation, passenger liability, property damage, baggage liability, cargo and mail liability, hangarkeeper's liability and contractual liability insurance with respect to each aircraft on which a Spare Engine is installed and the Spare Engines. Such liability insurance must be underwritten by insurers of nationally or internationally recognized responsibility. The amount of such liability insurance coverage per occurrence may not be less than the amount of commercial airline liability insurance from time to time applicable to aircraft owned or leased and operated by United (or a permitted lessee) of the same type and operating on similar routes as such aircraft. (Spare Engines Security Agreement, Section 2.05 and Annex A)

United is also required to maintain war-risk, hijacking and allied perils insurance with respect to an aircraft on which a Spare Engine is installed on the same basis as such insurance is required with respect to an Aircraft. See "Description of the Security Documents—Certain Provisions of the Indenture—Insurance" (Spare Engines Security Agreement, Section 2.05 and Annex A)

United (or a permitted lessee) may self-insure under a program applicable to all aircraft and engines in its fleet, but the amount of such self-insurance in the aggregate may not exceed 100% of the largest replacement value of any single aircraft in United's fleet or  $1^{1}/2\%$  of the average aggregate insurable value (during the preceding policy year) of all aircraft on which United carries insurance, whichever is less, unless an insurance broker of national standing shall certify that the standard among all other major U.S. airlines is a higher level of self-insurance, in which case United (or a permitted lessee) may self-insure to such higher level. In addition, United may self-insure to the extent of any applicable deductible per aircraft that does not exceed industry standards for major U.S. airlines. (Spare Engines Security Agreement, Section 2.05 and Annex A)

United is required to name as additional insured parties the Loan Trustee, the holder of the Equpment Note and the Liquidity Providers under all liability (including hull and war-risk, hijacking

and allied perils liability) insurance policies required with respect to a Spare Engine. In addition, the liability insurance policies will be required to provide that, in respect of the coverage of such additional insured persons, the insurance shall not be invalidated or impaired by any act or omission of United, any permitted lessee or any other person. (Spare Engines Security Agreement, Section 2.05 and Annex A)

# **Event of Loss**

If an Event of Loss occurs with respect to a Spare Engine, United must elect, within 45 days after such occurrence, to either (i) on or prior to the 91st day following the Event of Loss, pay to the Loan Trustee the Allocable Amount with respect to such Spare Engine, together with certain additional amounts, but, in any case, without any Make-Whole Premium, or (ii) not later than the 90th day following the occurrence of such Event of Loss, substitute a replacement engine free and clear of all liens (other than certain permitted liens). Such replacement engine shall be the same model as the Engine to be replaced, or a comparable or improved model manufactured by the same engine manufacturer as with respect to such Engine, or another manufacturer, suitable for installation and use on an Airframe, and having a value and utility (without regard to hours or cycles) at least equal to the Spare Engine to be replaced, assuming that such Spare Engine had been maintained in accordance with the Spare Engines Security Agreement.

If United elects to replace a Spare Engine that suffered such Event of Loss, United is required to provide to the Loan Trustee an opinion to the effect, among other things, that the Loan Trustee will be entitled to receive the benefits of Section 1110 of the U.S. Bankruptcy Code with respect to any such replacement engine (unless, as a result of a change in law or court interpretation, such benefits are not then available). (Spare Engines Security Agreement, Section 4.3(d) to Annex C)

An "Event of Loss" with respect to a Spare Engine means any of the following events:

- · The destruction of such Spare Engine, damage to such Spare Engine beyond economic repair or rendition of such Spare Engine permanently unfit for normal use.
- The actual or constructive total loss of such Spare Engine or any damage to such Spare Engine or requisition of title or use of such Spare Engine which results in an insurance settlement with respect to such Spare Engine on the basis of a total loss or a constructive or compromised total loss.
- Any theft, hijacking or disappearance of such Spare Engine for a period of 180 consecutive days or more (or, if earlier, the date on which United has confirmed to the Loan Trustee in writing that United cannot recover such Spare Engine).
- Any seizure, condemnation, confiscation, taking or requisition of title to such Spare Engine by any governmental entity or purported governmental entity (other than a U.S. government entity) for a period exceeding 180 consecutive days.
- As a result of any law, rule, regulation, order or other action by the FAA or other governmental authority, the use of such Spare Engine in the normal course of United's business of passenger air transportation is prohibited for 180 consecutive days, unless United, prior to the expiration of such 180-day period, shall have undertaken and shall be diligently carrying forward steps which are necessary or desirable to permit the normal use of such Spare Engine by United, but in any event if such use shall have been prohibited for a period of two consecutive years, provided that no Event of Loss shall be deemed to have occurred if such prohibition has been applicable to United's entire U.S. fleet of engines of such model and United, prior to the expiration of such two-year period, shall have conformed at least one engine of such model in its fleet to the requirements of any such law, rule, regulation, order or other action and commenced regular commercial use of the same and shall be diligently carrying forward, in a manner which does not

discriminate against such Spare Engine in so conforming such engines, steps which are necessary or desirable to permit the normal use of such Spare Engine by United, but in any event if such use shall have been prohibited for a period of three years.

- The use by United of such Spare Engine as a replacement for an Engine that has suffered an event of Loss pursuant to the terms of the Spare Engines Security Agreement.
- · Any divestiture of title to a Spare Engine in connection with pooling or certain other arrangements shall be treated as an Event of Loss. (Indenture, Annex A)
- Such Spare Engine is subject to a Technical Impairment and United shall have given the Loan Trustee notice of United's election to treat such Spare Engine as having been subject to an Event of Loss

# **Certain Provisions of the Indenture**

### Maintenance

United is obligated under the Indenture, among other things and at its expense, to keep each Aircraft duly registered and insured, and to maintain, service, repair and overhaul the Aircraft so as to keep it in good operating condition, and in such condition as required to maintain the airworthiness certificate for the Aircraft in good standing, except during periods of storage, maintenance or governmental grounding. (Indenture, Section 4.02)

### Possession, Lease and Transfer

Each Aircraft may be operated by United or, subject to certain restrictions, by certain other persons. Normal interchange agreements with respect to the Airframe and normal interchange, pooling and borrowing agreements with respect to any Engine, in each case customary in the commercial airline industry, are permitted (provided that if United's title to any Engine shall be divested under any such arrangement, such divestiture shall be deemed to be an Event of Loss with respect to such Engine). Leases are also permitted to U.S. air carriers and foreign air carriers that have their principal executive office in certain specified countries, subject to a reasonably satisfactory legal opinion that, among other things, such country would recognize the Loan Trustee's security interest in respect of the applicable Aircraft. In addition, a lessee may not be subject to insolvency or similar proceedings at the commencement of such lease. (Indemture, Section 4.02) Permitted foreign air carriers are not limited to those based in a country that is a party to the Convention on the International Recognition of Rights in Aircraft (Geneva 1948) (the "Convention") or the Cape Town Convention on International Interests in Mobile Equipment and the related Protocol on Matters Specific to Aircraft Equipment (the "Cape Town Treaty"). It is uncertain to what extent the Loan Trustee's security interest would be recognized if an Aircraft is registered or located in a jurisdiction not a party to the Convention or the Cape Town Treaty. Moreover, in the case of an Indenture Default, the ability of the Loan Trustee to realize upon its security interest in an Aircraft could be adversely affected as a legal or practical matter if such Aircraft were registered or located outside the United States.

# Registration

United is required to keep each Aircraft duly registered under the Transportation Code with the FAA and to record the Indenture and certain other documents under the Transportation Code. In addition, United is required to register the "international interests" created pursuant to the Indenture under the Cape Town Treaty. (Indenture, Section 4.02(e)) Such recordation of the Indenture and certain other documents with respect to each Aircraft will give the Loan Trustee a first-priority, perfected security interest in such Aircraft under U.S. law. If such Aircraft is located outside the United States, under U.S. law the effect of such perfection and the priority of such security interest will

be governed by the law of the jurisdiction where such Aircraft is located. The Convention provides that such security interest will be recognized, with certain limited exceptions, in those jurisdictions that have ratified or adhere to the Convention. The Cape Town Treaty provides that a registered "international interest" has priority over a subsequently registered interest and over an unregistered interest for purposes of the law of those jurisdictions that have ratified the Cape Town Treaty. There are many jurisdictions in the world that have not ratified either the Convention or the Cape Town Treaty, and the Aircraft may be located in any such jurisdiction from time to time.

So long as no Indenture Default exists, United has the right to register any Aircraft in a country other than the United States at its own expense in connection with a permitted lease of the Aircraft to a permitted foreign air carrier, subject to certain conditions set forth in the Indenture. These conditions include a requirement that an opinion of counsel be provided that the lien of the Indenture will continue as a first priority security interest in the applicable Aircraft. (Indenture, Section 4.02(e))

#### Liens

United is required to maintain each Aircraft free of any liens, other than the rights of the Loan Trustee, the holder of the Equipment Note and United arising under the Indenture or the other operative documents related thereto, and other than certain limited liens permitted under such documents, including but not limited to (i) liens for taxes either not yet due or being contested in good faith by appropriate proceedings; (ii) materialmen's, mechanics' and other similar liens arising in the ordinary course of business and securing obligations that either are not yet delinquent for more than 60 days or are being contested in good faith by appropriate proceedings; (iii) judgment liens so long as such judgment is discharged or vacated within 60 days or the execution of such judgment is stayed pending appeal or discharged, vacated or reversed within 60 days after expiration of such stay; and (iv) any other lien as to which United has provided a bond or other security adequate in the reasonable opinion of the Loan Trustee; provided that in the case of each of the liens described in the foregoing clauses (i), (ii) and (iii), such liens and proceedings do not involve any material risk of the sale, forfeiture or loss of such Aircraft or the interest of the Loan Trustee therein or impair the lien of the Indenture. (Indenture, Section 4.01)

### Replacement of Parts; Alterations

United is obligated to replace all parts at its expense that may from time to time be incorporated or installed in or attached to any Aircraft and that may become lost, damaged beyond repair, worn out, stolen, seized, confiscated or rendered permanently unfit for use. Such replacement parts will become subject to the lien of the Indenture and such lien will terminate as to the replaced part. United or any permitted lessee has the right, at its own expense, to make such alterations, modifications and additions with respect to each Aircraft as it deems desirable in the proper conduct of its business and to remove parts which it deems to be obsolete or no longer suitable or appropriate for use, so long as such alteration, modification, addition or removal does not materially diminish the fair market value, utility or useful life of the related Aircraft or Engine or invalidate the Aircraft's airworthiness certificate. United or any permitted lessee may remove any part from an Aircraft without replacing it if such part is in addition to (and not in replacement of) any part originally incorporated in an Aircraft at the time of original delivery by the manufacturer, is not required to be incorporated in the Aircraft under applicable law, regulatory mandate or other obligation and may be removed without materially diminishing the fair market value, utility or useful life of such Aircraft (assuming such part had not been incorporated in such Aircraft). (Indenture, Section 4.04(d))

#### Insurance

United is required to maintain, at its expense (or at the expense of a permitted lessee), all-risk aircraft hull insurance covering each Aircraft, at all times in an amount not less than such Aircraft's

"Allocable Amount" (which means, in the case of any Collateral, such Collateral's pro rata share of the outstanding principal amount of the Equipment Note based on the Appraised Value of such Collateral compared to the Aggregate Appraised Value of all Collateral (the "Allocable Amount") plus 10% thereof. However, after giving effect to self-insurance permitted as described below, the amount payable under such insurance may be less than such amounts payable with respect to the Equipment Note. In the event of a loss involving insurance proceeds in excess of \$18,000,000 per occurrence in the case of a narrowbody aircraft and \$5,000,000 in the case of any regional jet aircraft, such proceeds up to 110% of the Allocable Amount of the relevant Aircraft will be payable to the Loan Trustee, for so long as the Indenture shall be in effect. In the event of a loss involving insurance proceeds of up to the amount per occurrence set forth in the preceding sentence with respect to the relevant model of Aircraft, such proceeds will be payable directly to United so long as no Indenture Default exists. So long as the loss does not constitute an Event of Loss, insurance proceeds will be applied to repair or replace the property. (Indenture, Section 4.06 and Annex B)

In addition, United is obligated to maintain commercial airline liability insurance at its expense (or at the expense of a permitted lessee), including, without limitation, aircraft third party, passenger liability, baggage liability, cargo and mail liability, hangarkeeper's liability and contractual liability insurance with respect to each Aircraft. Such liability insurance must be underwritten by insurers of nationally or internationally recognized responsibility. The amount of such liability insurance coverage per occurrence may not be less than the amount of commercial airline liability insurance from time to time applicable to aircraft owned or leased and operated by United (or a permitted lessee) of the same type and operating on similar routes as such Aircraft. (Indenture, Section 4.06 and Annex B)

United is also required to maintain war risk, hijacking and allied perils insurance if it (or any permitted lessee) operates any Aircraft, Airframe or Engine in any area of recognized hostilities or if United (or any permitted lessee) maintains such insurance with respect to other aircraft operated on the same international routes or areas on or in which the Aircraft is operated. (Indenture, Section 4.06 and Annex B)

United (or a permitted lessee) may self-insure under a program applicable to all aircraft in its fleet, but the amount of such self-insurance in the aggregate may not exceed 100% of the largest replacement value of any single aircraft in United's fleet or  $1^{1}/2\%$  of the average aggregate insurable value (during the preceding policy year) of all aircraft on which United carries insurance, whichever is less, unless an insurance broker of national standing shall certify that the standard among all other major U.S. airlines is a higher level of self-insurance, in which case United may self-insure the Aircraft to such higher level. In addition, United (or a permitted lessee) may self-insure to the extent of any applicable deductible per Aircraft that does not exceed industry standards for major U.S. airlines. (Indenture, Section 4.06 and Annex B)

In respect of each Aircraft, United is required to name as additional insured parties the Loan Trustee, the holder of the Equipment Note and the Liquidity Providers under all liability insurance policies required with respect to such Aircraft. In addition, the insurance policies will be required to provide that, in respect of the coverage of such additional insured persons, the insurance shall not be invalidated or impaired by any act or omission of United, any permitted lessee or any other person. (Indenture, Section 4.06 and Annex B)

### **Events of Loss**

If an Event of Loss occurs with respect to the Airframe or the Airframe and Engines of an Aircraft, United must elect within 45 days after such occurrence either to make payment with respect to such Event of Loss or to replace such Airframe and any such Engines. Not later than the first Business Day following the earlier of (i) the 120th day following the date of occurrence of such Event

of Loss, and (ii) the fourth Business Day following the receipt of the insurance proceeds in respect of such Event of Loss, United must either (i) pay to the Loan Trustee the Allocable Amount with respect to such Aircraft, together with certain additional amounts, but, in any case, without any Make-Whole Premium or (ii) substitute an airframe (or airframe and one or more engines, as the case may be) for the Airframe, or Airframe and Engine(s), that suffered such Event of Loss. (Indenture, Sections 2.10 and 4.05(a))

If United elects to replace an Airframe (or Airframe and one or more Engines, as the case may be) that suffered such Event of Loss, it shall subject an airframe (or airframe and one or more engines) to the lien of the Indenture. Such replacement airframe must be the same model as the Airframe to be replaced or a comparable or improved model manufactured by the same airframe manufacturer as with respect to such Airframe, each replacement engine must be the same model as the Engine to be replaced or a comparable or improved model, manufactured by the same engine manufacturer as with respect to such Engine or another manufacturer, and such replacement airframe and engines, if any, shall have a value and utility (without regard to hours or cycles) at least equal to the Airframe or Airframe and Engines to be replaced, assuming that such Airframe and such Engines had been maintained in accordance with the Indenture. United is also required to provide to the Loan Trustee reasonably acceptable opinions of counsel to the effect, among other things, that (i) certain specified documents have been duly filed under the Transportation Code and (ii) the Loan Trustee will be entitled to receive the benefits of Section 1110 of the U.S. Bankruptcy Code with respect to any such replacement airframe (unless, as a result of a change in law or court interpretation, such benefits are not then available). (Indenture, Sections 4.2(d) and 4.3(d) to Annex C)

If United elects not to replace such Airframe, or Airframe and Engine(s), then upon payment of the Allocable Amount with respect to such Airframe, or Airframe and Engine(s), together with accrued and unpaid interest thereon and all additional amounts then due and unpaid with respect to such Airframe, or Airframe and Engine(s), the lien of the Indenture shall terminate with respect to such Airframe, or Airframe and Engine(s), and the obligation of United thereafter to make interest and principal payments with respect to such amounts shall cease. (Indenture, Sections 2.10, 3.02, 4.05(a)(ii) and 4.05(b)(iii)

If an Event of Loss occurs with respect to an Engine alone, United must elect, within 45 days after such occurrence, to either (i) on or prior to the 91st day following the Event of Loss, pay to the Loan Trustee the Allocable Amount with respect to such Engine, together with certain additional amounts, but, in any case, without any Make-Whole Premium, or (ii) not later than the 90th day following the occurrence of such Event of Loss, substitute a replacement engine, free and clear of all liens (other than certain permitted liens). Such replacement engine shall be the same model as the Engine to be replaced, or a comparable or improved model manufactured by the same engine manufacturer as with respect to such Engine, or another manufacturer, suitable for installation and use on an Airframe, and having a value and utility (without regard to hours or cycles) at least equal to the Engine to be replaced, assuming that such Engine had been maintained in accordance with the Indenture. (Indenture, Section 4.05(b))

An "Event of Loss" with respect to an Aircraft, Airframe or any Engine means any of the following events with respect to such property:

- The destruction of such property, damage to such property beyond economic repair or rendition of such property permanently unfit for normal use.
- The actual or constructive total loss of such property or any damage to such property or requisition of title or use of such property which results in an insurance settlement with respect to such property on the basis of a total loss or a constructive or compromised total loss.

- Any theft, hijacking or disappearance of such property for a period of 180 consecutive days or more (or, if earlier, the date on which United has confirmed to the Loan Trustee in writing that United cannot recover such property).
- Any seizure, condemnation, confiscation, taking or requisition of title to such property by any governmental entity or purported governmental entity (other than a U.S. government entity) for a period exceeding 180 consecutive days.
- As a result of any law, rule, regulation, order or other action by the FAA or any governmental entity, the use of such property in the normal course of United's business of passenger air transportation is prohibited for 180 consecutive days, unless United, prior to the expiration of such 180-day period, shall have undertaken and shall be diligently carrying forward steps which are necessary or desirable to permit the normal use of such property by United, but in any event if such use shall have been prohibited for a period of two consecutive years, provided that no Event of Loss shall be deemed to have occurred if such prohibition has been applicable to United's entire U.S. fleet of such property and United, prior to the expiration of such two-year period, shall have conformed at least one unit of such property in its fleet to the requirements of any such law, rule, regulation, order or other action and commenced regular commercial use of the same and shall be diligently carrying forward, in a manner which does not discriminate against applicable property in so conforming such property, steps which are necessary or desirable to permit the normal use of such property by United, but in any event if such use shall have been prohibited for a period of three years.
- With respect to any Engine, any divestiture of title to such Engine in connection with pooling or certain other arrangements shall be treated as an Event of Loss. (Indenture, Annex A)
- Such Aircraft, Airframe or any Engine is subject to a Technical Impairment and United shall have given the Loan Trustee notice of United's election to treat it as having been subject to an Event of Loss.

# Substitution of Airframe or Engine

United may elect to release any airframe(s) or engine(s) (including any Spare Engine(s)) from the security interest of the Security Documents and substitute for it one or more airframes or engines, as applicable. However, no engine may be substituted with an airframe and no airframe may be substituted with one or more engines. Notwithstanding the foregoing, a widebody Aircraft may be released and substituted with any aircraft and narrowbody aircraft may be released and substituted with narrowbody aircraft or Eligible Regional Aircraft, but not widebody aircraft. In any case, no substitute airframe or engine may be a model that (i) has been fully retired or has been announced for such retirement by United or (ii) is not then type certificated by the FAA. Any such release and substitution shall be subject to the satisfaction of the following conditions:

- no Indenture Default has occurred and is continuing at the time of substitution;
- no failure to comply with a Composition Test shall have occurred and be continuing at the time of substitution (unless such substitution would improve compliance, or otherwise not worsen any noncompliance, with such Composition Test);
- in the case of a substitute airframe (or airframes), it has (or they have, on a weighted average basis) a date of manufacture no earlier than the date of manufacture of the airframe (or airframes on a weighted average basis) being released:
- in the case of a substitute aircraft or engine, it has a Maintenance Adjusted Base Value (or, in the case of multiple substitute aircraft or engines, the sum of their Maintenance Adjusted Base Values shall be) at least equal to 110% of that of the released airframe(s) or engine(s); and

• in the case of a replacement of an airframe with one or more airframes of a different model (other than a comparable or improved model) and/or manufacturer, United will be obligated to obtain written confirmation from each Rating Agency that substituting such substitute airframe (and if applicable, any other substitute airframes) for the replaced airframe will not result in a withdrawal, suspension or downgrading of the ratings of the Certificates if then rated by such Rating Agency.

If United elects to substitute an airframe or engine, United is required to provide to the Loan Trustee opinions of counsel (i) to the effect that the Loan Trustee will be entitled to the benefits of Section 1110 with respect to the substitute airframe (unless, as a result of a change in law or governmental or judicial interpretation, such benefits are not available with respect to the additional airframe or engine immediately prior to such substitution), and (ii) as to the due registration of the aircraft of which such substitute airframe is part, the due recordation by the FAA of a supplement to the Indenture relating to such substitute airframe or engine and the registration of the lien of the applicable Security Document on such substitute airframe or engine with the international registry under the Cape Town Treaty, if applicable. (Indenture, Section 4.2 to Annex C)

### POSSIBLE ISSUANCE OF ADDITIONAL JUNIOR CERTIFICATES AND REFINANCING OF CERTIFICATES

# **Issuance of Additional Junior Certificates**

United may elect to issue one or more additional series of equipment notes (each, a series of "Additional Equipment Notes") with respect to all (but not less than all) of the Collateral at any time on or after the Issuance Date, each of which will be funded from sources other than this offering (this "Offering") but will be issued under the same Indenture as the Equipment Note. Any Additional Equipment Note issued under the Indenture will be subordinated in right of payment to the Equipment Note issued under the Indenture and may also be subordinated in right of payment to other Additional Equipment Notes that rank senior in right of payment to such Additional Equipment Notes. United will fund the sale of any series of Additional Equipment Notes through the sale of related pass through certificates (the "Additional Junior Certificates" and, in the case of certificates generally subordinated to the Certificates, but no other Additional Junior Certificates, the "Class B Certificates, but no other Additional Junior Certificates, the "Class C Certificates") issued by a single related United Airlines pass through trust (each such trust, an "Additional Trust").

The trustee of, and the liquidity provider (if any) for, any Additional Trust (each, an "Additional Trustee") will become a party to the Intercreditor Agreement. Except in the case of Class B Certificates or Class C Certificates issued on the same date as the Class A Certificates (in which case the original Intercreditor Agreement will cover all classes of Certificates issued on the same date), the Intercreditor Agreement will be amended by written agreement of United and the Subordination Agent to provide for the subordination of the Additional Junior Certificates to the Administration Expenses, the Liquidity Obligations, the Certificates and, if applicable, any other Additional Junior Certificates that rank senior in right of payment to such Additional Equipment Notes. The priority of distributions under the Intercreditor Agreement may be revised, however, to provide for distribution of "Adjusted Interest" with respect to each issued class of Additional Junior Certificates (calculated in a manner substantially similar to the calculation of Adjusted Interest but with respect to the applicable class of Additional Junior Certificates) after accrued interest on the Certificates but before Expected Distributions on the Certificates.

The holders of Additional Junior Certificates will have the right to purchase all of the Certificates and, if applicable, a previously issued or concurrently issued Class of Additional Junior Certificates under certain circumstances after a bankruptcy of United. See "Description of the Certificates—Purchase Rights of Certificateholders". In addition, the applicable Additional Trustee may be the Controlling Party upon payment of Final Distributions to the holders of the Certificates, subject to the rights of the Liquidity Providers to be the Controlling Party under certain circumstances. See "Description of the Intercreditor Agreement—Intercreditor Rights".

Any such issuance of Additional Equipment Notes and Additional Junior Certificates after the Issuance Date, and any such amendment of the Intercreditor Agreement (and any amendment of the Indenture in connection with such issuance) are contingent upon receipt of written confirmation from each nationally recognized rating agency which shall have been requested to rate the Certificates and which shall then be rating the Certificates (the "Rating Agencies") that such actions will not result in a withdrawal, suspension or downgrading of the rating of the Certificates. The issuance of Additional Equipment Notes and Additional Junior Certificates in compliance with the foregoing conditions will not require the consent of the Trustee or any holders of any class of Certificates.

# **Refinancing of Certificates**

United may elect to repay (either pursuant to a redemption or at Final Maturity) and at such time or subsequently re-issue any series of Additional Equipment Notes if so provided under the terms

thereof (any such re-issued equipment notes, the "Refinancing Equipment Notes") in respect of all (but not less than all) of the Collateral secured by such refinanced notes at any time after the Issuance Date. Refinancing Equipment Notes may have the same series designation as, and the same or differing terms as, the corresponding repaid equipment notes. In such case, United will fund the sale of such Refinancing Equipment Notes through the sale of pass through certificates (any such certificates, the "Refinancing Certificates") issued by a United Airlines pass through trust (any such trust, the "Refinancing Trust").

The trustee of each Refinancing Trust will become a party to the Intercreditor Agreement and the Intercreditor Agreement will be amended by written agreement of United and the Subordination Agent to provide for the subordination of the Refinancing Certificates to the Administration Expenses, the Liquidity Obligations and the Certificates and each other class of certificates that ranks senior in right of payment to such Refinancing Certificates, in the same manner that the corresponding class of refinanced certificates were subordinated. Any such issuance of Refinancing Equipment Notes and Refinancing Certificates, and any such amendment of the Intercreditor Agreement (and any amendment of the Indenture in connection with such re-issuance), are contingent upon each Rating Agency providing written confirmation that such actions will not result in a withdrawal, suspension or downgrading of the rating of any class of certificates that remains outstanding. The issuance of Refinancing Certificates in compliance with the foregoing conditions will not require the consent of the Trustee or any holders of Certificates.

# **Additional Liquidity Facilities**

Class B Certificates and Refinancing Certificates in respect of refinanced Class B Certificates may have the benefit of credit support similar to the Liquidity Facilities or different therefrom and claims for fees, interest, expenses, reimbursement of advances and other obligations arising from such credit support may rank equally with similar claims in respect of the Liquidity Facilities, so long as the prior written consent of the Liquidity Providers shall have been obtained and each Rating Agency shall have provided written confirmation to the effect that such actions will not result in a withdrawal, suspension, or downgrading of the rating of the Certificates if then rated by such Rating Agency and that remains outstanding.

Class C Certificates and Refinancing Certificates in respect of refinanced Class C Certificates may have the benefit of credit support similar to the Liquidity Facilities or different therefrom and claims for fees, interest, expenses, reimbursement of advances and other obligations arising from such credit support may rank equally with similar claims in respect of the Liquidity Facilities, so long as the prior written consent of the Liquidity Providers shall have been obtained and each Rating Agency shall have provided written confirmation to the effect that such actions will not result in a withdrawal, suspension, or downgrading of the rating of the Certificates if then rated by such Rating Agency and that remains outstanding.

Additional Junior Certificates that are subordinate to the Class C Certificates and Refinancing Certificates in respect of such refinanced Additional Junior Certificates may have the benefit of credit support similar to the Liquidity Facilities or different therefrom (provided that claims for fees, interest, expenses, reimbursement of advances and other obligations arising from such credit support shall be subordinated to the Administration Expenses, the Liquidity Obligations, the Class A Certificates, the Class B Certificates, the Class C Certificates and any Additional Junior Certificates that rank senior in right of payment to the applicable Additional Junior Certificates or Refinancing Certificates), so long as each Rating Agency shall have provided written confirmation to the effect that such actions will not result in a withdrawal, suspension, or downgrading of the rating the Certificates if then rated by such Rating Agency and that remains outstanding.

### CERTAIN U.S. FEDERAL TAX CONSEQUENCES

#### General

The following summary describes all material generally applicable U.S. federal income tax consequences, as well as certain Medicare tax considerations, to Certificateholders of the purchase, ownership and disposition of the Certificates. Except as otherwise specified, the summary is addressed to beneficial owners of Certificates that are (i) citizens or residents of the United States, (ii) corporations created or organized in or under the laws of the United States or any state therein or the District of Columbia, (iii) estates the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) trusts that (1) meet the following two tests: (a) a U.S. court is able to exercise primary supervision over the administration of the trust and (b) one or more U.S. fiduciaries have the authority to control all substantial decisions of the trust or (2) were in existence on August 20, 1996 and treated as U.S. persons and have validly elected to continue to be so treated ("U.S. Persons") that will hold the Certificates as capital assets ("U.S. Certificateholders"). This summary does not address the tax treatment of U.S. Certificateholders that may be subject to special tax rules, such as banks, insurance companies, dealers in securities or commodities, partnerships, holders subject to the mark-to-market rules, tax-exempt entities, holders that will hold Certificates as part of a straddle or holders that have a "functional currency" other than the U.S. Dollar, nor, except as otherwise specified, does it address the tax treatment of U.S. Certificateholders that do not acquire Certificates at the public offering price as part of the initial offering. The summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase Certificates. This summary does not describe any tax consequences arising under the laws of any state, locality or taxing invisidiction other than the United States.

The summary is based upon the tax laws and practice of the United States as in effect on the date of this Prospectus Supplement, as well as judicial and administrative interpretations thereof (in final or proposed form) available on or before such date. All of the foregoing are subject to change, which change could apply retroactively. We have not sought any ruling from the U.S. Internal Revenue Service (the "IRS") with respect to the tax consequences described below, and we cannot assure you that the IRS will not take contrary positions. The Trust is not indemnified for any U.S. federal income taxes that may be imposed upon it, and the imposition of any such taxes on the Trust could result in a reduction in the amounts available for distribution to the Certificateholders of the Trust. Prospective investors should consult their own tax advisors with respect to the federal, state, local and foreign tax consequences to them of the purchase, ownership and disposition of the Certificates.

# Tax Status of the Trust

Although there is no authority addressing the characterization of entities that are similar to the Trust in all material respects, United believes that the Trust will be classified as a grantor trust for U.S. federal income tax purposes. If the Trust is not classified as a grantor trust, it will be classified as a partnership for U.S. federal income tax purposes and will not be classified as a publicly traded partnership taxable as a corporation provided that at least 90% of the Trust's gross income for each taxable year of its existence is "qualifying income" (which is defined to include, among other things, interest income, gain from the sale or disposition of capital assets held for the production of interest income, and income derived with respect to a business of investing in securities). Income derived by the Trust from the Equipment Note will constitute qualifying income and the Trust therefore will meet the 90% test described above, assuming that the Trust operates in accordance with the terms of the Pass Through Trust Agreement and other agreements to which it is a party. The remainder of this discussion assumes that the Trust will be treated as a grantor trust.

### **Taxation of Certificateholders Generally**

Assuming that the Trust is classified as a grantor trust, a U.S. Certificateholder will be treated as owning its pro rata undivided interest in the Equipment Note held by the Trust and any other property held by the Trust. Accordingly, each U.S. Certificateholder's share of interest paid on the Equipment Note will be taxable as ordinary income, as it is paid or accrued, in accordance with such U.S. Certificateholder's method of accounting for U.S. federal income tax purposes except as noted in the next paragraph, and a U.S. Certificateholder's share of premium, if any, paid on redemption of the Equipment Note will be treated as capital gain. Any amounts received by the Trust under the Liquidity Facilities in order to make interest payments will be treated for U.S. federal income tax purposes as having the same characteristics as the payments they replace. Under the Tax Cuts and Jobs Act (the "Tax Act"), U.S. Certificateholders that use an accrual method of accounting for U.S. federal income tax purposes generally will be required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. The application of this rule thus may require the accrual of income earlier than would be the case under the general tax rules applicable to accrual basis taxpayers, although the precise application of this rule is unclear at this time. U.S. Certificateholders that use an accrual method of accounting should consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

In the case of a subsequent purchaser of a Certificate, the purchase price for the Certificate should be allocated among the Equipment Note and any other assets held by the Trust in accordance with their relative fair market values at the time of purchase. A U.S. Certificateholder who is treated as purchasing an interest in the Equipment Note at a market discount (generally, at a cost less than its remaining principal amount) that exceeds a statutorily defined de minimis amount will be subject to the "market discount" rules of the Code. These rules provide, in part, that gain on the sale or other disposition of a debt instrument with a term of more than one year and partial principal payments (including partial redemptions) on such a debt instrument are treated as ordinary income to the extent of accrued but unrecognized market discount. The market discount rules also provide for deferral of interest deductions with respect to debt incurred or continued to purchase or carry a debt instrument that has market discount. A U.S. Certificateholder who is treated as purchasing an interest in the Equipment Note at a premium may elect to amortize the premium as an offset to interest income on the Equipment Note under rules prescribed by the Code and Treasury regulations promulgated under the Code.

Each U.S. Certificateholder that is a corporation (other than an S corporation) generally will be entitled to deduct, consistent with its method of accounting, its pro rata share of fees and expenses paid or incurred by the Trust. Certain fees and expenses, including fees paid to the Trustee and the Liquidity Providers, will be borne by parties other than the Certificateholders. It is possible that payments related to such fees and expenses will be treated as constructively received by the Trust, in which event a U.S. Certificateholder will be required to include in income and, in the case of a U.S. Certificateholder that is a corporation (other than an S corporation), generally will be entitled to deduct its pro rata share of such fees and expenses. If a U.S. Certificateholder is an individual, estate or trust, a deduction for such holder's share of such fees or expenses generally will not be allowed as a result of changes made by the Tax Act for tax years beginning prior to January 1, 2026.

### Sale or Other Disposition of the Certificates

Upon the sale, exchange or other disposition of a Certificate, a U.S. Certificateholder generally will recognize capital gain or loss (subject to the possible recognition of ordinary income under the market discount rules) equal to the difference between the amount realized on the disposition (other than any amount attributable to accrued interest which will be taxable as ordinary income) and the U.S. Certificateholder's adjusted tax basis in the Equipment Note and any other property held by the Trust. Any such gain or loss will be long-term capital gain or loss to the extent attributable to property held

by the Trust for more than one year. In the case of individuals, estates and trusts, the maximum rate of tax on net long-term capital gains generally is 20%.

### 3.8% Medicare Tax on "Net Investment Income"

U.S. Certificateholders that are individuals, estates, and certain trusts are subject to an additional 3.8% tax on all or a portion of their "net investment income," which may include the interest payments and any gain realized with respect to the Equipment Note, to the extent of their net investment income that, when added to their other modified adjusted gross income, exceeds \$200,000 for an unmarried individual, estate or trust, \$250,000 for a married taxpayer filing a joint return (or a surviving spouse), or \$125,000 for a married individual filing a separate return. U.S. Certificateholders should consult their advisors with respect to the 3.8% Medicare tax.

### Foreign Certificateholders

Subject to the discussion of FATCA and backup withholding below, payments of principal, interest and premium on the Equipment Note to, or on behalf of, any beneficial owner of a Certificate that is for U.S. federal income tax purposes a nonresident alien (other than certain former United States citizens or residents), foreign corporation, foreign trust, or foreign estate (a "non-U.S. Certificateholder") will not be subject to U.S. federal withholding tax provided that:

- the non-U.S. Certificateholder does not actually or constructively own 10% or more of the total combined voting power of all classes of stock of United;
- the non-U.S. Certificateholder is not a bank receiving interest pursuant to a loan agreement entered into in the ordinary course of its trade or business, or a controlled foreign corporation for U.S. tax purposes that is related to United; and
- · certain certification requirements (including identification of the beneficial owner of the Certificate) are complied with.

Subject to the discussion of FATCA and backup withholding below, any capital gain (not including any amount treated as interest) realized upon the sale, exchange, retirement or other disposition of a Certificate or upon receipt of premium paid on the Equipment Note by a non-U.S. Certificateholder will not be subject to U.S. federal income or withholding taxes if (i) such gain is not effectively connected with a U.S. trade or business of the holder and (ii) in the case of an individual, such holder is not present in the United States for 183 days or more in the taxable year of the sale, exchange, retirement or other disposition or receipt.

Sections 1471 through 1474 of the Code ("FATCA") generally impose a withholding tax of 30% on U.S. sourced interest paid on, and the gross proceeds of a disposition of, debt obligations paid to (i) a foreign financial institution, as defined for purposes of FATCA (whether as a beneficial owner or an intermediary), unless (a) such institution enters into an agreement with the United States government to collect and provide to the United States tax authorities substantial information regarding United States account holders of such institution, which would include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with United States owners), (b) such institution is resident in a country that has entered into an agreement with the United States regarding the exchange of certain information with respect to United States account holders and complies with local legislation enacted to give effect to such agreement, or (c) such institution otherwise establishes an exemption from FATCA withholding or (ii) a foreign entity that is not a financial institution, unless such entity provides the withholding agent with a certification identifying the substantial United States owners of the entity, which generally includes any U.S. Person who directly or indirectly owns more than 10% of the entity, or otherwise establishes an exemption from FATCA withholding. Under proposed regulations, upon which taxpayers are entitled to rely until further

guidance is provided, FATCA withholding tax will not apply to gross proceeds from the disposition of debt instruments. Investors are encouraged to consult with their own tax advisors regarding the implications of this legislation on their investment in the Certificates.

### **Backup Withholding**

Payments made on the Certificates and proceeds from the sale of Certificates will not be subject to backup withholding tax unless, in general, the Certificateholder fails to comply with certain reporting procedures or otherwise fails to establish an exemption from such tax under applicable provisions of the Code. Backup withholding is not an additional tax. A Certificateholder generally will be entitled to credit any amounts withheld under the backup withholding rules against its U.S. federal income tax liability or to obtain a refund of the amounts withheld, provided the required information is furnished to the IRS in a timely manner.

### CERTAIN DELAWARE TAXES

The Trustee is a national banking association with its corporate trust office in Delaware. In the opinion of Morris James LLP, Wilmington, Delaware, counsel to the Trustee, under currently applicable law, assuming that the Trust will not be taxable as corporations, but, rather, will be classified as grantor trusts under subpart E, Part I of Subchapter J of the Code or as partnerships under Subchapter K of the Code, (i) the Trust will not be subject to any tax (including, without limitation, net or gross income, tangible or intangible property, net worth, capital, franchise or doing business tax), fee or other governmental charge under the laws of the State of Delaware or any political subdivision thereof and (ii) Certificateholders that are not residents of or otherwise subject to tax in Delaware will not be subject to any tax (including, without limitation, net or gross income, tangible or intangible property, net worth, capital, franchise or doing business tax), fee or other governmental charge under the laws of the State of Delaware or any political subdivision thereof as a result of purchasing, holding (including receiving payments with respect to) or selling a Certificate.

Neither the Trust nor the Certificateholders will be indemnified for any state or local taxes imposed on them, and the imposition of any such taxes on the Trust could result in a reduction in the amounts available for distribution to the Certificateholders of such Trust. In general, should a Certificateholder or the Trust be subject to any state or local tax which would not be imposed if the Trustee were located in a different jurisdiction in the United States, the Trustee will resign and a new Trustee in such other jurisdiction will be appointed.

### CERTAIN ERISA CONSIDERATIONS

The Employee Retirement Income Security Act of 1974, as amended ("ERISA"), imposes certain requirements on employee benefit plans subject to Title I of ERISA ("ERISA Plans"), and on those persons who are fiduciaries with respect to ERISA Plans. Investments by ERISA Plans are subject to ERISA's general fiduciary requirements, including, but not limited to, the requirements of investment prudence and diversification and the requirement that an ERISA Plan's investments be made in accordance with the documents governing the Plan.

Section 406 of ERISA and Section 4975 of the Code prohibit certain transactions involving the assets of an ERISA Plan (as well as those plans that are not subject to ERISA but which are subject to Section 4975 of the Code, such as individual retirement accounts (together with ERISA Plans, "Plans")) and certain persons (referred to as "parties in interest" or "disqualified persons") having certain relationships to such Plans, unless a statutory or administrative exemption is applicable to the transaction. A party in interest or disqualified person who engages in a prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Code.

The Department of Labor has promulgated a regulation, 29 CFR Section 2510.3-101 (the "Plan Asset Regulation"), describing what constitutes the assets of a Plan with respect to the Plan's investment in an entity for purposes of ERISA and Section 4975 of the Code. Under the Plan Asset Regulation, as modified by Section 3(42) of ERISA, if a Plan invests (directly or indirectly) in a Certificate, the Plan's assets will include both the Certificate and an undivided interest in each of the underlying assets of the Trust, including the Equipment Note held by the Trust, unless it is established that equity participation in the Trust by Plans and entities whose underlying assets include Plan assets by reason of a Plan's investment in the entity is not "significant" within the meaning of the Plan Asset Regulation, as modified by Section 3(42) of ERISA. In this regard, the extent to which there is equity participation in the Trust by, or on behalf of, employee benefit plans will not be monitored. If the assets of the Trust are deemed to constitute the assets of a Plan, transactions involving the assets of the Trust could be subject to the prohibited transaction provisions of ERISA and Section 4975 of the Code unless a statutory or administrative exemption is applicable to the transaction.

The fiduciary of a Plan that proposes to purchase and hold any Certificates should consider, among other things, whether such purchase and holding may involve a direct or indirect (i) extension of credit to a party in interest or a disqualified person, (ii) sale or exchange of any property between a Plan and a party in interest or a disqualified person, or (iii) transfer to, or use by or for the benefit of, a party in interest or a disqualified person, of any Plan assets. Such parties in interest or disqualified persons could include, without limitation, United and its affiliates, the Underwriters, the Loan Trustee, the Trustee and the Liquidity Providers. In addition, in the event Additional Junior Certificates are issued, if Certificates are purchased by a Plan and a Class of Additional Junior Certificates is held by a party in interest or a disqualified person with respect to such Plan, the exercise by the holder of a Class of Additional Junior Certificates of its right to purchase the Certificates upon the occurrence and during the continuation of a Certificate Buyout Event could be considered to constitute a prohibited transaction unless a statutory or administrative exemption were applicable. Depending on the identity of the Plan fiduciary making the decision to acquire or hold Certificates on behalf of a Plan, Prohibited Transaction Class Exemption ("PTCE") 91-38 (relating to investments by a bank collective investment fund), PTCE 84-14 (relating to transactions effected by a "qualified professional asset manager"), PTCE 95-60 (relating to investments by an insurance company general account), PTCE 96-23 (relating to transactions directed by an in-house professional asset manager) or PTCE 90-1 (relating to investments by an insurance company general account) (collectively, the "Class Exemptions") could provide an exemption from the prohibited transaction provisions of ERISA and Section 4975 of the Code. However, there can be no assurance that any of these Class Exemptions or any other exemption will be av

Governmental plans, certain church plans, and foreign plans (collectively, "Similar Law Plans") while not subject to the fiduciary responsibility provisions of ERISA or the prohibited transaction provisions of ERISA and Section 4975 of the Code, may nevertheless be subject to other laws that are substantially similar to the foregoing provisions of ERISA and the Code. Fiduciaries of any such plans should consult with their counsel before purchasing any Certificates.

Any Plan fiduciary which proposes to cause a Plan to purchase any Certificates should consult with its counsel regarding the applicability of the fiduciary responsibility and prohibited transaction provisions of ERISA and Section 4975 of the Code to such an investment, and to confirm that such purchase and holding will not constitute or result in a non-exempt prohibited transaction or any other violation of an applicable requirement of ERISA.

Each person who acquires or accepts a Certificate or an interest therein, will be deemed by such acquisition or acceptance to have represented and warranted that either: (i) no assets of a Plan or any Similar Law Plan have been used to purchase or hold such Certificate or an interest therein or (ii) the purchase and holding of such Certificate or an interest therein either (a) in the case of Plan assets, are exempt from the prohibited transaction restrictions of ERISA and the Code pursuant to one or more prohibited transaction statutory or administrative exemptions or (b) in the case of Similar Law Plan assets, will not violate any similar state, local or foreign law.

If the purchaser or transferee of a Certificate or an interest therein is a Plan, it will be deemed to represent, warrant and agree that (i) none of UAL, United, or the Underwriters, nor any of their affiliates, has provided any investment recommendation or investment advice on which it, or any fiduciary or other person investing the assets of the Plan ("Plan Fiduciary"), has relied in connection with its decision to invest in Certificates, and they are not otherwise acting as a fiduciary, as defined in Section 3(21) of ERISA or Section 4975(e)(3) of the Code, to the Plan or the Plan Fiduciary in connection with the Plan's acquisition of Certificates; and (ii) the Plan Fiduciary is exercising its own independent judgment in evaluating the transaction.

### UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement (the "Underwriting Agreement") dated the date of this Prospectus Supplement among United and Goldman Sachs & Co. LLC, as representative of the several underwriters listed below (collectively, the "Underwriters"), United has agreed to cause the Trust to sell to the Underwriters, and each of the Underwriters has severally agreed to purchase, the following respective face amounts of the Certificates:

		Face
Underwriter	_	Amount of Certificates
Goldman Sachs & Co. LLC	\$	545,400,000
Citigroup Global Markets Inc.		545,400,000
Barclays Capital Inc.		545,400,000
J.P. Morgan Securities LLC		545,400,000
Morgan Stanley & Co. LLC		545,400,000
BofA Securities, Inc.		273,000,000
Total	\$	3,000,000,000

The Underwriting Agreement provides that the obligations of the Underwriters are subject to certain conditions precedent and that the Underwriters are obligated to purchase all of the Certificates if any are purchased. If an Underwriter defaults on its purchase commitment, the purchase commitments of the non-defaulting Underwriters may be increased or the offering of the Certificates may be terminated. The Certificates are offered subject to receipt and acceptance by the Underwriters and to certain other conditions, including the right to reject orders in whole or in part.

The aggregate proceeds from the sale of the Certificates will be \$3,000,000,000. United will pay the Underwriters a commission of \$30,000,000. United estimates that its expenses associated with the offer and sale of the Certificates will be approximately \$11,200,000.

The Underwriters propose to offer the Certificates to the public initially at the public offering prices on the cover page of this Prospectus Supplement and to selling group members at those prices less the concessions set forth below. The Underwriters and selling group members may allow a discount to other broker/dealers as set forth below. After the initial public offering, the public offering prices and concessions and discounts may be changed by the Underwriters.

D. CT. 10.10	Selling Group	Discount To
Pass Through Certificates	Members	Broker/Dealers
2020-1A	0.50%	0.25%

The Certificates are a new issue of securities with no established trading market. United does not intend to apply for the listing of the Certificates on a national securities exchange.

The Underwriters have advised United that one or more of the Underwriters currently intend to make a market in the Certificates, as permitted by applicable laws and regulations. The Underwriters are not obligated, however, to make a market in the Certificates and any such market making may be discontinued at any time at their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the Certificates.

United has agreed to indemnify the several Underwriters against certain liabilities including liabilities under the Securities Act of 1933, as amended, or contribute to payments which the Underwriters may be required to make in that respect.

From time to time, the several Underwriters or their affiliates have performed and are performing investment banking and advisory services for, and have provided and are providing general financing and banking services to, UAL and United and their affiliates. In particular, affiliates of each of Goldman Sachs & Co. LLC and potentially, one or more Underwriters will act as liquidity facility providers to United and may receive fees in connection with this offering. Goldman Sachs Bank USA intends to syndicate some or all of its exposure under its Liquidity Facility to other banks (which may include one or more Underwriters or their respective affiliates), which will satisfy the Liquidity Threshold Rating. Affiliates of each of the Underwriters are lenders to UAL and/or United. In addition, certain of the underwriters are lenders under the Bridge Facilities and, as a result, may receive a significant portion of the net proceeds from this offering upon repayment of the Bridge Facilities. An affiliate of J.P. Morgan Securities LLC is a merchant processing bank and a counterparty to certain agreements with UAL to process customer credit card transactions for the sale of air travel and other services. Under certain circumstances, such affiliate may have the right to require that UAL establish additional cash or other collateral reserves or additional withholding of payments related to receivables collected if UAL does not maintain certain minimum levels of unrestricted cash, cash equivalents and short-term investments.

The Underwriting Agreement provides that United will not, between the date of the Underwriting Agreement and the Issuance Date, without the consent of Goldman Sachs & Co. LLC, offer, sell or enter into any agreement to sell (as public debt securities registered under the Securities Act (other than the Class A Certificates or a class of pass through certificates junior to the Class A Certificates and related equipment notes) or as debt securities which may be resold in a transaction exempt from the registration requirements of the Securities Act in reliance on Rule 144A thereunder and which are marketed through the use of a disclosure document containing substantially the same information as a prospectus for similar debt securities registered under the Securities Act), any equipment notes, pass through certificates, equipment trust certificates or equipment purchase certificates secured by aircraft, spare engines or spare parts owned by the Company (or rights relating thereto).

In addition, in the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of United. The Underwriters and their respective affiliates that have a lending relationship with United may hedge their credit exposure to United. Such Underwriters and their affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in United's securities, including potentially the Certificates offered hereby. Any such short positions could adversely affect future trading prices of the Certificates offered hereby. The Underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

United expects that delivery of the Certificates will be made against payment therefor on or about the closing date specified on the cover page of this Prospectus Supplement, which will be the sixth business day following the date hereof (this settlement cycle being referred to as T+6). Under Rule 15c6-1 of the Commission under the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to the trade expressly agree otherwise. Accordingly, purchasers who wish to trade Certificates on a day prior to the second business day before the date of initial delivery of the Certificates will be required, by virtue of the fact that the Certificates initially will settle on a delayed basis, to specify an alternate settlement cycle at the time of any trade to prevent a failed settlement and should consult their own advisor.

To facilitate the offering of the Certificates, the Underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the Certificates. Specifically, the Underwriters may overallot in connection with this Offering, creating a short position in the Certificates for their own account. To cover overallotments or to stabilize the price of the Certificates, the Underwriters may bid for, and purchase, Certificates in the open market. Finally, the Underwriters may reclaim selling concessions allowed to an agent or a dealer for distributing Certificates in this Offering, if the Underwriters repurchase previously distributed Certificates in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the Certificates above independent market levels. The Underwriters are not required to engage in these activities, and may end any of these activities at any time.

### **Selling Restrictions**

This Prospectus Supplement and the accompanying Prospectus do not constitute an offer of, or a solicitation of an offer by or on behalf of us or the Underwriters to subscribe for or purchase, any of the Certificates in any jurisdiction to or from any person to whom or from whom it is unlawful to make such an offer or solicitation in that jurisdiction. This distribution of this Prospectus Supplement and the accompanying Prospectus and the offering of the Certificates in certain jurisdictions may be restricted by law. We and the Underwriters require persons into whose possession this Prospectus Supplement and the accompanying Prospectus come to observe the following restrictions.

### European Economic Area and United Kinadom

The Certificates are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA") or in the United Kingdom ("UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Certificates or otherwise making them available to retail investors in the EEA or in the UK has been prepared and therefore offering or selling the Certificates or otherwise making them available to any retail investor in the EEA or in the UK may be unlawful under the PRIIPS Regulation.

This Prospectus Supplement has been prepared on the basis that any offer of Certificates in any Member State of the EEA or in the UK will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of Certificates. The expression "Prospectus Regulation" means Regulation (EU) 2017/1129 (as amended).

References to Regulations or Directives include, in relation to the UK, those Regulations or Directives as they form part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 or have been implemented in UK domestic law, as appropriate.

### **United Kingdom**

In the United Kingdom, this Prospectus Supplement is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of

the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons. For the purposes of this paragraph, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in the United Kingdom.

#### Canada

The Certificates may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the Certificates must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Prospectus Supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the Underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this Offering.

### Hong Kong

The Certificates may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the Certificates may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to Certificates which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

### Singapore

This Prospectus Supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this Prospectus Supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Certificates may not be circulated or distributed, nor may the Certificates be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in

accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Certificates are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the Certificates under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

### Singapore Securities and Futures Act Product Classification

Solely for the purposes of our obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the SFA, we have determined, and hereby notify all relevant persons (as defined in Section 309A of the SFA), that the Certificates are "prescribed capital markets products" (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

### Japan

The Certificates have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each Underwriter has agreed that it will not offer or sell any Certificates, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

### Switzerland

The Certificates may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the "SIX") or on any other stock exchange or regulated trading facility in Switzerland. This Prospectus Supplement has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this Prospectus Supplement nor any other offering or marketing material relating to the Certificates or the Offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this Prospectus Supplement nor any other offering or marketing material relating to the Offering, the issuer, or the Certificates have been or will be filed with or approved by any Swiss regulatory authority. In particular, this Prospectus Supplement will not be filed with, and the offer of Certificates will not be supervised by, the Swiss Financial Market Supervisory Authority, and the offer of Certificates has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (the "CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of Certificates.

### LEGAL MATTERS

The validity of the Certificates is being passed upon for United by Hughes Hubbard & Reed LLP, New York, New York, and for the Underwriters by Milbank LLP, New York, New York, Morris James LLP, Wilmington, Delaware, counsel for Wilmington Trust, National Association, as Trustee, will pass upon certain matters of Delaware law relating to the Pass Through Trust Agreement, including that the Certificates are binding obligations of the Trustee, and Milbank LLP will rely on such opinion.

### **EXPERTS**

The consolidated financial statements of United appearing in our Annual Report on Form 10-K for the year ended December 31, 2019 (including the financial statement schedule appearing therein) have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The references to BK, ICF and mba, and to their appraisal reports, dated October 1, 2020, in the case of BK, October 7, 2020, in the case of ICF, October 13, 2020, in the case of mba's appraisal of the Spare Engines and Aircraft, and August 31, 2020, in the case of mba's appraisal of the Spare Parts, are included herein in reliance upon the authority of each such firm as an expert with respect to the matters contained in its report.

# INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

This Prospectus Supplement incorporates by reference the following documents previously filed by United with the Commission (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act) that are not delivered with this Prospectus Supplement:

Filing	Date Filed
Annual Report on Form 10-K for the year ended December 31, 2019	February 25, 2020
Quarterly Report on Form 10-Q for the quarter ended March 31, 2020	May 4, 2020
Quarterly Report on Form 10-Q for the quarter ended June 30, 2020	July 22, 2020
Quarterly Report on Form 10-Q for the quarter ended September 30, 2020	October 15, 2020
Current Report on Form 8-K	March 12, 2020
Current Report on Form 8-K	March 26, 2020
Current Report on Form 8-K	April 13, 2020
Current Report on Form 8-K	April 21, 2020
Current Report on Form 8-K	April 23, 2020
Current Report on Form 8-K	April 24, 2020
Current Report on Form 8-K	May 6, 2020
Current Report on Form 8-K/A	May 6, 2020
Current Report on Form 8-K	May 8, 2020
Current Report on Form 8-K	May 12, 2020
Current Report on Form 8-K/A	May 22, 2020
Current Report on Form 8-K	<u>June 2, 2020</u>
Current Report on Form 8-K	<u>June 15, 2020</u>
Current Report on Form 8-K	<u>June 15, 2020</u>
Current Report on Form 8-K/A	<u>June 15, 2020</u>
Current Report on Form 8-K	<u>June 23, 2020</u>
Current Report on Form 8-K	<u>June 26, 2020</u>
Current Report on Form 8-K	<u>July 2, 2020</u>
Current Report on Form 8-K	<u>July 8, 2020</u>
Current Report on Form 8-K	August 28, 2020
Current Report on Form 8-K/A	<u>September 2, 2020</u>
Current Report on Form 8-K/A	September 14, 2020
Current Report on Form 8-K	September 30, 2020
Current Report on Form 8-K/A	October 14, 2020

United's Commission file number is 1-10323.

Reference is made to the information under "Incorporation of Certain Documents by Reference" in the accompanying Prospectus. All documents filed under the Exchange Act with the Commission prior to January 1, 2019, and incorporated by reference in the Prospectus have been superseded by the above-listed documents and shall not be deemed to constitute a part of the Prospectus or this Prospectus Supplement. In addition, for the avoidance of doubt, the Annual Report on Form 10-K for the year ended December 31, 2019, the Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, the Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 and the Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, of UAL are not incorporated by reference in this Prospectus Supplement.

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Full Appraisal of: Component Inventory, Consisting of 154,111 Unique Spare Part Line Items

> Engaging Client: United Airlines, Inc.

> > Date: August 31, 2020

Delivered to: United Airlines and Goldman Sachs as Admin Agent

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# I. Introduction and Executive Summary

mba Aviation ("mba") has been retained by United Airlines, Inc. (the "Client") to provide a Full Appraisal stating the Current Market Value of a Component Inventory consisting of 154,111 unique spare part line items at multiple stations provided by the Client as of July 2020. The accuracy of the data was verified by a virtual inspection utilizing Microsoft Teams software of the Component Inventory held at two United Airlines locations that was conducted by mba over the week of April 6, 2020. The Component Inventory is further identified in Section VI of this Report.

In performing this Appraisal, mba relied on industry knowledge and intelligence, confidentially obtained data points, its market expertise and current analysis of market trends and conditions.

Based on the information set forth in this Report, it is mba's opinion that the total Current Market Value of the Component Inventory portfolio is as follows and as set forth in Section VI.

		Pre-Audit	Adjusted per Results of On-Site Inspection
Component Category	Line Items	Current Market Value (US\$)	Current Market Value (US\$)
Total Rotable	74,998	\$736,167,711	\$678,378,546
Total Repairable	56,861	\$326,758,658	\$326,758,658
Total Expendable	472,238	\$272,356,321	\$272,356,321
Total Inventory	604,097	\$1,335,282,690	\$1,277,493,525

Component Location by Country	Line Items	Current Market Value (US\$)
United States, US Virgin Islands, Guam and Puerto Rico	573,295	\$1,259,452,099
All Other Locations	<u>30,802</u>	<u>\$75,830,591</u>
Total Inventory	604,097	\$1,335,282,690

Component Category	Line Items	Liquidation Value Range (US\$)
Total Inventory	604.097	\$801.170.000 - \$1.068.226.000

Section II of this report presents definitions of various terms, such as Current Base Value and Current Market Value as promulgated by the Appraisal Program of the International Society of Transport Aircraft Trading (ISTAT). ISTAT is a non-profit association of management personnel from banks, leasing companies, airlines, manufacturers, brokers, and others who have a vested interest in the commercial aviation industry and who have established a technical and ethical certification program for expert appraisers.



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### II. Definitions

### Full Appraisal

A full appraisal is one that includes an inspection of the assets and its maintenance records. This inspection is aimed solely at determining the overall condition of the assets and records to support the value opinions of the appraiser. A full appraisal would normally provide a value that includes adjustments for the asset's condition to account for the actual condition of the asset, and possibly other adjustments to reflect the findings of the inspection of the asset and its records. (ISTAT Handbook).

# Market Value

ISTAT defines Market Value (or Current Market Value) as the appraiser's opinion of the most likely trading price that may be generated for an asset under market circumstances that are perceived to exist at the time in question. Current Market Value assumes that the asset is valued for its highest, best use, and the parties to the hypothetical sale transaction are willing, able, prudent and knowledgeable and under no unusual pressure for a prompt transaction. It also assumes that the transaction would be negotiated in an open and unrestricted market on an arm's-length basis, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers.

Market Value of a specific asset will tend to be consistent with its Base Value in a stable market environment. In situations where a reasonable equilibrium between supply and demand does not exist, trading prices, and therefore Market Values, are likely to be at variance with the Base Value of the asset. Market Value may be based upon either the actual (or specified) physical condition or maintenance time or condition status of the asset, or alternatively upon an assumed average physical condition and mid-life, mid-time maintenance status.

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### Liquidation Value

ISTAT defines Liquidation Value as the Appraiser's opinion of the price at which an aircraft (or other assets such as an engine or spare parts) could be sold in a cash transaction under abnormal conditions – typically an artificially limited marketing time period, the perception of the seller being under duress to sell, an auction, a liquidation, commercial restrictions, legal complications, or other such factors that materially reduce the bargaining leverage of the seller and give prospective buyers a significant advantage that can translate into heavily discounted actual trading prices.

# Qualifications

mba is a recognized provider of aircraft and aviation-related asset appraisals and inspections. mba and its principals have been providing appraisal services to the aviation industry for over 20 years; and its employees adhere to the rules and ethics set forth by the International Society of Transport Aircraft Trading (ISTAT). mba employs seven ISTAT Certified Appraisers and Appraiser Candidates, one of the largest appraisal staff in the industry. mba's clients include most of the world's major airlines, lessors, financial institutions, and manufacturers and suppliers. mba maintains offices in North America, Europe, and Asia.

mba publishes the semiannual REDBOOK, a compendium of current and projected aircraft values for the next 20 years for over 150 types of jet, turboprop, and cargo aircraft.

mba also provides consulting services to the industry relating to operations, marketing, and management with an emphasis on financial/operational analysis, airline safety audits and certification, utilizing hands-on solutions to current situations. mba also provides expert testimony and witness support on cases involving collateral/asset disputes, bankruptcies, financial operations, safety, regulatory and maintenance concerns.

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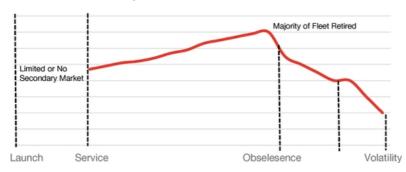
### **III. Current Market Conditions**

An essential consideration in any appraisal is the condition of the market at the time the valuation is rendered. This section explores major factors currently influencing spare part and engine values, including spare part value retention, market trends and financial performance of Maintenance, Repair, Overhauls (MROs) and spare parts providers.

### **SPARE PART RESIDUAL VALUES**

An aircraft or engine that is in high demand will naturally have spare parts that are in high demand and will be priced accordingly. However, unlike aircraft, spare parts do not necessarily continually depreciate. Spare parts that service a particular aircraft will depreciate at first as the aircraft platform enters service and supply of parts is predominantly provided by the manufacturer of the components at what many would consider "list prices." Then, as the secondary parts market becomes more active, the market value of components will appreciate modestly for what is usually the remainder of the platform's production life. Once production of a particular aircraft is ceased and a considerable number of aircraft remain in service, the market value may begin to appreciate at a greater rate as part scarcity starts to increase while demand remains constant. This typically drives the entrance of part-out companies that acquire and dissemble aircraft to service this market in greater numbers. This leads to a period of stability in value before entering a period of volatility in which values are directly correlated to the supply and demand ratio for the specific component. The following graph illustrates the life-cycle of spare parts value.

# **Spare Parts Value Over Time**



Spare parts are readily traded on the secondary market with several platforms on which sellers can market their parts. Online services such as ILS and Parts Base allow sellers to post the parts they are looking to liquidate. When monetizing inventories, sellers looking to maximize yield typically list their spare parts on the market individually, yielding the highest value over a long period. Those who own larger inventories that require monetization in shorter periods of time may require a lot sale.

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Lot sales have lower yields than selling each part individually, but they allow for the sale of parts in greater numbers and more rapidly. Another option for part sales are auctions, during which the seller packages entire spare part inventories for liquidation in short periods of time with the lowest yield.

### SPARE PART TRADING OPTIONS

	Yield	Marketing Time
INDIVIDUAL SALE	High	Long
LOT SALE	Low	Short
AUCTION	Lowest	Immediate

# **MAJOR PLAYERS**

Aviation spare parts suppliers are represented by the Aviation Suppliers Association (ASA). The ASA is a not-for-profit organization based in Washington D.C., which currently has 679 members worldwide. Another program known as the International Airlines Technical Pool (IATP) allows airlines to pool their parts in order to increase spares availability. Members of IATP do not have to operate a storeroom at every destination they fly to, and instead, can purchase other member's spares in case of an aircraft on ground (AOG) scenario. IATP currently has 118 participants with parts at over 900 airports. The newest members of the organization are GOL Linhas Aereas and Starlux Airlines which joined in March 2020.

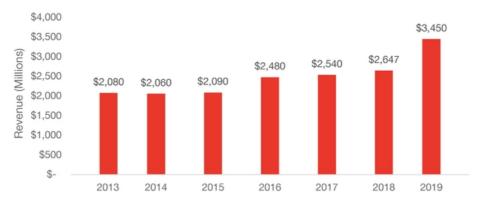
Some of the largest providers of spare parts are AAR, AJ Walter, and GA Telesis. These companies purchase airframes and engines for part out, overhaul the spares, and then sell these parts to operators around the world. All three companies also have a MRO component to their business. Of these companies, only AAR is publically listed. AAR continued its upward revenue growth in 2019 netting US\$2,052 million in sales, representing a 17.4% increase compared to 2018.

The largest MRO in Asia is Singapore-based ST Aerospace. ST Aerospace offers MRO services for airframes, engines, and spare components. ST Aerospace also offers spare parts leasing services, with a "Maintenance-by-the-Hour" program for spare components, which currently supports more than 600 aircraft. ST Aerospace's revenue has grown at a steady pace, reaching US\$3.45 billion in 2019, up 30.34% since 2018. ST Aerospace posted a net profit of US\$268.9 million in 2019, up 9.9% from 2018.

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# ST Aerospace Revenue



Source: ST Engineering Annual Reports 2013 - 2019

Several airlines also operate parts-trading business lines, with the largest being Air France–KLM and Lufthansa Technik. These airlines focus more on leasing spares to smaller airlines as part of a parts pool instead of selling parts outright. Profitability of these companies has increased over the past several years, with more aircraft being delivered and more startup airlines demanding spares and maintenance. In 2019, the revenue of Lufthansa Technik's commercial maintenance business was US\$8.16 billion, up 13.4% from 2018

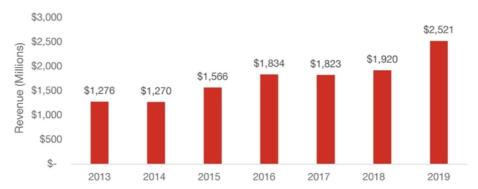


Source: Lufthansa Technik Annual Reports 2013 - 2019

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# Air France-KLM Revenue



Source: Air France-KLM Annual Reports 2013 - 2019

While demand for MRO services and spare parts had been trending upwards before the start of the COVID-19 pandemic, the spare parts market will likely take a considerable hit due to the ongoing crisis. MRO revenues are likely to shrink in 2020 as airlines are flying a fraction of their pre-COVID schedules. Airlines have started to retire a number of aircraft sooner than intended, with many of these destined for the part-out market. Demand for spare parts is also likely to fall as airlines have stored large portions of their fleets in order to account for the steep drop in demand for air travel due to the ongoing spread of the COVID-19 virus. As a result of these supply and demand shocks, mba has observed Market Values for airframes dropping considerably since the pandemic began, typically between 30% - 40%. Significant negative value impacts have not yet been seen on the Market Values of spare parts themselves, although these impacts are likely to occur in the coming months. The Market Values of spare parts servicing newer aircraft types such as the Boeing 787, Boeing 737NG, and Airbus A320 family are likely to recover once these aircraft are reintroduced into service. However, Market Values of parts for older aircraft such as the Boeing 757 and Boeing 767 are unlikely to return to their pre-COVID levels due to the large influx of retired aircraft.

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# IV. Appraisal Methodology

### **Spare Parts Valuation Methodology**

In its Valuation Model, mba obtained third-party market data on the Component Inventory, including recent quote, number of vendors, number of components, avref price, etc. These Values are adjusted based on the market availability and component condition to reach a Current Market Value for each line item in the stated condition. Depending on the results of the statistical sampling, a verification ratio is applied to the Inventory, after which mba identifies a total Current Market Value of the Component Inventory. In addition to its basic valuation methodology, mba:

- i. Reviewed the parts inventory report supplied for the Client;
- ii. Reviewed mba's internal database for relevant information with regards to the inventory to be valued;
- iii. Developed a representative sampling of a reasonable number of the different Qualified Spare Parts included in the Collateral;
- iv. Checked other sources, such as manufacturers and aviation listing services, for current market transactions;
- v. Conducted a limited review of the inventory reporting system applicable to the Pledged Spare Parts, including checking information reported in such system against information determined through virtual inspection; and
- vi. Reviewed a sampling of the Spare parts records, logs, manuals, and other documents as applicable.

The Appraisal consisted of 154,111 Unique Spare Part Line Items, totaling 27,573,234 rotable, repairable, and expendable parts in varied condition. The definition detailing the category of each part was provided by the Client; therefore, the market definition for each P/N was used in determining the category of each Line Item. Several line items included in the expendable inventory list provided by the Client had previously been identified as repairable items by mba. These items were included in the repairable portion of the Subject Inventory.

All information was provided by the Client from their inventory control system in MSExcel format. mba has extensively analyzed this data and relied upon the Client, in part, to derive the appraised values herein.

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The spare parts included in the Collateral fall into three categories, "Rotables," "Repairables," and "Expendables." These are defined below:

Rotable Items<sup>1</sup>: A rotable item is defined as an item that can be economically restored to a serviceable condition and, in the normal course of operations, can be repeatedly rehabilitated to a fully serviceable condition over a <u>period of time approximating the life of the flight equipment to which it is related</u>. Examples include avionics units, landing gears, auxiliary power units, major engine accessories, etc.

Repairable Items<sup>1</sup>: A replaceable part or component, commonly economical to repair, and subject to being rehabilitated to a fully serviceable condition over a <u>period of time</u> less than the life of the flight equipment to which it is related. Examples include many engine blades and vanes, some tires, seats, and galleys.

Expendable Items<sup>1</sup>: Items for which no authorized repair procedure exists, and for which cost of repair would normally exceed that of replacement. Expendable items include nuts, bolts, rivets, sheet metal, wire, light bulbs, cable, and hoses.

mba was furnished with: Part Number, Part Description, Condition, Quantity, and Station Location. mba conducted a sampling of parts in order to verify the conditions provided by the Client and ensure each component is certified by either a FAA 8130-3 or EASA Form One, with a bench check as a minimum.

<sup>1</sup> ISTAT definition.

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### Inventory Data

The Component Inventory data was sent to third-party vendors to identify parts available in the secondary market. This process is performed for all spare parts. The scan for 154,111 unique part numbers returned over 450,000 data points for the Subject Inventory.

mba applied percentage discounts to List Price (OEM catalogue price) that represents its opinion of value and liquidity – Value-in-Use, and compared them to current market pricing by adjusting the components to a baseline value, and further discounted for the condition of parts based on market depreciation and demand. The resulting values represent the mba appraised value.

### **Component Condition**

Components removed from an aircraft at part out are generally considered to be in an "as removed" condition with no repair station certifying documents other than the removal tag attached at removal. In the market, these components are considered to be less valuable as many operators require a certifying document such as an FAA 8130-3 or EASA Form One prior to installation validating, at a minimum, the serviceability of the unit. The most cost effective method by which a certification can be obtained is an appropriately authorized repair station performing a "bench check" or operational test of the component and completing a thorough inspection. The level of complexity for the "bench check" varies by component type as the requirements for the test to assure serviceability will vary. Components that are un-serviceable may then be repaired or overhauled to return them to service. Overhauled components are disassembled and returned as close as possible to new specifications while repaired components are returned to service.

The condition codes below were used in this Appraisal:1

NE – New OH – Overhauled USV – Unserviceable SV – Serviceable

<sup>1</sup> If no condition code was provided, the appraiser assumed part to be in serviceable condition.

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### V. Audit

In order to verify the currency of the data provided for the Valuation, mba performed a virtual on-site inspection utilizing Microsoft Teams software of the Component Inventory at United's facilities at Chicago O'Hare International Airport (ORD) and Houston George Bush Intercontinental Airport (IAH) the week of April 6, 2020. At each inspection location, mba performed a statistical sampling of the Component Inventory for the purpose of determining the following:

- Presence of the Component;
- → Correct Quantity of the Component;
- → Correct Condition Specified;
- Correct and Accurate Documentation accompanying each Component (i.e. FAA 8130-3 and/or EASA Form One, Certificate of Conformance, etc.);
- An acceptable tracking mechanism for issuance and control of Components which are not present as reported during the inspection.

The result of the statistical sampling is a stratification inspection proportionate to value in order to appropriately asses the rotable serviceable, rotable unserviceable and repairable of the inventory to a confidence level of 95.0%.

As a result of the stratified sampling process a total of 403 line items were selected to sample using a random number generator, 143 line items of inventory at ORD, and 260 IAH, which were divided among rotable and repairable components according to proportion of value of the overall inventory. The sample list also included the top 20 spare part line items by value located at ORD and IAH. mba has not yet conducted an in-person inspection of the Client's expendable inventory.

The inspection yielded 11 line items at ORD and 12 at IAH which were unable to be located, have been scrapped, or for repairable items, the stocked quantity differed significantly from the inventory list provided by the Client. All 11 items that were unable to be located at ORD and all 12 items that were unable to be located at IAH were categorized as rotable. All repairable items were present as described at both ORD and IAH. The results of the inventory sampling inspection suggest that the Client is unable to produce 7.85% of its rotable inventory. mba reduced the market value of rotable parts by 7.85% as a result. This reduction in value is as a result of the inspection conducted the week of April 6, 2020. This reduction will continue to be applied until mba conducts a further inspection of the Component Inventory.

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# VI. Valuation and Inventory Information

In developing the Values of the Component Inventory, mba performed a virtual inspection sampling of the Component Inventory and its documentation at two United Airlines locations, and relied on information supplied by the Client. The following information was independently verified by mba through the sampling inspection process for select components.

- 1. The components are in good overall condition;
- 2. The components in the Component Inventory are present as described by the Client;
- 3. All components are presently in the condition specified by the Client;
- 4. The component classifications in this report are provided by the Client and not independently verified for each line item by mba; and
- 5. Each component identified as serviceable has a Certificate of Conformance, Federal Aviation Administration (FAA) 8130-3, and/or European Aviation Safety Agency (EASA) Form One certifying document.

mba used certain assumptions that are generally accepted industry practice to calculate the value of the Component Inventory when more detailed information is not available.

- 1. All engine Blades in the inventory were assumed to be in a "New" Condition;
- 2. All components identified as having been Overhauled within the preceding three calendar years were assumed to be in an "Overhauled" condition;
- 3. All expendable components were assumed to be in a "New" Condition;
- 4. There is no history of accident/incident or damage as not all records were verified during the sampling inspection;
- 5. In the case of Market Value, no accounting is made for lease revenues, obligations, or terms of ownership unless otherwise specified; and
- 6. All station locations are assumed to be as reported by the operator unless otherwise noted.

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Inventory Valuation (US\$)					
	Line Items	Component Quantity	Current Market Value in Serviceable Condition	Discounted Current Market Value as a result of Sampling Inspection	
New Rotable	1,155	1,155	\$44,850,795	\$41,330,008	
Overhauled Rotable	4,273	4,273	\$65,065,354	\$59,957,724	
Serviceable Rotable	51,190	51,190	\$576,834,051	\$531,552,578	
Unserviceable Rotable	18,380	18,380	\$49,417,511	\$45,538,236	
New Repairable	32	3,000	\$11,325,894	\$11,325,894	
Serviceable Repairable	56,829	1,540,787	\$315,432,764	\$315,432,764	
Expendable	472,238	25,954,449	\$272, <u>356,321</u>	\$272, <u>356,321</u>	
Total Spare Parts Inventory					

Inventory Valuation by Country				
	Line Items	Pre-Audit Value (US\$)		
USA	560,830	\$1,238,990,478		
Hong Kong	6,233	\$24,226,759		
Guam	12,453	\$20,323,743		
Vendor <sup>2</sup>	537	\$15,246,437		
United Kingdom	6,592	\$11,749,541		
Japan	3,366	\$5,847,513		
China	1,096	\$4,702,985		
Brazil	4,052	\$3,490,109		
Mexico	3,252	\$3,105,563		
Germany	80	\$1,167,096		
Australia	1,034	\$972,627		

<sup>&</sup>lt;sup>2</sup> Items currently away from a United Airlines facility.

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Inventory Valuation by (	Country	
Description	Line Items	Pre-Audit Value (US\$)
Taiwan	2,424	\$768,991
Argentina	1,755	\$616,814
Canada	14	\$419,013
New Zealand	13	\$269,576
Singapore	18	\$256,956
Colombia	33	\$243,366
Peru	8	\$243,330
Ireland	11	\$207,405
France	16	\$205,047
Portugal	10	\$165,935
Netherlands	15	\$142,404
Korea South	12	\$141,724
Chile	14	\$128,688
Dominican Republic	8	\$118,351
Spain	18	\$115,457
India	11	\$113,515
Switzerland	15	\$112,508
Costa Rica	30	\$105,828
Israel	9	\$102,212
Belgium	10	\$93,148
Turks and Caicos	4	\$77,491
Puerto Rico	9	\$76,987
Italy	16	\$75,208
French Polynesia (Tahiti)	4	\$70,498
Virgin Islands (U.S.)	3	\$60,891
El Salvador	4	\$46,409

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Inventory Valuation by Country				
Description	Line Items	Pre-Audit Value (US\$)		
Iceland	2	\$46,190		
Sweden	1	\$44,878		
Aruba	3	\$43,770		
Panama	4	\$42,392		
The Bahamas	2	\$42,392		
Netherlands Antilles	2	\$38,328		
South Africa	1	\$37,025		
Bermuda	3	\$35,304		
Cayman Islands	2	\$24,140		
Nicaragua	2	\$24,140		
Ecuador	3	\$21,455		
Trinidad and Tobago	2	\$16,847		
Guatemala	5	\$14,740		
Antigua and Barbuda	1	\$12,070		
Cuba	1	\$12,070		
Jamaica	1	\$12,070		
Honduras	1	\$8,006		
Philippines	1	\$3,458		
Greece	2	\$1,499		
Czech Republic	<u>3</u>	<u>\$1,313</u>		
Total	604,097	\$1,335,282,690		

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### VII. Covenants

This Report has been prepared for the exclusive use of United Airlines, Inc. and shall not be provided to other parties by mba without the express consent of United Airlines, Inc. mba certifies that this Report has been independently prepared and that it fully and accurately reflects mba's opinion as to the values as requested. mba further certifies that it does not have and does not expect to have any financial or other interest in the Subject Inventory.

This report represents the opinion of mba as to the values of the Subject Inventory as requested and is intended to be advisory only. Therefore, mba assumes no responsibility or legal liability for any actions taken or not taken by United Airlines, Inc. or any other party with regard to the Subject Inventory. By accepting this Report, all parties agree that mba shall bear no such responsibility or legal liability.

PREPARED BY:

Alex Cosaro

Manager – Asset Valuations mba Aviation

ISTAT Certified Appraiser

August 31, 2020

REVIEWED BY:

David Tokoph President & CEO mba Aviation

ISTAT Certified Senior Appraiser

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# **VALUATION OF A 99 ENGINE**

# **PORTFOLIO**

As of September 1, 2020 Client: United Airlines, Inc.

Report Date: October 1, 2020

7315 Wisconsin Ave, Ste 800W Bethesda, MD 20814

II-19

# **Table of Contents** VALUATION SUMMARY 2 **DEFINITIONS** 3 **ASSUMPTIONS** 4 5 MARKET OUTLOOK 7 AIRCRAFT MARKET ANALYTICS COVID-19 IMPACT 10 VALUATION METHODOLOGY 12 DISCLAIMER 14 APPENDIX: FIGURE 1 15

APPENDIX: FIGURE 2

1

17

II-20

#### I. VALUATION SUMMARY

BK Associates, Inc. ("BK") has been engaged by United Airlines, Inc. ("Client") to provide a desktop valuation, setting forth BK's opinions of current half-life Base Values (BV) and Market Values (CMV) and future base values (FBV) through 2028 of 99 engines, as of September 1, 2020.

#### **ENGINE DESCRIPTION**

The Portfolio of engines are identified by engine model/variant, serial number, year of manufacture, and Quick Engine Change (QEC) hardware in Figures 1 and 2. Figure 1 reflects the current half-life BVs and CMVs in millions of USD, as of September 1, 2020. Figure 2 reflects the future base values in millions of USD through 2028, assuming 2% inflation.

#### **PURPOSE OF THE VALUATION ENGAGEMENT**

It is understood by BK that the Conclusion of Value will be used by Client to present to investors. This report was prepared solely for the purposes described herein and, accordingly, should not be used for any other purpose. In addition, this report should not be distributed to any party other than Client, without the express knowledge and written consent of Client or BK.

#### RELEVANT DATES

BK was engaged to value the subject engines as of the Valuation Date, September 1, 2020. In this valuation, BK considered only circumstances that existed as of and events that occurred up to the Valuation Date.

#### PREMISE OF VALUE

The valuation premise may be either in-use (i.e., going concern) or liquidation. The determining factor being the highest and best use as considered from a market participant's perspective. The values issued in this report are based on an in-use valuation premise, which assumes that the engines will continue to operate.

#### **CONCLUSIONS**

Based upon our knowledge of these various engine types, our knowledge of the capabilities and uses to which they have been put in various parts of the world, our knowledge of the marketing of used engines, and our knowledge of engines in general, it is our opinion that the values in 2020 U.S. dollars as found in the attached Figures 1 and 2. These values reflect the impact of COVID-19, which will be discussed in more detail later.

#### II. DEFINITIONS

According to the International Society of Transport Aircraft Trading's (ISTAT) definition of current market value (CMV), to which BK subscribes, the quoted current market value is the Appraiser's opinion of the most likely trading price that may be generated for an engine under the market circumstances that are perceived to exist at the time in question. The current market value assumes that the engine is valued for its highest and best use, that the parties to the hypothetical sale transaction are willing, able, prudent and knowledgeable, and under no unusual pressure for a prompt sale, and that the transaction would be negotiated in an open and unrestricted market on an arm's length basis, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers, which BK considers to be 12 to 18 months.

Since market conditions cannot be predicted far into the future, forecast values are usually presented as base values.

According to the International Society of Transport Aircraft Trading's (ISTAT) definition of Base Value, to which BK subscribes, the base value is the Appraiser's opinion of the underlying economic value of an engine in an open, unrestricted, stable market environment with a reasonable balance of supply and demand, and assumes full consideration of its "highest and best use". An engine's base value is founded in the historical trend of values and in the projection of future value trends and presumes an arm's length, cash transaction between willing, able and knowledgeable parties, acting prudently, with an absence of duress and with a reasonable period of time available for marketing. The base value normally refers to a transaction involving a single engine. When multiple engines are acquired in the same transaction, the trading price of each unit may be discounted.

Our stated values include assumed half-life values. Half-life or half-time is a typical appraisal assumption frequently employed by appraisers. Half-time pertains to all significant scheduled maintenance events with half-time implying that each event status is mid-way through scheduled intervals resulting in a perceived dollar value equivalent to half the total cost of each maintenance event considered in the value of the equipment.

#### III. ASSUMPTIONS

We have made the following assumptions with respect to these engines in preparing this valuation:

- The engines are in good physical condition.
- The historical maintenance documentation has been maintained to acceptable international standards. The specifications of the engines are those most common for engines of the same type and vintage. 2.
- 3.
- 4. The engines are operated on aircraft in standard passenger configuration.
- The engines are current as to all Airworthiness Directives and Service Bulletins. 5.
- The engines' modification status is comparable to engines of the same type and vintage. The engines are operated under an appropriate civil airworthiness authority. The engines' utilization is comparable to industry averages.
- 7. 8.
- There is no history of accident or incident damage we are aware of.

#### IV. MARKET OUTLOOK

The performance and current value of an aircraft or engine is affected to varying degrees by conditions in the global economy. Some of the key influences include Gross Domestic Product, Fuel Price, and the Lending environment. This section of the report will analyze what the current outlook is for each.

#### **GROSS DOMESTIC PRODUCT (GDP)**



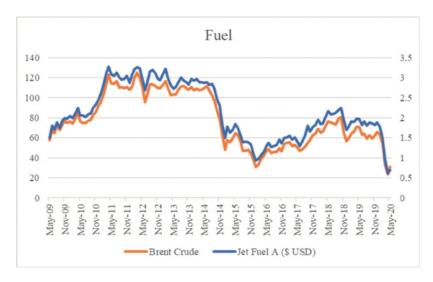
Source: IATA.ORG

Aviation is a highly cyclical industry, marked with high highs and low lows. Historically, gross domestic product and traffic have been good indicators of the health of the industry; as they are highly correlated. Economic prosperity leads to increases in disposable income and subsequently an increase in demand for air travel. An increase in demand for air travel means an increase in demand for aircraft.

The aviation industry, along with the global economy at large, has been severely impacted by the Coronavirus pandemic which broke out in January 2020. According to the International Monetary Fund's (IMF) June 2020 World Economic Outlook report, global GDP is currently expected to decline by 4.9% in 2020. This was a much sharper decline than what was seen during the 2008 financial crisis. While the IMF expects global GDP to grow by 5.4% in 2021, they warn that more severe outcomes are possible, depending on how quickly the pandemic fades and containment efforts can be unwound. In terms of recovery, IATA currently expects that traffic will lag behind GDP by about 2 years. <sup>1</sup>

1 https://www.iata.org/en/iata-repository/publications/economic-reports/covid-19-outlook-for-air-travel-in-the-next-5-years/

#### **FUEL ENVIRONMENT**



Source: Indexmundi.com

The chart above shows the volatility in the fuel market over the last decade. Brent crude has a strong correlation with Jet Fuel A prices. In the fall of 2014, crude oil prices began to fall. Crude oil prices had stayed around \$55-65/bl in part because of supply increases from Iran and the United States. However, COVID-19 has severely impacted the fuel market and the global economy. Both Jet Fuel A and Brent Crude have seen in excess of a 40% drop in pricing from January 2020 to present. As of May 26, 2020, Jet Fuel A was trading at \$0.90 per gallon.<sup>2</sup> Historically, jet fuel and airline profitability have had an inverse relationship. Lower fuel prices bring airline expenses down, which results in lower fares and upticks in demand. Lower fuel pricing is good for the health of an airline, but right now demand has fallen to very low levels because of COVID-19.

#### LENDING LANDSCAPE

The lending environment is also a material consideration when evaluating the current market. The last 10 years have been marked with historically low interest rates. A more favorable lending environment leads to more orders, but the negative ramification of this is airlines that historically looked to secondary markets now look to new aircraft, which in turn could result in steeper value drops in the secondary market. The Federal Reserve's policymaking arm, the Federal Open Market Committee (FOMC), has reduced the federal funds rate target to a range of 0% to 0.25%. The previous time the Federal Reserve pursued a similar policy was in 2008, when the economy sank into a recession, and the Fed has kept the rates at low levels until 2015. Low rates will spur financing activities but the impact will likely be offset by weakened demand and global recession. Similar to the recession in 2008, liquidity is likely to be an issue for most of the industry.

2 https://www.airlines.org/argus-us-jet-fuel-index/

#### V. AIRCRAFT MARKET ANALYTICS

#### AIRCRAFT DEMAND

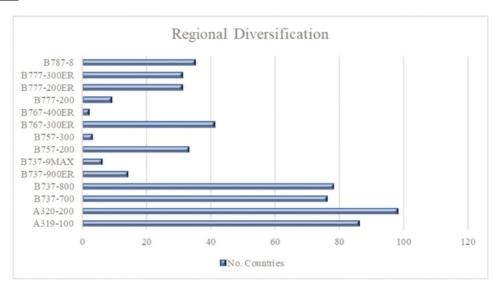


The number of orders placed in a given year is a good indicator of where we are in the cycle. An aircraft type launched in the right business cycle can lead to a large order stream and ultimately strong residual value. In 2019, the number of orders placed declined compared to 2018. Airbus recently published its 2019 sales totals. Airbus delivered a total of 863 jets and received 768 net new orders in 2019. Most of its orders were for A320Neo and A321Neo aircraft. Of the orders Airbus had, its largest was with Indigo for 87 A320Neos and 213 A321Neos. By comparison, Boeing delivered 380 aircraft, which is the lowest since their production strike shut down in 2008. Net orders for Boeing were negative. They had more cancellations than new orders. Boeing's net order figure for the year was –87. This is a clear reflection of their problem with the MAX aircraft, which had more cancellations than orders. Boeing also endured a net loss of orders for 777X jets, with Emirates having cut its order for the large widebody jet and substituting for an order of 30 smaller 787s. As of May 2020, Airbus delivered 160 aircraft with no new orders or cancellations, and Boeing delivered 60 aircraft with –9 net new orders.

COVID-19 has also had a dramatic effect on aircraft demand. Per IATA, lower traffic has led to the grounding of about 2/3 of the global commercial fleet, as of April 2020. Additionally, the pandemic has led to deferrals and cancellations of many new aircraft deliveries. In particular, a number of operators and lessors have deferred or cancelled their MAX orders, with some switching to the Neos. The effect of these trends on aircraft values will be further discussed in the COVID-19 impact section of this report.<sup>3</sup>

3 https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—april-2020/

#### **GEOGRAPHIC DIVERSITY**



Source: Airfleets.net

The aircraft in this portfolio are popular all over the world with a dominance in Asia and North America, on a regional level. The A319-100 is in 86 countries, the A320-200 is in 98 countries, the B737-700 is in 76 countries, the B737-800 is in 78 countries, the B737-900ER is in 14 countries, the B737-900ER is in 30 countries, the B757-200 is in 30 countries, the B757-300 is in 30 countries, the B757-300ER is in 41 countries, the B767-400ER is in 20 countries, the B777-200 is in 9 countries, the B777-200ER is in 31 countries, the B777-300ER is in 31 countries, and the B787-8 is in 35 countries. The United States has the most A319-100, B737-700, B737-900ER, B737-9MAX, B757-200, B757-300, B767-300ER, B767-400ER, and B777-200ER aircraft with 356, 647, 345, 14, 416, 37, 192, 37, and 115 of them, respectively. China has the most A320-200 and B737-800 aircraft with 827 and 1195 of them, respectively. Japan has the most B777-200 and B787-8 aircraft with 28 and 65 of them, respectively. United Arab Emirates has the most B777-300ER aircraft with 153 of them. Regional diversification is also a major influence on value. The more diverse the operation of the aircraft, the easier it is to remarket it.

#### **OPERATOR BASE**



Source: Airfleets.net

The graph above illustrates the operator base of each aircraft type compared with the age of the global fleet. A320s and B737-800s are typically viewed as the most liquid aircraft types, in terms of ability to convert to cash. The A319-100 has 186 operators, the A320-200 has 307 operators, the B737-700 has 176 operators, the B737-800 has 223 operators, the B737-900ER has 22 operators, the B737-9MAX has 6 operators, the B757-200 has 74 operators, the B757-300 has 4 operators, the B767-300ER has 80 operators, the B767-400ER has 3 operators, the B777-200 has 12 operators, the B777-200ER has 45 operators, the B787-8 has 46 operators. The largest operator of A319-100 and B737-800 aircraft is American Airlines with 133 and 304 of them, respectively. The largest operator of A320-200 aircraft is China Eastern Airlines with 185 of them. The largest operator of B737-700 aircraft is Southwest Airlines with 505 of them. The largest operator of B737-900ER, B737-9MAX, B757-300, B777-200, and B777-200ER aircraft is United Airlines with 136, 14, 21, 19, and 55 of them, respectively. The largest operator of B757-200, B767-300ER, and B767-400ER aircraft is Delta Air Lines with 164, 57, and 21 of them, respectively. The largest operator of B777-300ER aircraft is Emirates with 133 of them. The largest operator of B787-8 aircraft is All Nippon Airways with 36 of them. Operator base, like region diversification, is an important influence on value. The more operators there are, the easier it is to remarket the aircraft.

#### VI. COVID-19 IMPACT

The global economic shock resulting from the rapid spread of COVID-19 has dramatically impacted the aviation industry. In response to travel restrictions and reduced demand, airlines have taken emergency actions to reduce costs. European regional carrier Flybe collapsed in March 2020, with Virgin Australia following in April 2020. LATAM and Avianca filed for bankruptcy in May 2020, and it is likely other carriers will follow.<sup>4 5</sup>

Many governments have taken extraordinary stimulus measures to protect their carriers and boost their economies, and more assistance might come in the coming months. While these measures will have a positive impact, the combination of unprecedented travel restrictions, declining consumer spending, falling business confidence, and rising unemployment will have a severely negative impact on the industry.

IATA has reported that global passenger traffic declined 86.5% year-on-year for the month of June, as measured by revenue passenger kilometers (RPKs). Passenger capacity, as measured by global available seat kilometers (ASKs), also fell 80.1% year-on-year. Industry-wide passenger load factors fell from 60.6% in March to 57.6% in June. Following an uptick in April, global passenger yields also fell, declining 0.7% month-on-month in May.  $^{6.7}$  As of April 2020, IATA also reported that roughly  $^{2}$ /3 of the global commercial fleet was grounded and that deliveries of new aircraft were practically non-existent. Many future deliveries have been cancelled or delayed.  $^{8}$ 

The cargo market has also seen sharp declines, but has been slightly more resilient than the passenger market. Industry-wide cargo demand, as measured by cargo tonne kilometers (CTKs), declined by 17.6% year-on-year for the month of June. Similarly, industry-wide cargo capacity, as measured by available cargo tonne kilometers (ACTKs), contracted by 34.1% year-on-year. Due to reduced belly capacity, industry-wide cargo load factors rose by about 11.5 percentage points year-over-year.

Per their most recent impact assessment, IATA believes April may have been a turning point for the industry, given the modest improvements seen in May and June. They currently estimate that 2020 traffic will fall by a little more than 60% year-over-year, across all regions. However, given the trajectory of new COVID cases, IATA does not expect recovery to pre-COVID levels of traffic before 2024. While a vaccine and improved testing could result in a quicker recovery, IATA warns that there is still significant downside risk,

4 https://www.bbc.com/news/business-51748139

5

https://www.nytimes.com/aponline/2020/05/26/business/bc-lt-latam-airlines-bankruptcy.html

- 6 https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthly-analysis—june-20202/
- https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—june-2020/
- 8 https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—april-2020/
- 9 https://www.iata.org/en/iata-repository/publications/economic-reports/air-freight-monthly-analysis-june-202022/

depending on the ultimate severity of the economic downturn and the possibility of a second wave of COVID cases. 10 11

Analysis of previous crises is necessary to estimate the pandemic's impact and timeline for recovery. According to IATA's analysis of traffic during recent pandemics, the 2003 SARS outbreak, 2005 and 2013 Avian Flu outbreaks, and 2015 MERS Flu outbreak all had V-shaped recoveries. In each case, traffic recovered to pre-outbreak levels within a year. However, these pandemics did not coincide with a global recession. During periods of economic downturn, traffic has recovered more slowly. IATA's comprehensive study of passenger traffic concluded that within four years of both the 9/11 and 2008 shocks, traffic had recovered to its long-term trend level. <sup>12</sup> <sup>13</sup>

As of May 13, 2020, IATA expects that traffic will recover more slowly than GDP, lagging behind by about 2 years. Short-haul domestic flights will likely be the first to recover, with international traffic lagging behind. As borders remain closed, international traffic is not expected to recover until 2023 or 2024. 14

In addition to COVID-19's direct impacts on traffic and demand, the pandemic has also led to deferrals and cancellations of new equipment deliveries and storage of existing fleets. All of these factors have impaired the marketability of commercial aircraft and engines. Given our knowledge of previous crises such as 9-11, SARS, and the 2008 recession, as well as the data currently available, BK has developed a position of the impact of COVID-19 on the current market values (CMV) of the world's fleets of commercial aircraft and engines. Specifically, we have reduced our CMVs by 5% to 25%, depending on the age, type, and production status of the asset.

The CMVs have been reduced more severely for widebody aircraft than for narrowbody and regional aircraft. Older or out of production aircraft have been reduced more severely. We have not impaired the marketability of freighter aircraft that are in production, but have impaired marketability for those out of production. For engines, the CMVs have been cut in proportion to the haircut applied to the host aircraft type, albeit by a lesser percentage.

In addition to the reductions made to the CMVs, we have also reduced the base values (BV) for certain aircraft types, including the B777-200s, B777-200ERs, A330-300s, A330-200s, E190s, E195s, and A380s. Based on early retirements and falling activity rates, we believe these aircraft types have had permanent impairment to their BVs. Please note that these changes to our BVs also reflect the typical updates we make to our value tables throughout the year. The reductions should not be interpreted as solely being a result of COVID-19.

10 https://www.iata.org/en/iata-repository/publications/economic-reports/june-data-and-revised-air-travel-outlook/

- $11 \qquad https://www.iata.org/en/iata-repository/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-$
- 12 https://www.iata.org/en/iata-repository/publications/economic-reports/third-impact-assessment/
- 13 https://www.iata.org/en/iata-repository/publications/economic-reports/global-air-passenger-markets-riding-out-periods-of-turbulence/
- 14 https://www.iata.org/en/iata-repository/publications/economic-reports/covid-19-outlook-for-air-travel-in-the-next-5-years/

#### VII. VALUATION METHODOLOGY

In our opinion there is a relationship between the marketability of a spare engine type and the marketability of the host aircraft type. If a particular type aircraft is in demand in the marketplace, it follows that the engine type(s), which are utilized on that aircraft, will also be in high demand. Conversely, the market for an engine type will be diminished when the host aircraft type is in a low demand situation.

Current values are normally based on comparison to recent sales of comparable equipment. In recent years airlines and other aviation industry entities in the United States have claimed, with support of the government and the courts that the realizations in their sales transactions should be kept confidential. Since then, information about sale prices has been restricted to the occasional press release or aviation periodical item that divulges a sale price. We routinely participate in forums conducted by manufacturers, including engine manufacturers in which valuation data and information has been conveyed. Some prices are divulged informally in private conversations. We have contacted industry participants to solicit data based on their current involvement with similar equipment, and of course, appraisers are often privy to transaction prices from appraisals they have conducted. These cannot be divulged in our reports.

In the absence of more recent sales data, alternative methodologies must be used. One approach is to use the base value to predict what the value should be in a balanced market and then adjust the base value to reflect the impact of current market conditions.

From these base values, analysis of current market conditions, such as the number of engines and host aircraft available for sale, the length of time on the market, availability of competing equipment, asking prices and current traffic demand, results in an opinion on the current market value.

As of June 2020					
•				Available	% of
	Active	Stored	Scrapped	For Sale	Fleet
A319-100	870	524	56	9	1.0%
A320-200	2,784	1,710	192	33	1.2%
B737-700	878	338	49	3	0.3%
B737-800	3,735	1,259	31	13	0.3%
B737-900ER	301	202	_	_	0.0%
B737-9MAX	1	27	_	_	0.0%
B757-200	120	444	69	5	4.2%
B757-300	36	18	_	2	5.6%
B767-300ER	208	267	29	9	4.3%
B767-400ER	10	28	_	_	0.0%
B777-200	28	44	17	_	0.0%
B777-200ER	118	277	21	16	13.6%
B777-300ER	650	164	_	_	0.0%
B787-8	247	129	1	1	0.4%
	12				

The above table, summarized from the Airfleets and Airfax, lists aircraft similar to the host aircraft supporting the Portfolio engines, which were publicly advertised for sale or lease along with in service fleets. Experience has shown that when more than one percent of the fleet is available for sale, downward pressure begins on current market values. However, COVID-19 has led to impaired marketability across the board. As a result, we conclude that the CMV is less than the BV for all the engine types in this portfolio, as displayed in Figure 1.

#### VIII. DISCLAIMER

It should be understood that BK Associates has not inspected the Engine or the maintenance records, but has relied upon the information provided by you and in the BK Associates database. The assumptions have been made that all Airworthiness Directives have been complied with; and, maintenance has been accomplished in accordance with a civil airworthiness authority's approved maintenance program and accepted industry standards. To the extent the Engine may be in storage, we further assume that the storage configuration, including preparation for storage, is in accordance to the manufacturer's direction and that no storage environment has been incurred which will cause the value to diminish. Deviations from these assumptions can change significantly our opinion regarding the engine values.

BK Associates, Inc. has no present or contemplated future interest in the Engine, nor any interest that would preclude our making a fair and unbiased estimate. This appraisal represents the opinion of BK Associates, Inc. and reflects our best judgment based on the information available to us at the time of preparation and the time and budget constraints imposed by Client. It is not given as a recommendation, or as an inducement, for any financial transaction and further, BK Associates, Inc. assumes no responsibility or legal liability for any action taken or not taken by the addressee, or any other party, with regard to the appraised equipment. By accepting this appraisal, the addressee agrees that BK Associates, Inc. shall bear no such responsibility or legal liability. This appraisal is prepared for the use of the addressee and shall not be provided to other parties without the express consent of the addressee. BK Associates, Inc. consents to the inclusion of this appraisal report in the Prospectus Supplement and to the inclusion of BK Associates, Inc.'s name in the Prospectus Supplement under the caption "Experts".

Sincerely,

BK ASSOCIATES, INC.

Pooja Gardemal, CPA/ABV Managing Director

Ben Wallace Financial Analyst

Richard Britton Vice President

ISTAT Senior Certified Appraiser

PG/BW/RLB

### FIGURE 1

#### UNITED AIRLINES

# HALF-LIFE BASE VALUES (BV) AND CURRENT MARKET VALUES (CMV) ALL VALUES IN U.S. \$ MILLIONS

### VALUES AS OF SEPTEMBER 1, 2020

					Half-L	ife
Engine No.	Engine Serial Number	Date of Manufacture	Engine Type	QEC	BV	CMV
1	706368	Oct 2001	CF6-80C2B8F	Full	4.63	3.71
2	706439	Jul 2000	CF6-80C2B8F	Full	4.63	3.71
3	706323	May 2001	CF6-80C2B8F	Full	4.63	3.71
4	890202	Aug 2002	CFM56-7B24	Full	6.40	5.25
5	890307	Oct 2002	CFM56-7B24	Full	6.40	5.25
6	890418	Mar 2003	CFM56-7B24	Full	6.40	5.25
7	890436	Apr 2003	CFM56-7B24	Full	6.40	5.25
8	874219	Jan 1998	CFM56-7B24	Full	6.40	5.25
9	874792	May 1999	CFM56-7B24	Full	6.40	5.25
10	876266	Mar 2000	CFM56-7B24	Full	6.40	5.25
11	876563	Sep 2000	CFM56-7B24	Full	6.40	5.25
12	889320	Sep 2001	CFM56-7B24	Full	6.40	5.25
13	890452	May 2003	CFM56-7B26	Full	6.80	5.58
14	890516	Jun 2003	CFM56-7B26	Full	6.80	5.58
15	890612	Sep 2003	CFM56-7B26	Full	6.80	5.58
16	890652	Oct 2003	CFM56-7B26	Full	6.80	5.58
17	890684	Dec 2003	CFM56-7B26	Full	6.80	5.58
18 19	890775	Mar 2004	CFM56-7B26	Full	6.80	5.58
19 20	874336 876213	Jul 1998 Dec 1999	CFM56-7B26	Full Full	6.80 6.80	5.58 5.58
20 21	876633		CFM56-7B26 CFM56-7B26	Full	6.80	5.58
21	8/6633 888436	Sep 2000		Full	6.80	5.58
23	888868	May 2001 Jan 2002	CFM56-7B26	Full	6.80	5.58
23 24	890339	Dec 2002	CFM56-7B26 CFM56-7B26	Full	6.80	5.58
24 25	660372	Sep 2014		Full	9.42	9.04
26	862250	Jun 2015	CFM56-7B26E CFM56-7B26E	Full	9.42	9.04
20 27	862937	Feb 2016	CFM56-7B26E	Full	9.42	9.04
28	660119	Jun 2014	CFM56-7B26E	Full	9.42	9.04
29	660170	Jun 2014	CFM56-7B26E CFM56-7B26E	Full	9.42	9.04
30	901480	Oct 2019	GE90-115B	Full	27.55	26.17
31	901096	Nov 2016	GE90-115B	Full	27.55	26.17
32	901281	Nov 2017	GE90-115B	Full	27.55	26.17
33	900272	Dec 1998	GE90-90B	Full	11.12	9.45
34	900352	Sep 2001	GE90-90B	Full	11.12	9.45
35	900361	Oct 2001	GE90-90B	Full	11.12	9.45
36	900392	Sep 2002	GE90-90B	Full	11.12	9.45
37	900242	Aug 1998	GE90-90B	Full	11.12	9.45
38	900325	Jan 2000	GE90-90B	Full	11.12	9.45
39	956883	Jan 2017	GEnx-1B70	Full	19.82	18.83
40	956912	Mar 2017	GEnx-1B70	Full	19.82	18.83
41	958090	Mar 2018	GEnx-1B70	Full	19.82	18.83
42	958338	Mar 2019	GEnx-1B70	Full	19.82	18.83
43	958576	Mar 2020	GEnx-1B70	Full	19.82	18.83
44	956295	Dec 2013	GEnx-1B70	Full	19.82	18.83
45	956322	Dec 2013	GEnx-1B70	Full	19.82	18.83
46	956515	Mar 2015	GEnx-1B70	Full	19.82	18.83
47	956679	Dec 2015	GEnx-1B70	Full	19.82	18.83
48	603331	Apr 2019	LEAP-1B26/28	Full	11.90	11.42
49	602853	Sep 2018	LEAP-1B26/28	Full	11.90	11.42
50	602518	Apr 2018	LEAP-1B26/28	Full	11.90	11.42
51	727787	Jun 1998	PW4056	Full	3.53	2.47
52	727948	Oct 1999	PW4056	Full	3.53	2.47

n .	T .	D f	n .		Half-I	ife
Engine	Engine Serial Number	Date of	Engine	OFC	DV	CMN
No. 53	727569	Manufacture	Type PW4056	QEC Full	BV 3.53	2.47
53 54	P222309	Mar 1996 Feb 2015	PW4077	Full	7.65	5.36
54 55	P222310	Dec 2014	PW4077 PW4077	Full	7.65	5.36
56	P222310 P222311	Feb 2015	PW4077	Full	7.65	5.36
5 <b>6</b> 57	222258	Apr 2007	PW4077 PW4077	Full	7.65	5.36
58	777067	Feb 1997	PW4077	Full	7.65	5.36
59	P222308	Nov 2014	PW4077	Full	7.65	5.36
60	222067	May 1998	PW4077 PW4090	Full	9.94	7.96
61	222068	May 1998	PW4090	Full	9.94	7.96
62	222000	Mar 1999	PW4090	Full	9.94	7.96
63	222108	Jul 2015	PW4090	Full	9.94	7.96
64	222182	Dec 2001	PW4090	Full	9.94	7.96
65	222215	Jun 2018	PW4090	Full	9.94	7.96
66	222213	Dec 2012	PW4090	Full	9.94	7.96
67	222254	May 2017	PW4090	Full	9.94	7.96
68	222022	Jun 2016	PW4090	Full	9.94	7.96
69	222025	May 1997	PW4090	Full	9.94	7.96
70	222023	Apr 2016	PW4090	Full	9.94	7.96
70 71	222036	Jan 2016	PW4090	Full	9.94	7.96
72	222037	Jun 2016	PW4090	Full	9.94	7.96
73	222037	May 1998	PW4090	Full	9.94	7.96
73 74	222043	Oct 1997	PW4090	Full	9.94	7.96
7 <del>4</del> 75	222056	Jan 1998	PW4090	Full	9.94	7.96
76	31572	Jun 1998	RB211-535E4B	Full	3.00	2.25
70 77	31620	Jan 1999	RB211-535E4B	Full	3.00	2.25
78	31655	Jun 1999	RB211-535E4B	Full	3.00	2.25
76 79	31849	Dec 2001	RB211-535E4B	Full	3.00	2.25
80	31884	Dec 2003	RB211-535E4B	Full	3.00	2.25
81	31900	Oct 2004	RB211-535E4B	Full	3.00	2.25
82	31378	Jun 1995	RB211-535E4B	Full	3.00	2.25
83	31379	Jun 1995	RB211-535E4B	Full	3.00	2.25
84	31412	May 1996	RB211-535E4B	Full	3.00	2.25
85	31515	Oct 1997	RB211-535E4B	Full	3.00	2.25
86	V10327	Mar 1998	V2522-A5	Full	6.49	5.19
87	V10327 V10824	Mar 2001	V2522-A5 V2522-A5	Full	6.49	5.19
88	V10024 V11050	Aug 2001	V2522-A5 V2522-A5	Full	6.49	5.19
89	V1030 V10232	Jun 1997	V2522-A5 V2522-A5	Full	6.49	5.19
90	V10232 V10316	Feb 1998	V2522-A5 V2522-A5	Full	6.49	5.19
91	V10310 V12173	Aug 2018	V2524-A5	Full	6.74	5.39
92	V12173 V11807	Aug 2010 Aug 2018	V2524-A5 V2524-A5	Full	6.74	5.39
93	V11395	Mar 2017	V2527-A5	Full	7.14	5.71
94	V11353 V12083	Sep 1996	V2527-A5 V2527-A5	Full	7.14	5.71
95	V12003 V12169	Dec 2005	V2527-A5 V2527-A5	Full	7.14	5.71
96	V12521	Feb 2007	V2527-A5 V2527-A5	Full	7.14	5.71
97	V12321 V10167	Jun 1996	V2527-A5 V2527-A5	Full	7.14	5.71
98	V10107 V10372	May 1998	V2527-A5 V2527-A5	Full	7.14	5.71
99	V10372 V11394	Mar 2017	V2527-A5 V2527-A5	Full	7.14	5.71
55	¥11354	14111 2017	+ 232/-A3	ı un	905.16	775.50
					303.10	//3.30

# FIGURE 2 UNITED AIRLINES HALF-LIFE FUTURE BASE VALUES (2% ANNUAL INFLATION) ALL VALUES IN U.S. \$ MILLIONS VALUES AS OF SEPTEMBER 1, 2020

Engine No.	Engine Serial Number	Year of Manufacture	Engine Type	QEC	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	706368	Oct 2001	CF6-80C2B8F	Full	4.63	3.95	3.53	3.12	2.71	2.30	1.88	1.47	1.06
2	706439	Jul 2000	CF6-80C2B8F	Full	4.63	3.95	3.53	3.12	2.71	2.30	1.88	1.47	1.06
3	706323	May 2001	CF6-80C2B8F	Full	4.63	3.95	3.53	3.12	2.71	2.30	1.88	1.47	1.06
4	890202	Aug 2002	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
5	890307	Oct 2002	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
6	890418	Mar 2003	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
7	890436	Apr 2003	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
8 9	874219 874792	Jan 1998 May 1999	CFM56-7B24 CFM56-7B24	Full Full	6.40 6.40	5.85 5.85	5.29 5.29	4.74 4.74	4.19 4.19	3.63 3.63	3.08 3.08	2.53 2.53	1.97 1.97
10	876266	Mar 2000	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
11	876563	Sep 2000	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
12	889320	Sep 2001	CFM56-7B24	Full	6.40	5.85	5.29	4.74	4.19	3.63	3.08	2.53	1.97
13	890452	May 2003	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
14	890516	Jun 2003	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
15	890612	Sep 2003	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
16	890652	Oct 2003	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
17	890684	Dec 2003	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
18	890775	Mar 2004	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
19	874336	Jul 1998	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
20 21	876213 876633	Dec 1999 Sep 2000	CFM56-7B26 CFM56-7B26	Full Full	6.80 6.80	6.21 6.21	5.62 5.62	5.04 5.04	4.45 4.45	3.86 3.86	3.27 3.27	2.69 2.69	2.10 2.10
22	888436	May 2001	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
23	888868	Jan 2002	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
24	890339	Dec 2002	CFM56-7B26	Full	6.80	6.21	5.62	5.04	4.45	3.86	3.27	2.69	2.10
25	660372	Sep 2014	CFM56-7B26E	Full	9.42	9.03	8.80	8.61	8.05	7.29	6.53	5.77	5.00
26	862250	Jun 2015	CFM56-7B26E	Full	9.42	9.03	8.80	8.61	8.05	7.29	6.53	5.77	5.00
27	862937	Feb 2016	CFM56-7B26E	Full	9.42	9.03	8.80	8.61	8.05	7.29	6.53	5.77	5.00
28	660119	Jun 2014	CFM56-7B26E	Full	9.42	9.03	8.80	8.61	8.05	7.29	6.53	5.77	5.00
29	660170	Jun 2014	CFM56-7B26E	Full	9.42	9.03	8.80	8.61	8.05	7.29	6.53	5.77	5.00
30 31	901480 901096	Oct 2019 Nov 2016	GE90-115B GE90-115B	Full Full	27.55 27.55	26.56 26.56	25.96 25.96	25.32 25.32	24.77 24.77	24.18 24.18	22.55 22.55	20.41 20.41	18.27 18.27
32	901281	Nov 2017	GE90-115B GE90-115B	Full	27.55	26.56	25.96	25.32	24.77	24.18	22.55	20.41	18.27
33	900272	Dec 1998	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
34	900352	Sep 2001	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
35	900361	Oct 2001	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
36	900392	Sep 2002	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
37	900242	Aug 1998	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
38	900325	Jan 2000	GE90-90B	Full	11.12	9.47	8.48	7.49	6.50	5.51	4.52	3.53	2.54
39	956883	Jan 2017	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
40 41	956912 958090	Mar 2017 Mar 2018	GEnx-1B70 GEnx-1B70	Full Full	19.82 19.82	19.40 19.40	19.15 19.15	18.98 18.98	18.76 18.76	18.50 18.50	18.25 18.25	18.02 18.02	17.80 17.80
42	958338	Mar 2019	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
43	958576	Mar 2020	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
44	956295	Dec 2013	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
45	956322	Dec 2013	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
46	956515	Mar 2015	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
47	956679	Dec 2015	GEnx-1B70	Full	19.82	19.40	19.15	18.98	18.76	18.50	18.25	18.02	17.80
48	603331	Apr 2019	LEAP-1B26/28	Full	11.90	11.64	11.50	11.39	11.26	11.10	10.96	10.82	10.69
49	602853	Sep 2018	LEAP-1B26/28	Full	11.90	11.64	11.50	11.39	11.26	11.10	10.96	10.82	10.69
50	602518 727787	Apr 2018	LEAP-1B26/28	Full	11.90 3.53	11.64 3.00	11.50 2.69	11.39 2.38	11.26 2.06	11.10 1.75	10.96 1.43	10.82 1.12	10.69 0.81
51 52	727948	Jun 1998 Oct 1999	PW4056 PW4056	Full Full	3.53	3.00	2.69	2.38	2.06	1.75	1.43	1.12	0.81
53	727569	Mar 1996	PW4056	Full	3.53	3.00	2.69	2.38	2.06	1.75	1.43	1.12	0.81
54	P222309	Feb 2015	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
55	P222310	Dec 2014	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
56	P222311	Feb 2015	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
57	222258	Apr 2007	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
58	777067	Feb 1997	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
59	P222308	Nov 2014	PW4077	Full	7.65	6.52	5.84	5.16	4.47	3.79	3.11	2.43	1.75
60	222067	May 1998	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
61 62	222068 222099	May 1998 Mar 1999	PW4090 PW4090	Full Full	9.94 9.94	8.47 8.47	7.59 7.59	6.70 6.70	5.81 5.81	4.93 4.93	4.05 4.05	3.16 3.16	2.27 2.27
63	222108	Mar 1999 Jul 2015	PW4090 PW4090	Full	9.94	8.47 8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
64	222182	Dec 2001	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
65	222215	Jun 2018	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
66	222225	Dec 2012	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
67	222254	May 2017	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27

	Engine												
Engine	Serial	Year of	Engine										
No.	Number	Manufacture	Туре	QEC	2020	2021	2022	2023	2024	2025	2026	2027	2028
68	222022	Jun 2016	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
69	222025	May 1997	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
70	222035	Apr 2016	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
71	222036	Jan 2016	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
72	222037	Jun 2016	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
73	222043	May 1998	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
74	222048	Oct 1997	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
75	222056	Jan 1998	PW4090	Full	9.94	8.47	7.59	6.70	5.81	4.93	4.05	3.16	2.27
76	31572	Jun 1998	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
77	31620	Jan 1999	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
78	31655	Jun 1999	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
79	31849	Dec 2001	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
80	31884	Dec 2003	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
81	31900	Oct 2004	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
82	31378	Jun 1995	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
83	31379	Jun 1995	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
84	31412	May 1996	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
85	31515	Oct 1997	RB211-535E4B	Full	3.00	2.55	2.29	2.02	1.75	1.49	1.22	0.95	0.69
86	V10327	Mar 1998	V2522-A5	Full	6.49	5.53	4.95	4.37	3.79	3.22	2.64	2.06	1.48
87	V10824	Mar 2001	V2522-A5	Full	6.49	5.53	4.95	4.37	3.79	3.22	2.64	2.06	1.48
88	V11050	Aug 2001	V2522-A5	Full	6.49	5.53	4.95	4.37	3.79	3.22	2.64	2.06	1.48
89	V10232	Jun 1997	V2522-A5	Full	6.49	5.53	4.95	4.37	3.79	3.22	2.64	2.06	1.48
90	V10316	Feb 1998	V2522-A5	Full	6.49	5.53	4.95	4.37	3.79	3.22	2.64	2.06	1.48
91	V12173	Aug 2018	V2524-A5	Full	6.74	5.74	5.14	4.54	3.94	3.34	2.74	2.14	1.54
92	V11807	Aug 2018	V2524-A5	Full	6.74	5.74	5.14	4.54	3.94	3.34	2.74	2.14	1.54
93	V11395	Mar 2017	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
94	V12083	Sep 1996	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
95	V12169	Dec 2005	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
96	V12521	Feb 2007	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
97	V10167	Jun 1996	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
98	V10372	May 1998	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63
99	V11394	Mar 2017	V2527-A5	Full	7.14	6.08	5.45	4.81	4.17	3.54	2.90	2.27	1.63



### **VALUATION OF A 352 AIRCRAFT**

## **PORTFOLIO**

As of September 1, 2020 Client: United Airlines, Inc.

Report Date: October 1, 2020

7315 Wisconsin Ave, Ste 800W Bethesda, MD 20814

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#### I. VALUATION SUMMARY

BK Associates, Inc. ("BK") has been engaged by United Airlines, Inc. ("Client") to provide a desktop valuation, setting forth BK's opinions of current half-life Base Values (BV) and market values (CMV) and future base values (FBV) through 2028 of 352 aircraft, as of September 1, 2020.

#### **AIRCRAFT DESCRIPTION**

The Portfolio aircraft are identified by type, serial number, date of manufacture, engine model/variant, and maximum takeoff weight (MTOW) in attached Figures 1 and 2. Figure 1 reflects the current half-life BVs and CMVs in millions of USD, as of September 1, 2020. Figure 2 reflects the future base values in millions of USD through 2028, assuming 2% inflation.

#### **PURPOSE OF THE VALUATION ENGAGEMENT**

It is understood by BK that the Conclusion of Value will be used by Client to present to investors. This report was prepared solely for the purposes described herein and, accordingly, should not be used for any other purpose. In addition, this report should not be distributed to any party other than Client, without the express knowledge and written consent of Client or BK.

#### **RELEVANT DATES**

BK was engaged to value the subject aircraft as of the Valuation Date, September 1, 2020. In this valuation, BK considered only circumstances that existed as of and events that occurred up to the Valuation Date.

#### **PREMISE OF VALUE**

The valuation premise may be either in-use (i.e., going concern) or liquidation. The determining factor being the highest and best use as considered from a market participant's perspective. The values issued in this report are based on an in-use valuation premise, which assumes that the aircraft will continue to operate.

#### **CONCLUSIONS**

Based upon our knowledge of these various aircraft types, our knowledge of the capabilities and uses to which they have been put in various parts of the world, our knowledge of the marketing of used aircraft, and our knowledge of aircraft in general, it is our opinion that the values in 2020 U.S. dollars are as found in attached Figures 1 and 2. These values reflect the impact of COVID-19, which will be discussed in more detail later.

#### II. DEFINITIONS

According to the International Society of Transport Aircraft Trading's (ISTAT) definition of *current market value* (CMV), to which BK Associates subscribes, the quoted current market value is the Appraiser's opinion of the most likely trading price that may be generated for an aircraft under the market circumstances that are perceived to exist at the time in question. The current market value assumes that the aircraft is valued for its highest and best use, that the parties to the hypothetical sale transaction are willing, able, prudent and knowledgeable, and under no unusual pressure for a prompt sale, and that the transaction would be negotiated in an open and unrestricted market on an arm's length basis, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers, which BK Associates considers to be 12 to 18 months.

Since market conditions cannot be predicted far into the future, forecast values are usually presented as base values.

According to the International Society of Transport Aircraft Trading's (ISTAT) definition of *Base Value* (BV), to which BK Associates subscribes, the base value is the Appraiser's opinion of the underlying economic value of an aircraft in an open, unrestricted, stable market environment with a reasonable balance of supply and demand, and assumes full consideration of its "highest and best use". An aircraft's base value is founded in the historical trend of values and in the projection of future value trends and presumes an arm's length, cash transaction between willing, able and knowledgeable parties, acting prudently, with an absence of duress and with a reasonable period of time available for marketing. The base value normally refers to a transaction involving a single aircraft. When multiple aircraft are acquired in the same transaction, the trading price of each unit may be discounted.

For comparison purposes it is the convention to assign "half-time, half-life" values to aircraft, which represent the value of an aircraft that is halfway between the expensive major maintenance events.

#### III. ASSUMPTIONS

We have made the following assumptions and determinations with respect to these aircraft, in preparing this valuation:

- The aircraft are in good physical condition.
- 2. The historical maintenance documentation has been maintained to acceptable international standards.
- The specifications of the aircraft are those most common for aircraft of their type and vintage. 3.
- 4. The aircraft are in standard passenger configurations.
- The aircraft are current as to all Airworthiness Directives and Service Bulletins. 5.
- 6. 7. 8. Their modification statuses are comparable to those of aircraft of their type and vintage.
- They are operated under an appropriate civil airworthiness authority. Their utilization is comparable to industry averages.
- There is no history of accident or incident damage we are aware of.

#### IV. MARKET OUTLOOK

The performance and current value of an aircraft is affected to varying degrees by conditions in the global economy. Some of the key influences on aircraft include Gross Domestic Product, Fuel Price, and the Lending environment. This section of the report will analyze what the current outlook is for each.

#### **GROSS DOMESTIC PRODUCT (GDP)**



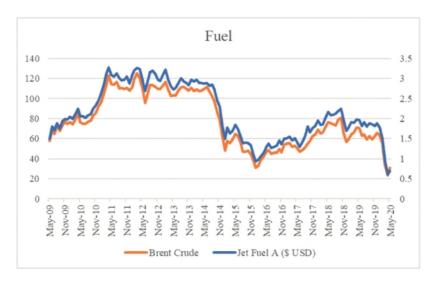
Source: IATA.ORG

Aviation is a highly cyclical industry, marked with high highs and low lows. Historically, gross domestic product and traffic have been good indicators of the health of the industry; as they are highly correlated. Economic prosperity leads to increases in disposable income and subsequently an increase in demand for air travel. An increase in demand for air travel means an increase in demand for aircraft.

The aviation industry, along with the global economy at large, has been severely impacted by the Coronavirus pandemic which broke out in January 2020. According to the International Monetary Fund's (IMF) June 2020 World Economic Outlook report, global GDP is currently expected to decline by 4.9% in 2020. This was a much sharper decline than what was seen during the 2008 financial crisis. While the IMF expects global GDP to grow by 5.4% in 2021, they warn that more severe outcomes are possible, depending on how quickly the pandemic fades and containment efforts can be unwound. In terms of recovery, IATA currently expects that traffic will lag behind GDP by about 2 years. <sup>1</sup>

1 https://www.iata.org/en/iata-repository/publications/economic-reports/covid-19-outlook-for-air-travel-in-the-next-5-years/

#### **FUEL ENVIRONMENT**



Source: Indexmundi.com

The chart above shows the volatility in the fuel market over the last decade. Brent crude has a strong correlation with Jet Fuel A prices. In the fall of 2014, crude oil prices began to fall. Crude oil prices had stayed around \$55-65/bl in part because of supply increases from Iran and the United States. However, COVID-19 has severely impacted the fuel market and the global economy. Both Jet Fuel A and Brent Crude have seen in excess of a 40% drop in pricing from January 2020 to present. As of May 26, 2020, Jet Fuel A was trading at \$0.90 per gallon.<sup>2</sup> Historically, jet fuel and airline profitability have had an inverse relationship. Lower fuel prices bring airline expenses down, which results in lower fares and upticks in demand. Lower fuel pricing is good for the health of an airline, but right now demand has fallen to very low levels because of COVID-19.

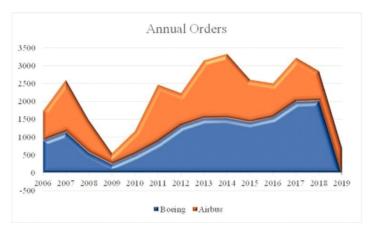
#### **LENDING LANDSCAPE**

The lending environment is also a material consideration when evaluating the current market. The last 10 years have been marked with historically low interest rates. A more favorable lending environment leads to more orders, but the negative ramification of this is airlines that historically looked to secondary markets now look to new aircraft, which in turn could result in steeper value drops in the secondary market. The Federal Reserve's policymaking arm, the Federal Open Market Committee (FOMC), has reduced the federal funds rate target to a range of 0% to 0.25%. The previous time the Federal Reserve pursued a similar policy was in 2008, when the economy sank into a recession, and the Fed has kept the rates at low levels until 2015. Low rates will spur financing activities but the impact will likely be offset by weakened demand and global recession. Similar to the recession in 2008, liquidity is likely to be an issue for most of the industry.

2 https://www.airlines.org/argus-us-jet-fuel-index/

#### V. AIRCRAFT MARKET ANALYTICS

#### AIRCRAFT DEMAND

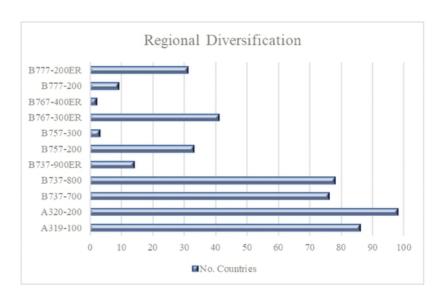


The number of orders placed in a given year is a good indicator of where we are in the cycle. An aircraft type launched in the right business cycle can lead to a large order stream and ultimately strong residual value. In 2019, the number of orders placed declined compared to 2018. Airbus recently published its 2019 sales totals. Airbus delivered a total of 863 jets and received 768 net new orders in 2019. Most of its orders were for A320Neo and A321Neo aircraft. Of the orders Airbus had, its largest was with Indigo for 87 A320Neos and 213 A321Neos. By comparison, Boeing delivered 380 aircraft, which is the lowest since their production strike shut down in 2008. Net orders for Boeing were negative. They had more cancellations than new orders. Boeing's net order figure for the year was –87. This is a clear reflection of their problem with the MAX aircraft, which had more cancellations than orders. Boeing also endured a net loss of orders for 777X jets, with Emirates having cut its order for the large widebody jet and substituting for an order of 30 smaller 787s. As of May 2020, Airbus delivered 160 aircraft with no new orders or cancellations, and Boeing delivered 60 aircraft with –9 net new orders.

COVID-19 has also had a dramatic effect on aircraft demand. Per IATA, lower traffic has led to the grounding of about <sup>2</sup>/3 of the global commercial fleet, as of April 2020. Additionally, the pandemic has led to deferrals and cancellations of many new aircraft deliveries. In particular, a number of operators and lessors have deferred or cancelled their MAX orders, with some switching to the Neos. The effect of these trends on aircraft values will be further discussed in the COVID-19 impact section of this report.<sup>3</sup>

3 https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—april-2020/

#### **GEOGRAPHIC DIVERSITY**



Source: Airfleets.net

The aircraft in this portfolio are popular all over the world with a dominance in Asia and North America, on a regional level. The B737-700 is in 76 countries, the B737-800 is in 78 countries, the B737-900ER is in 14 countries, the B757-200 is in 33 countries, the B757-300 is in 3 countries, the B767-300ER is in 41 countries, the B767-400ER is in 2 countries, the B777-200 is in 9 countries, the B777-200ER is in 31 countries, the A319-100 is in 86 countries, and the A320-200 is in 98 countries. The United States has the most B737-700, B737-900ER, B757-200, B757-300, B767-300ER, B767-400ER, B777-200ER, and A319-100 aircraft with 647, 345, 416, 37, 192, 37, 115, and 356 of them, respectively. China has the most B737-800 and A320-200 aircraft with 1195 and 827 of them, respectively. Japan has the most B777-200 aircraft with 28 of them. Regional diversification is also a major influence on value. The more diverse the operation of the aircraft, the easier it is to remarket it.

#### **OPERATOR BASE**



Source: Airfleets.net

The graph above illustrates the operator base of each aircraft type compared with the age of the global fleet. A320s and B737-800s are typically viewed as the most liquid aircraft types, in terms of ability to convert to cash. The B737-700 has 176 operators, the B737-800 has 223 operators, the B757-200 has 74 operators, the B757-300 has 4 operators, the B767-300ER has 80 operators, the B767-400ER has 3 operators, the B777-200ER has 45 operators, the A319-100 has 186 operators, and the A320-200 has 307 operators. The largest operator of B737-700 aircraft is Southwest Airlines with 505 of them. The largest operator of B737-800 and A319-100 aircraft is American Airlines with 304 and 133 of them, respectively. The largest operator of B737-900ER, B757-300, B777-200, and B777-200ER aircraft is United Airlines with 136, 21, 19, and 55 of them, respectively. The largest operator of B757-200, B767-300ER, and B767-400ER aircraft is Delta Air Lines with 164, 57, and 21 of them, respectively. The largest operator of A320-200 aircraft is China Eastern Airlines with 185 of them. Operator base, like region diversification, is an important influence on value. The more operators there are, the easier it is to remarket the aircraft.

#### VI. COVID-19 IMPACT

The global economic shock resulting from the rapid spread of COVID-19 has dramatically impacted the aviation industry. In response to travel restrictions and reduced demand, airlines have taken emergency actions to reduce costs. European regional carrier Flybe collapsed in March 2020, with Virgin Australia following in April 2020. LATAM and Avianca filed for bankruptcy in May 2020, and it is likely other carriers will follow.<sup>4 5</sup>

Many governments have taken extraordinary stimulus measures to protect their carriers and boost their economies, and more assistance might come in the coming months. While these measures will have a positive impact, the combination of unprecedented travel restrictions, declining consumer spending, falling business confidence, and rising unemployment will have a severely negative impact on the industry.

IATA has reported that global passenger traffic declined 86.5% year-on-year for the month of June, as measured by revenue passenger kilometers (RPKs). Passenger capacity, as measured by global available seat kilometers (ASKs), also fell 80.1% year-on-year. Industry-wide passenger load factors fell from 60.6% in March to 57.6% in June. Following an uptick in April, global passenger yields also fell, declining 0.7% month-on-month in May.  $^{6.7}$  As of April 2020, IATA also reported that roughly  $^{2}$ /3 of the global commercial fleet was grounded and that deliveries of new aircraft were practically non-existent. Many future deliveries have been cancelled or delayed.  $^{8}$ 

The cargo market has also seen sharp declines, but has been slightly more resilient than the passenger market. Industry-wide cargo demand, as measured by cargo tonne kilometers (CTKs), declined by 17.6% year-on-year for the month of June. Similarly, industry-wide cargo capacity, as measured by available cargo tonne kilometers (ACTKs), contracted by 34.1% year-on-year. Due to reduced belly capacity, industry-wide cargo load factors rose by about 11.5 percentage points year-over-year.

Per their most recent impact assessment, IATA believes April may have been a turning point for the industry, given the modest improvements seen in May and June. They currently estimate that 2020 traffic will fall by a little more than 60% year-over-year, across all regions. However, given the trajectory of new COVID cases, IATA does not expect recovery to pre-COVID levels of traffic before 2024. While a vaccine and improved testing could result in a quicker recovery, IATA warns that there is still

4 https://www.bbc.com/news/business-51748139

5

https://www.nytimes.com/aponline/2020/05/26/business/bc-lt-latam-airlines-bankruptcy.html

- 6 https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthly-analysis—june-20202/
- https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—june-2020/
- 8 https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor—april-2020/
- 9 https://www.iata.org/en/iata-repository/publications/economic-reports/air-freight-monthly-analysis-june-202022/

significant downside risk, depending on the ultimate severity of the economic downturn and the possibility of a second wave of COVID cases. <sup>10</sup> 11

Analysis of previous crises is necessary to estimate the pandemic's impact and timeline for recovery. According to IATA's analysis of traffic during recent pandemics, the 2003 SARS outbreak, 2005 and 2013 Avian Flu outbreaks, and 2015 MERS Flu outbreak all had V-shaped recoveries. In each case, traffic recovered to pre-outbreak levels within a year. However, these pandemics did not coincide with a global recession. During periods of economic downturn, traffic has recovered more slowly. IATA's comprehensive study of passenger traffic concluded that within four years of both the 9/11 and 2008 shocks, traffic had recovered to its long-term trend level. <sup>12</sup> <sup>13</sup>

As of May 13, 2020, IATA expects that traffic will recover more slowly than GDP, lagging behind by about 2 years. Short-haul domestic flights will likely be the first to recover, with international traffic lagging behind. As borders remain closed, international traffic is not expected to recover until 2023 or 2024. <sup>14</sup>

In addition to COVID-19's direct impacts on traffic and demand, the pandemic has also led to deferrals and cancellations of new equipment deliveries and storage of existing fleets. All of these factors have impaired the marketability of commercial aircraft and engines. Given our knowledge of previous crises such as 9-11, SARS, and the 2008 recession, as well as the data currently available, BK has developed a position of the impact of COVID-19 on the current market values (CMV) of the world's fleets of commercial aircraft and engines. Specifically, we have reduced our CMVs by 5% to 25%, depending on the age, type, and production status of the asset.

The CMVs have been reduced more severely for widebody aircraft than for narrowbody and regional aircraft. Older or out of production aircraft have been reduced more severely. We have not impaired the marketability of freighter aircraft that are in production, but have impaired marketability for those out of production. For engines, the CMVs have been cut in proportion to the haircut applied to the host aircraft type, albeit by a lesser percentage.

In addition to the reductions made to the CMVs, we have also reduced the base values (BV) for certain aircraft types, including the B777-200s, B777-200ERs, A330-300s, A330-200s, E190s, E195s, and A380s. Based on early retirements and falling activity rates, we believe these aircraft types have had permanent impairment to their BVs. Please note that these changes to our BVs also reflect the typical updates we make to our value tables throughout the year. The reductions should not be interpreted as solely being a result of COVID-19.

10 https://www.iata.org/en/iata-repository/publications/economic-reports/june-data-and-revised-air-travel-outlook/

- $11 \qquad https://www.iata.org/en/iata-repository/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-to-the-pre-pandemic-level-of-passenger-demand/publications/economic-reports/Five-years-to-return-$
- 12 https://www.iata.org/en/iata-repository/publications/economic-reports/third-impact-assessment/
- 13 https://www.iata.org/en/iata-repository/publications/economic-reports/global-air-passenger-markets-riding-out-periods-of-turbulence/
- 14 https://www.iata.org/en/iata-repository/publications/economic-reports/covid-19-outlook-for-air-travel-in-the-next-5-years/

#### VII. VALUATION METHODOLOGY

Current values are normally based on comparison to recent sales of comparable aircraft. Unfortunately, there have been few recent transactions involving comparable aircraft for which the price was divulged. Since the 1990s, the major airlines and other aviation industry entities in the United States have claimed, with support of the government and the courts that the realizations in their aircraft sales should be kept confidential. Prior to that, all transactions were reported to the government and the prices were available to the public. Now, we are only aware of transactions that are occasionally reported in the press, when we are involved in the transaction or when our clients sometimes share the prices of recent transactions. Equipment manufacturers also share with us confidential cost data related to their products. We are aware of some sales of similar aircraft to those subject of this appraisal.

In the absence of more recent sales data, alternative methodologies must be used. One approach is to determine the base value or what the value should be in a balanced market and then adjust that base value to reflect the impact of current market conditions.

As the definition implies, the base value is determined from long-term historical trends. BK Associates has accumulated a database of over 13,000 data points of aircraft sales that occurred since 1970. From analysis of these data we know, for example, what the average aircraft should sell for as a percentage of its new price, as well as, the high and low values that have occurred in strong and weak markets.

Based on these data, we have developed relationships between aircraft age and sale price for wide-bodies, narrow-bodies, large turboprops and, more recently, regional jet and freighter aircraft. Within these groups we have developed further refinements for such things as derivative aircraft, aircraft still in production versus no longer in production, and aircraft early in the production run versus later models. Within each group variations are determined by the performance capabilities of each aircraft relative to the others. We now track some 150 different variations of aircraft types and models and determine current and forecast base values. These relationships are verified, and changed or updated if necessary, when actual sales data becomes available.

This relationship between sale price as a function of age and the new price is depicted in the following figure.



The following, summarized from published Airfax reports, lists aircraft similar to those in the Portfolio, which are publicly advertised for sale or lease. Additionally, aircraft currently active, scrapped, and in storage are quantified, per Airfleets data. However, it should be understood that some operators and lessors do not publicize their aircraft availability and the list of stored aircraft does not directly compliment the availability listing.

#### As of June 2020

				Available	% of
	Active	Stored	Scrapped	For Sale	Fleet
A319-100	870	524	56	9	1.0%
A320-200	2,784	1,710	192	33	1.2%
B737-700	878	338	49	3	0.3%
B737-800	3,735	1,259	31	13	0.3%
B737-900ER	301	202	_	_	0.0%
B757-200	120	444	69	5	4.2%
B757-300	36	18	_	2	5.6%
B767-300ER	208	267	29	9	4.3%
B767-400ER	10	28	_	_	0.0%
B777-200	28	44	17	_	0.0%
B777-200ER	118	277	21	16	13.6%
	22	138	141	_	0.0%

Experience has shown that when more than one percent of the fleet is available for sale, downward pressure begins on current market values. However, COVID-19 has led to impaired marketability across the board. As a result, we conclude that the CMV is less than the BV for all the aircraft types in this portfolio, as displayed in Figure 1.

#### VIII. DISCLAIMER

It should be understood that BK Associates has neither inspected the Aircraft nor the maintenance records, but has relied upon the information provided by the addressee and in the BK Associates database. The assumptions have been made that all Airworthiness Directives have been complied with; and accident damage has not been incurred that would affect market values. Further, we have assumed unless otherwise stated, that the Aircraft is in typical configuration for the type. Deviations from these assumptions can change significantly our opinion regarding the values.

BK Associates, Inc. has no present or contemplated future interest in the Aircraft, nor any interest that would preclude our making a fair and unbiased estimate. This appraisal represents the opinion of BK Associates, Inc. and reflects our best judgment based on the information available to us at the time of preparation and the time and budget constraints imposed by Client. It is not given as a recommendation, or as an inducement, for any financial transaction and further, BK Associates, Inc. assumes no responsibility or legal liability for any action taken or not taken by the addressee, or any other party, with regard to the appraised equipment. By accepting this appraisal, the addressee agrees that BK Associates, Inc. shall bear no such responsibility or legal liability. This appraisal is prepared for the use of the addressee and shall not be provided to other parties without the express consent of the addressee. BK Associates, Inc. consents to the inclusion of this appraisal report in the Prospectus Supplement and to the inclusion of BK Associates, Inc.'s name in the Prospectus Supplement under the caption "Experts".

Sincerely,

BK ASSOCIATES, INC.

Ben Wallace Financial Analyst

R.L. Britton
Vice President
ISTAT Senior Certified Appraiser

Pooja Gardemal, CPA/ABV Managing Director

BW/RLB/PG

# FIGURE 1 UNITED AIRLINES

# HALF-LIFE BASE VALUES (BV) AND CURRENT MARKET VALUES (CMV) ALL VALUES IN U.S. \$ MILLIONS

### VALUES AS OF SEPTEMBER 1, 2020

Aircraft No.	Aircraft Type	Narrow / Widebody	Registration Number	Manufacturer's Serial Number	Engine Type	MTOW (lbs)	Manufacture Date	Half BV	-Life CMV
1	Boeing 737-700	Narrowbody	N25705	28766	CFM56-7B24	154,500	May 1998	8.94	7.71
2	Boeing 737-700	Narrowbody	N24706	28767	CFM56-7B24	154,500	May 1998	8.94	7.71
3	Boeing 737-700	Narrowbody	N23707	28768	CFM56-7B24	154,500	May 1998	8.94	7.71
4	Boeing 737-700	Narrowbody	N23708	28769	CFM56-7B24	154,500	Jun 1998	8.99	7.75
5	Boeing 737-700	Narrowbody	N16709	28779	CFM56-7B24	154,500	Aug 1998	9.10	7.85
6	Boeing 737-700	Narrowbody	N15710	28780	CFM56-7B24	154,500	Aug 1998	9.10	7.85
7	Boeing 737-700	Narrowbody	N54711	28782	CFM56-7B24	154,500	Sep 1998	9.15	7.90
8	Boeing 737-700	Narrowbody	N15712	28783	CFM56-7B24	154,500	Sep 1998	9.15	7.90
9	Boeing 737-700	Narrowbody	N33714	28785	CFM56-7B24	154,500	Sep 1998	9.15	7.90
10	Boeing 737-700	Narrowbody	N24715	28786	CFM56-7B24	154,500	Oct 1998	9.21	7.94
11	Boeing 737-700	Narrowbody	N13716	28787	CFM56-7B24	154,500	Dec 1998	9.32	8.04
12	Boeing 737-700	Narrowbody	N29717	28936	CFM56-7B24	154,500	Jan 1999	9.39	8.12
13	Boeing 737-700	Narrowbody	N13718	28937	CFM56-7B24	154,500	Jan 1999	9.39	8.12
14	Boeing 737-700	Narrowbody	N17719	28938	CFM56-7B24	154,500	Feb 1999	9.44 9.44	8.17
15 16	Boeing 737-700	Narrowbody	N13720	28939 28940	CFM56-7B24	154,500	Feb 1999 Mar 1999		8.17
17	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N23721 N27722	28789	CFM56-7B24 CFM56-7B24	154,500 154,500	Apr 1999	9.50 9.55	8.22 8.26
18	Boeing 737-700	Narrowbody	N21723	28790	CFM56-7B24	154,500	Apr 1999	9.55	8.26
19	Boeing 737-700	Narrowbody	N39728	28944	CFM56-7B24	154,500	Jul 1999	9.71	8.40
20	Boeing 737-700	Narrowbody	N24729	28945	CFM56-7B24	154,500	Jul 1999	9.71	8.40
21	Boeing 737-700	Narrowbody	N14731	28799	CFM56-7B24	154,500	Aug 1999	9.75	8.44
22	Boeing 737-700	Narrowbody	N16732	28948	CFM56-7B24	154,500	Aug 1999	9.75	8.44
23	Boeing 737-700	Narrowbody	N27733	28800	CFM56-7B24	154,500	Sep 1999	9.80	8.48
24	Boeing 737-700	Narrowbody	N27734	28949	CFM56-7B24	154,500	Sep 1999	9.80	8.48
25	Boeing 737-700	Narrowbody	N14735	28950	CFM56-7B24	154,500	Sep 1999	9.80	8.48
26	Boeing 737-700	Narrowbody	N24736	28803	CFM56-7B24	154,500	Sep 1999	9.80	8.48
27	Boeing 737-700	Narrowbody	N15751	29047	CFM56-7B24	154,500	Mar 1999	9.50	8.22
28	Boeing 737-700	Narrowbody	N17752	29048	CFM56-7B24	154,500	May 1999	9.61	8.31
29	Boeing 737-700	Narrowbody	N7714B	32679	CFM56-7B22	154,500	May 2004	12.46	11.08
30	Boeing 737-700	Narrowbody	N7703A	32653	CFM56-7B22	154,500	Sep 2004	12.69	11.27
31	Boeing 737-800	Narrowbody	N25201	28958	CFM56-7B26	174,200	Dec 1999	12.64	11.29
32	Boeing 737-800	Narrowbody	N33209	30581	CFM56-7B26	174,200	Aug 2000	13.32	11.94
33 34	Boeing 737-800	Narrowbody	N26210	28770	CFM56-7B26	174,200	Jun 1998	11.07	9.86
	Boeing 737-800	Narrowbody	N24211	28771	CFM56-7B26	174,200	Jun 1998	11.07	9.86 9.86
35 36	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N24212 N27213	28772 28773	CFM56-7B26 CFM56-7B26	174,200 174,200	Jun 1998 Jul 1998	11.07 11.17	9.00
37	Boeing 737-800	Narrowbody	N14214	28774	CFM56-7B26	174,200	Jul 1998	11.17	9.94
38	Boeing 737-800	Narrowbody	N26215	28775	CFM56-7B26	174,200	Aug 1998	11.26	10.02
39	Boeing 737-800	Narrowbody	N12216	28776	CFM56-7B26	174,200	Aug 1998	11.26	10.02
40	Boeing 737-800	Narrowbody	N16217	28777	CFM56-7B26	174,200	Jul 1998	11.17	9.94
41	Boeing 737-800	Narrowbody	N12218	28778	CFM56-7B26	174,200	Aug 1998	11.26	10.02
42	Boeing 737-800	Narrowbody	N14219	28781	CFM56-7B26	174,200	Aug 1998	11.26	10.02
43	Boeing 737-800	Narrowbody	N18220	28929	CFM56-7B26	174,200	Nov 1998	11.54	10.27
44	Boeing 737-800	Narrowbody	N12221	28930	CFM56-7B26	174,200	Dec 1998	11.63	10.35
45	Boeing 737-800	Narrowbody	N34222	28931	CFM56-7B26	174,200	Dec 1998	11.63	10.35
46	Boeing 737-800	Narrowbody	N18223	28932	CFM56-7B26	174,200	Dec 1998	11.63	10.35
47	Boeing 737-800	Narrowbody	N13227	28788	CFM56-7B26	174,200	May 1999	12.10	10.80
48	Boeing 737-800	Narrowbody	N14228	28792	CFM56-7B26	174,200	May 1999	12.10	10.80
49	Boeing 737-800	Narrowbody	N26232	28942	CFM56-7B26	174,200	Jun 1999	12.19	10.88
50	Boeing 737-800	Narrowbody	N16234	28946	CFM56-7B26	174,200	Aug 1999	12.34	11.02
51	Boeing 737-800	Narrowbody	N14235	28947	CFM56-7B26	174,200	Aug 1999	12.34	11.02
52	Boeing 737-800	Narrowbody	N35236	28801	CFM56-7B26	174,200	Sep 1999	12.42	11.09
53	Boeing 737-800	Narrowbody	N14237	28802	CFM56-7B26	174,200	Sep 1999	12.42	11.09
54 55	Boeing 737-800	Narrowbody	N14240	28952	CFM56-7B26	174,200	Oct 1999	12.49	11.15
56	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N18243 N17245	28806 28955	CFM56-7B26 CFM56-7B26	174,200 174,200	Oct 1999 Nov 1999	12.49 12.57	11.15 11.22
57	Boeing 737-800	Narrowbody	N1/245 N14250	28957	CFM56-7B26 CFM56-7B26	174,200	Dec 1999	12.57	11.22
3/	Doeing /3/-000	rantowoody	1114230	20337	CI-10130-71320	1/4,200	Dec 1333	12.04	11.23

				35 6		1.577.1		** **	T.16
Aircraft No.	Aircraft Type	Narrow / Widebody	Registration Number	Manufacturer's Serial Number	Engine Type	MTOW (lbs)	Manufacture Date	Half BV	-Life CMV
58	Boeing 737-800	Narrowbody	N37252	30583	CFM56-7B26	174,200	Sep 2000	13.43	12.03
59	Boeing 737-800	Narrowbody	N37253	30584	CFM56-7B26	174,200	Sep 2000	13.43	12.03
60	Boeing 737-800	Narrowbody	N76254	30779	CFM56-7B26	174,200	Sep 2000	13.43	12.03
61	Boeing 737-800	Narrowbody	N77258	30802	CFM56-7B26	174,200	Nov 2000	13.64	12.22
62	Boeing 737-800	Narrowbody	N35260	30855	CFM56-7B26	174,200	Jun 2001	14.13	12.70
63	Boeing 737-800	Narrowbody	N33266	32403	CFM56-7B26	174,200	Aug 2001	14.32	12.86
64	Boeing 737-800	Narrowbody	N36272	31590	CFM56-7B26	174,200	Nov 2001	14.60	13.12
65	Boeing 737-800	Narrowbody	N73276	31594	CFM56-7B26	174,200	Feb 2002	15.14	13.65
66	Boeing 737-800	Narrowbody	N37277	31595	CFM56-7B26	174,200	Mar 2002	15.23	13.73
67	Boeing 737-800	Narrowbody	N73278	31596	CFM56-7B26	174,200	Oct 2003	16.87	15.25
68	Boeing 737-800	Narrowbody	N79279	31597	CFM56-7B26	174,200	Nov 2003	16.96	15.34
69	Boeing 737-800	Narrowbody	N36280	31598	CFM56-7B26	174,200	Dec 2003	17.06	15.43
70	Boeing 737-800	Narrowbody	N37281	31599	CFM56-7B26	174,200	Dec 2003	17.06	15.43
71	Boeing 737-800	Narrowbody	N33286	31600	CFM56-7B26	174,200	May 2004	17.30	15.69
72	Boeing 737-800	Narrowbody	N37287	31636	CFM56-7B26	174,200	May 2004	17.30	15.69
73 74	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N76288 N33289	33451 31607	CFM56-7B26 CFM56-7B26	174,200 174,200	Jun 2004 Jul 2004	17.39 17.47	15.78 15.85
75		Narrowbody	N37290	31601	CFM56-7B26	174,200	Sep 2004	17.63	15.99
75 76	Boeing 737-800 Boeing 737-800	Narrowbody	N33292	33455	CFM56-7B26	174,200	Dec 2004	17.87	16.21
70	Boeing 737-800	Narrowbody	N77295	34001	CFM56-7B26	174,200	Aug 2005	18.64	16.96
78	Boeing 737-800	Narrowbody	N77296	34002	CFM56-7B26	174,200	Sep 2005	18.73	17.05
79	Boeing 737-800	Narrowbody	N78501	31602	CFM56-7B26	174,200	Jul 2006	19.46	17.76
80	Boeing 737-800	Narrowbody	N76502	31603	CFM56-7B26	174,200	Aug 2006	19.52	17.81
81	Boeing 737-800	Narrowbody	N76503	33461	CFM56-7B26	174,200	Aug 2006	19.52	17.81
82	Boeing 737-800	Narrowbody	N76504	31604	CFM56-7B26	174,200	Aug 2006	19.52	17.81
83	Boeing 737-800	Narrowbody	N76505	32834	CFM56-7B26	174,200	Sep 2006	19.57	17.87
84	Boeing 737-800	Narrowbody	N78506	32832	CFM56-7B26	174,200	Oct 2006	19.63	17.92
85	Boeing 737-800	Narrowbody	N76519	30132	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
86	Boeing 737-800	Narrowbody	N77520	31658	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
87	Boeing 737-800	Narrowbody	N79521	31662	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
88	Boeing 737-800	Narrowbody	N76522	31660	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
89	Boeing 737-800	Narrowbody	N76523	37101	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
90	Boeing 737-800	Narrowbody	N78524	31642	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
91	Boeing 737-800	Narrowbody	N77525	31659	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
92	Boeing 737-800	Narrowbody	N76526	38700	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
93	Boeing 737-800	Narrowbody	N87527	38701	CFM56-7B26/3	174,200	Aug 2010	23.89	22.08
94	Boeing 737-900ER	Narrowbody	N27421	37094	CFM56-7B26/3	187,700	Apr 2008	21.22	19.06
95	Boeing 737-900ER	Narrowbody	N37422	31620	CFM56-7B26/3	187,700	May 2008	21.29	19.12
96	Boeing 737-900ER	Narrowbody	N37434	33528	CFM56-7B26/3	187,700	Oct 2009	22.75	20.61
97	Boeing 737-900ER	Narrowbody	N57439	33534	CFM56-7B26/3	187,700	Aug 2009	22.52	20.41
98	Boeing 737-900ER	Narrowbody	N45440	33535	CFM56-7B26/3	187,700	Aug 2009	22.52	20.41
99	Boeing 737-900ER	Narrowbody	N53441	30131	CFM56-7B26/3	187,700	Sep 2009	22.64	20.51
100	Boeing 737-900ER	Narrowbody	N53442	33536	CFM56-7B26/3	187,700	Sep 2009	22.64	20.51
101	Boeing 757-200	Narrowbody	N21108	27298	RB211-535	255,000	Nov 1994	6.24	4.37
102 103	Boeing 757-200	Narrowbody	N12109 N13110	27299 27300	RB211-535 RB211-535	255,000	Dec 1994 Dec 1994	6.30 6.30	4.41
103	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N57111	27301	RB211-535	255,000 255,000	Dec 1994	6.30	4.41 4.41
105	Boeing 757-200	Narrowbody	N18112	27302	RB211-535	255,000	Feb 1995	6.45	4.54
106	Boeing 757-200	Narrowbody	N13113	27555	RB211-535	255,000	Apr 1995	6.56	4.61
107	Boeing 757-200	Narrowbody	N12114	27556	RB211-535	255,000	Jul 1995	6.71	4.71
108	Boeing 757-200	Narrowbody	N12114 N12116	27558	RB211-535	255,000	Mar 1996	7.08	5.36
109	Boeing 757-200	Narrowbody	N19117	27559	RB211-535	255,000	Apr 1996	7.12	5.38
110	Boeing 757-200	Narrowbody	N14118	27560	RB211-535	255,000	Mar 1997	7.46	5.66
111	Boeing 757-200	Narrowbody	N18119	27561	RB211-535	255,000	May 1997	7.56	5.74
112	Boeing 757-200	Narrowbody	N14120	27562	RB211-535	255,000	Jun 1997	7.62	5.78
113	Boeing 757-200	Narrowbody	N14121	27563	RB211-535	255,000	Jul 1997	7.66	5.81
114	Boeing 757-200	Narrowbody	N17122	27564	RB211-535	255,000	Aug 1997	7.70	5.85
115	Boeing 757-200	Narrowbody	N17126	27566	RB211-535	255,000	Feb 1998	7.98	6.08
116	Boeing 757-200	Narrowbody	N48127	28968	RB211-535	255,000	Feb 1998	7.98	6.08
117	Boeing 757-200	Narrowbody	N17128	27567	RB211-535	255,000	Mar 1998	8.02	6.11
118	Boeing 757-200	Narrowbody	N29129	28969	RB211-535	255,000	Mar 1998	8.02	6.11
119	Boeing 757-200	Narrowbody	N19130	28970	RB211-535	255,000	May 1998	8.11	6.18
120	Boeing 757-200	Narrowbody	N34131	28971	RB211-535	255,000	Jun 1998	8.15	6.21
121	Boeing 757-200	Narrowbody	N33132	29281	RB211-535	255,000	Jun 1998	8.15	6.21
122	Boeing 757-200	Narrowbody	N67134	29283	RB211-535	255,000	Feb 1999	8.59	6.57
123	Boeing 757-200	Narrowbody	N41135	29284	RB211-535	255,000	Feb 1999	8.59	6.57

Aircraft	Aircraft	Narrow /	Registration	Manufacturer's	Engine	MTOW	Manufacture	Half	-I ife
No.	Type	Widebody	Number	Serial Number	Type	(lbs)	Date	BV	CMV
124	Boeing 757-200	Narrowbody	N19136	29285	RB211-535	255,000	Mar 1999	8.64	6.61
125	Boeing 757-200	Narrowbody	N34137	30229	RB211-535	255,000	Nov 1999	8.98	6.87
126	Boeing 757-200	Narrowbody	N13138	30351	RB211-535	255,000	Dec 1999	9.01	6.90
127	Boeing 757-200	Narrowbody	N17139	30352	RB211-535	255,000	Feb 2000	9.10	6.99
128	Boeing 757-200	Narrowbody	N41140	30353	RB211-535	255,000	Feb 2000	9.10	6.99
129	Boeing 757-200	Narrowbody	N19141	30354	RB211-535	255,000	Jun 2000	9.25	7.10
130	Boeing 757-300	Narrowbody	N75851	32810	RB211-535	273,000	Dec 2001	13.33	9.92
131	Boeing 757-300	Narrowbody	N57852	32811	RB211-535	273,000	Dec 2001	13.33	9.92
132	Boeing 757-300	Narrowbody	N75853	32812	RB211-535	273,000	Feb 2002	13.77	10.41
133	Boeing 757-300	Narrowbody	N75854	32813	RB211-535	273,000	Feb 2002	13.77	10.41
134	Boeing 757-300	Narrowbody	N57855	32814	RB211-535	273,000	Jan 2004	15.84	12.35
135	Boeing 757-300	Narrowbody	N74856	32815	RB211-535	273,000	Jan 2004	15.84	12.35
136	Boeing 757-300	Narrowbody	N57857	32816	RB211-535	273,000	Feb 2004	15.95	12.44
137	Boeing 757-300	Narrowbody	N75858	32817	RB211-535	273,000	Mar 2004	16.05	12.52
138 139	Boeing 757-300 Boeing 767-300ER	Narrowbody Widebody	N56859 N664UA	32818 29236	RB211-535 PW4056	273,000 407,000	Apr 2004 Jun 1998	16.16 12.94	12.61 9.59
140	Boeing 767-300ER	Widebody	N666UA	29238	PW4050 PW4052	407,000	Aug 1998	13.18	9.59
140	Boeing 767-300ER	Widebody	N667UA	29239	PW4052 PW4056	407,000	Aug 1998	13.18	9.76
141	Boeing 767-300ER	Widebody	N668UA	30024	PW4056	407,000	Mar 1999	13.16	10.41
143	Boeing 767-300ER	Widebody	N669UA	30025	PW4056	407,000	Jun 1999	14.33	10.41
144	Boeing 767-300ER	Widebody	N670UA	29240	PW4056	407,000	Aug 1999	14.54	10.82
145	Boeing 767-300ER	Widebody	N671UA	30026	PW4056	407,000	Oct 1999	14.74	10.97
146	Boeing 767-300ER	Widebody	N673UA	29241	PW4052	407,000	Jan 2000	15.04	11.25
147	Boeing 767-300ER	Widebody	N674UA	29242	PW4052	407,000	Apr 2000	15.34	11.48
148	Boeing 767-300ER	Widebody	N675UA	29243	PW4056	407,000	Aug 2000	15.82	11.84
149	Boeing 767-300ER	Widebody	N676UA	30028	PW4056	407,000	Apr 2001	16.57	12.46
150	Boeing 767-300ER	Widebody	N684UA	33466	PW4060	407,000	Sep 2002	18.89	14.27
151	Boeing 767-300ER	Widebody	N685UA	33467	PW4060	407,000	Nov 2002	19.10	14.43
152	Boeing 767-300ER	Widebody	N686UA	33468	PW4060	407,000	Jan 2003	19.34	14.68
153	Boeing 767-400ER	Widebody	N66051	29446	CF6-80C2B	450,000	Aug 2000	15.42	12.08
154	Boeing 767-400ER	Widebody	N67052	29447	CF6-80C2B	450,000	Sep 2000	15.56	12.19
155	Boeing 767-400ER	Widebody	N59053	29448	CF6-80C2B	450,000	Oct 2000	15.69	12.29
156	Boeing 767-400ER	Widebody	N66056	29451	CF6-80C2B	450,000	Jun 2001	16.45	13.44
157	Boeing 767-400ER	Widebody	N66057	29452	CF6-80C2B	450,000	Jan 2002	18.10	15.39
158	Boeing 767-400ER	Widebody	N67058	29453	CF6-80C2B	450,000	Jan 2002	18.10	15.39
159 160	Boeing 767-400ER	Widebody	N69059 N78060	29454 29455	CF6-80C2B CF6-80C2B	450,000	Feb 2002 Feb 2002	18.30 18.30	15.56
161	Boeing 767-400ER Boeing 767-400ER	Widebody Widebody	N68061	29456	CF6-80C2B	450,000 450,000	Mar 2002	18.50	15.56 15.73
162	Boeing 767-400ER Boeing 767-400ER	Widebody	N76062	29457	CF6-80C2B	450,000	Mar 2002	18.50	15.73
163	Boeing 767-400ER	Widebody	N69063	29458	CF6-80C2B	450,000	Apr 2002	18.70	15.90
164	Boeing 767-400ER	Widebody	N76064	29459	CF6-80C2B	450,000	Apr 2002	18.70	15.90
165	Boeing 767-400ER	Widebody	N76065	29460	CF6-80C2B	450,000	May 2002	18.90	16.07
166	Boeing 767-400ER	Widebody	N77066	29461	CF6-80C2B	450,000	May 2002	18.90	16.07
167	Boeing 777-200	Widebody	N210UA	30216	PW4077	545,000	Jan 2000	22.05	14.25
168	Boeing 777-200	Widebody	N215UA	30221	PW4077	545,000	Aug 2000	23.44	15.15
169	Boeing 777-200	Widebody	N768UA	26919	PW4077	545,000	Jun 1995	11.60	7.05
170	Boeing 777-200	Widebody	N769UA	26921	PW4077	545,000	Jun 1995	11.60	7.05
171	Boeing 777-200	Widebody	N771UA	26932	PW4077	545,000	Nov 1995	12.60	7.66
172	Boeing 777-200	Widebody	N772UA	26930	PW4077	545,000	Sep 1995	12.20	7.41
173	Boeing 777-200	Widebody	N773UA	26929	PW4077	545,000	Jan 1996	13.12	8.07
174	Boeing 777-200	Widebody	N774UA	26936	PW4077	166,400	Mar 1996	13.51	8.32
175	Boeing 777-200	Widebody	N775UA	26947	PW4077	545,000	Jan 1996	13.12	8.07
176	Boeing 777-200	Widebody	N776UA	26937	PW4077	545,000	Apr 1996	13.71	8.44
177 178	Boeing 777-200	Widebody	N777UA N778UA	26916 26940	PW4077 PW4077	545,000 545,000	May 1995 Jul 1996	11.41 14.31	6.93 8.81
179	Boeing 777-200	Widebody Widebody		26940	PW4077 PW4077	545,000			8.81
180	Boeing 777-200 Boeing 777-200	Widebody	N779UA N780UA	26944	PW4077 PW4077	545,000	Jul 1996 Aug 1996	14.31 14.51	8.93
181	Boeing 777-200	Widebody	N781UA	26945	PW4077	545,000	Sep 1996	14.71	9.05
182	Boeing 777-200ER	Widebody	N78001	27577	GE90-90B	656,000	Sep 1998	21.79	12.39
183	Boeing 777-200ER	Widebody	N78002	27578	GE90-90B	656,000	Sep 1998	21.79	12.39
184	Boeing 777-200ER	Widebody	N78003	27579	GE90-90B	656,000	Nov 1998	22.30	12.67
185	Boeing 777-200ER	Widebody	N78004	27580	GE90-90B	656,000	Nov 1998	22.30	12.67
186	Boeing 777-200ER	Widebody	N78005	27581	GE90-90B	656,000	Dec 1998	22.55	12.82
187	Boeing 777-200ER	Widebody	N77006	29476	GE90-90B	656,000	Dec 1998	22.55	12.82
188	Boeing 777-200ER	Widebody	N74007	29477	GE90-90B	656,000	Feb 1999	23.04	13.52
189	Boeing 777-200ER	Widebody	N78008	29478	GE90-90B	656,000	Mar 1999	23.29	13.67

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Aircraft	Aircraft	Narrow /	Registration	Manufacturer's	Engine	MTOW	Manufacture	Half	
No. 190	Type Boeing 777-200ER	Widebody Widebody	Number N78009	Serial Number 29479	<u>Type</u> GE90-90B	(lbs) 656,000	Apr 1999	BV 23.54	2MV 13.81
191	Boeing 777-200ER Boeing 777-200ER	Widebody	N76010	29480	GE90-90B	656,000	May 1999	23.80	13.96
192	Boeing 777-200ER	Widebody	N79011	29859	GE90-90B	656,000	Jun 1999	24.05	14.11
193	Boeing 777-200ER	Widebody	N78013	29861	GE90-90B	656,000	Sep 1999	24.70	14.49
194	Boeing 777-200ER	Widebody	N27015	28678	GE90-90B	656,000	Apr 2000	26.22	15.87
195	Boeing 777-200ER	Widebody	N57016	28679	GE90-90B	656,000	May 2000	26.44	16.00
196 197	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N78017 N37018	31679 31680	GE90-90B GE90-90B	656,000 656,000	Mar 2002 Apr 2002	32.25 32.50	20.30 20.46
198	Boeing 777-200ER	Widebody	N77019	35547	GE90-90B	656,000	Mar 2007	46.18	30.42
199	Boeing 777-200ER	Widebody	N69020	31687	GE90-90B	656,000	Apr 2007	46.44	30.60
200	Boeing 777-200ER	Widebody	N76021	39776	GE90-90B	656,000	Jul 2010	54.75	37.04
201	Boeing 777-200ER	Widebody	N77022	39777	GE90-90B	656,000	Jul 2010	54.75	37.04
202	Boeing 777-200ER	Widebody	N204UA	28713	PW4090	648,000	Feb 1999	22.68	13.31
203 204	Boeing 777-200ER	Widebody	N206UA N209UA	30212 30215	PW4090 PW4090	648,000 648,000	May 1999 Dec 1999	23.44 24.99	13.76 14.67
205	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N209UA N218UA	30222	PW4090 PW4090	648,000	Jan 2001	27.61	17.22
206	Boeing 777-200ER	Widebody	N219UA	30551	PW4090	648,000	Jan 2001	27.61	17.22
207	Boeing 777-200ER	Widebody	N220UA	30223	PW4090	648,000	May 2001	28.72	17.91
208	Boeing 777-200ER	Widebody	N221UA	30552	PW4090	648,000	Jun 2001	29.00	18.08
209	Boeing 777-200ER	Widebody	N222UA	30553	PW4090	648,000	Jul 2001	29.26	18.24
210	Boeing 777-200ER	Widebody	N224UA	30225	PW4090	648,000	Dec 2001	30.53	19.04
211 212	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N225UA N226UA	30554 30226	PW4090 PW4090	648,000 648,000	Dec 2001 Jan 2002	30.53 31.29	19.04 19.69
213	Boeing 777-200ER Boeing 777-200ER	Widebody	N227UA	30555	PW4090	648,000	Jan 2002	31.29	19.69
214	Boeing 777-200ER	Widebody	N782UA	26948	PW4090	648,000	Mar 1997	17.10	9.41
215	Boeing 777-200ER	Widebody	N783UA	26950	PW4090	648,000	Mar 1997	17.10	9.41
216	Boeing 777-200ER	Widebody	N784UA	26951	PW4090	648,000	Apr 1997	17.35	9.54
217	Boeing 777-200ER	Widebody	N785UA	26954	PW4090	648,000	May 1997	17.59	9.68
218	Boeing 777-200ER	Widebody	N786UA	26938	PW4090	648,000	Apr 1997	17.35	9.54
219 220	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N787UA N788UA	26939 26942	PW4090 PW4090	648,000 648,000	Jun 1997 Jul 1997	17.84 18.08	9.81 9.94
221	Boeing 777-200ER Boeing 777-200ER	Widebody	N791UA	26933	PW4090	648,000	Aug 1997	18.32	10.08
222	Boeing 777-200ER	Widebody	N792UA	26934	PW4090	648,000	Sep 1997	18.57	10.21
223	Boeing 777-200ER	Widebody	N793UA	26946	PW4090	648,000	Oct 1997	18.81	10.35
224	Boeing 777-200ER	Widebody	N794UA	26953	PW4090	648,000	Nov 1997	19.06	10.48
225	Boeing 777-200ER	Widebody	N795UA	26927	PW4090	648,000	Dec 1997	19.30	10.62
226	Boeing 777-200ER	Widebody	N796UA	26931	PW4090	648,000	Jan 1998	19.49	11.08
227 228	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N797UA N798UA	26924 26928	PW4090 PW4090	648,000 648,000	Feb 1998 Feb 1998	19.73 19.73	11.22 11.22
229	Boeing 777-200ER	Widebody	N799UA	26926	PW4090	648,000	May 1998	20.46	11.63
230	Airbus A319-100	Narrowbody	N801UA	686	V2522-A5	166,400	Jun 1997	7.51	6.42
231	Airbus A319-100	Narrowbody	N802UA	690	V2522-A5	166,400	Jun 1997	7.51	6.42
232	Airbus A319-100	Narrowbody	N803UA	0748	V2522-A5	166,400	Nov 1997	7.83	6.69
233 234	Airbus A319-100	Narrowbody	N804UA	0759	V2522-A5	166,400	Dec 1997	7.90	6.75
234	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N805UA N806UA	0783 0788	V2522-A5 V2522-A5	166,400 166,400	Feb 1998 Feb 1998	8.00 8.00	6.86 6.86
236	Airbus A319-100	Narrowbody	N807UA	0798	V2522-A5 V2522-A5	166,400	Mar 1998	8.06	6.91
237	Airbus A319-100	Narrowbody	N808UA	0804	V2522-A5	166,400	Mar 1998	8.06	6.91
238	Airbus A319-100	Narrowbody	N809UA	0825	V2522-A5	166,400	May 1998	8.19	7.02
239	Airbus A319-100	Narrowbody	N810UA	0843	V2522-A5	166,400	Jun 1998	8.26	7.08
240	Airbus A319-100	Narrowbody	N811UA	0847	V2522-A5	166,400	Jul 1998	8.31	7.12
241 242	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N812UA N813UA	0850 0858	V2522-A5 V2522-A5	166,400 166,400	Jul 1998 Jul 1998	8.31 8.31	7.12 7.12
242	Airbus A319-100 Airbus A319-100	Narrowbody	N814UA	0862	V2522-A5 V2522-A5	166,400	Aug 1998	8.37	7.12
244	Airbus A319-100	Narrowbody	N815UA	0867	V2522-A5	166,400	Aug 1998	8.37	7.17
245	Airbus A319-100	Narrowbody	N816UA	0871	V2522-A5	166,400	Sep 1998	8.43	7.22
246	Airbus A319-100	Narrowbody	N817UA	0873	V2522-A5	166,400	Sep 1998	8.43	7.22
247	Airbus A319-100	Narrowbody	N818UA	0882	V2522-A5	166,400	Oct 1998	8.48	7.27
248	Airbus A319-100	Narrowbody	N819UA	0893	V2522-A5	166,400	Oct 1998	8.48	7.27
249 250	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N820UA N821UA	0898 0944	V2522-A5 V2522-A5	166,400 166,400	Oct 1998 Jan 1999	8.48 8.63	7.27 7.42
251	Airbus A319-100 Airbus A319-100	Narrowbody	N822UA	0948	V2522-A5 V2522-A5	166,400	Feb 1999	8.69	7.42
252	Airbus A319-100	Narrowbody	N823UA	0952	V2522-A5	166,400	Feb 1999	8.69	7.47
253	Airbus A319-100	Narrowbody	N824UA	0965	V2522-A5	166,400	Feb 1999	8.69	7.47
254	Airbus A319-100	Narrowbody	N825UA	0980	V2522-A5	166,400	Mar 1999	8.75	7.52
255	Airbus A319-100	Narrowbody	N826UA	0989	V2522-A5	166,400	Mar 1999	8.75	7.52

Aircraft	Aircraft	Narrow /	Registration	Manufacturer's	Engine	MTOW	Manufacture	Half	
No. 256	Type Airbus A319-100	Widebody Narrowbody	Number N827UA	Serial Number 1022	<u>Type</u> V2522-A5	(lbs) 166,400	May 1999	8.86	7.61
257	Airbus A319-100 Airbus A319-100	Narrowbody	N828UA	1022	V2522-A5 V2522-A5	166,400	Jun 1999	8.91	7.66
258	Airbus A319-100	Narrowbody	N829UA	1211	V2522-A5	166,400	Apr 2000	9.41	8.11
259	Airbus A319-100	Narrowbody	N830UA	1243	V2522-A5	166,400	Jun 2000	9.51	8.19
260	Airbus A319-100	Narrowbody	N831UA	1291	V2522-A5	166,400	Aug 2000	9.66	8.32
261	Airbus A319-100	Narrowbody	N832UA	1321	V2522-A5	166,400	Sep 2000	9.73	8.38
262	Airbus A319-100	Narrowbody	N833UA	1401	V2522-A5	166,400	Jan 2001	9.80	8.47
263	Airbus A319-100	Narrowbody	N834UA	1420	V2522-A5	166,400	Feb 2001	9.87	8.53
264	Airbus A319-100	Narrowbody	N835UA	1426	V2522-A5	166,400	Feb 2001	9.87	8.53
265 266	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N836UA N837UA	1460 1474	V2522-A5 V2522-A5	166,400 166,400	Mar 2001 Apr 2001	9.95 10.02	8.60 8.66
267	Airbus A319-100 Airbus A319-100	Narrowbody	N838UA	1474	V2522-A5 V2522-A5	166,400	Apr 2001 Apr 2001	10.02	8.66
268	Airbus A319-100	Narrowbody	N839UA	1507	V2522-A5 V2522-A5	166,400	May 2001	10.02	8.72
269	Airbus A319-100	Narrowbody	N840UA	1522	V2522-A5	166,400	Jun 2001	10.17	8.79
270	Airbus A319-100	Narrowbody	N841UA	1545	V2522-A5	166,400	Jul 2001	10.23	8.84
271	Airbus A319-100	Narrowbody	N842UA	1569	V2522-A5	166,400	Sep 2001	10.36	8.95
272	Airbus A319-100	Narrowbody	N843UA	1573	V2522-A5	166,400	Aug 2001	10.29	8.90
273	Airbus A319-100	Narrowbody	N844UA	1581	V2522-A5	166,400	Nov 2001	10.48	9.06
274	Airbus A319-100	Narrowbody	N845UA	1585	V2522-A5	166,400	Nov 2001	10.48	9.06
275	Airbus A319-100	Narrowbody	N846UA	1600	V2522-A5	166,400	Nov 2001	10.48	9.06
276	Airbus A319-100	Narrowbody	N847UA	1627	V2522-A5	166,400	Nov 2001	10.48	9.06
277	Airbus A319-100	Narrowbody	N848UA	1647	V2522-A5	166,400	Jan 2002	10.78	9.34
278 279	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N849UA N850UA	1649 1653	V2522-A5 V2522-A5	166,400 166,400	Feb 2002 Feb 2002	10.85 10.85	9.40 9.40
280	Airbus A319-100	Narrowbody	N851UA	1664	V2522-A5 V2522-A5	166,400	Mar 2002	10.03	9.45
281	Airbus A319-100	Narrowbody	N852UA	1671	V2522-A5	166,400	Mar 2002	10.91	9.45
282	Airbus A320-200	Narrowbody	N1902U	2714	V2527-A5	169,700	Feb 2006	18.34	16.84
283	Airbus A320-200	Narrowbody	N423UA	504	V2527-A5	169,700	Feb 1995	8.01	7.09
284	Airbus A320-200	Narrowbody	N424UA	506	V2527-A5	169,700	Feb 1995	8.01	7.09
285	Airbus A320-200	Narrowbody	N425UA	508	V2527-A5	169,700	Mar 1995	8.10	7.18
286	Airbus A320-200	Narrowbody	N426UA	510	V2527-A5	169,700	Mar 1995	8.10	7.18
287	Airbus A320-200	Narrowbody	N427UA	512	V2527-A5	169,700	Apr 1995	8.19	7.26
288	Airbus A320-200	Narrowbody	N428UA	523	V2527-A5	169,700	May 1995	8.29	7.34
289 290	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N429UA N430UA	539 568	V2527-A5 V2527-A5	169,700 169,700	Jun 1995 Feb 1996	8.38 9.04	7.43 8.11
290	Airbus A320-200 Airbus A320-200	Narrowbody	N431UA	571	V2527-A5 V2527-A5	169,700	Mar 1996	9.10	8.17
292	Airbus A320-200	Narrowbody	N432UA	587	V2527-A5	169,700	May 1996	9.24	8.30
293	Airbus A320-200	Narrowbody	N433UA	589	V2527-A5	169,700	Jun 1996	9.31	8.36
294	Airbus A320-200	Narrowbody	N434UA	592	V2527-A5	169,700	Jun 1996	9.31	8.36
295	Airbus A320-200	Narrowbody	N435UA	613	V2527-A5	169,700	Sep 1996	9.57	8.59
296	Airbus A320-200	Narrowbody	N436UA	638	V2527-A5	169,700	Dec 1996	9.83	8.83
297	Airbus A320-200	Narrowbody	N437UA	655	V2527-A5	169,700	Feb 1997	9.68	8.71
298	Airbus A320-200	Narrowbody	N438UA	678	V2527-A5	169,700	May 1997	9.94	8.95
299	Airbus A320-200	Narrowbody	N439UA	683	V2527-A5	169,700	Jun 1997	10.03	9.03
300 301	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N440UA N441UA	702 751	V2527-A5 V2527-A5	169,700 169,700	Jul 1997 Dec 1997	10.12 10.55	9.10 9.49
302	Airbus A320-200 Airbus A320-200	Narrowbody	N442UA	780	V2527-A5 V2527-A5	169,700	Feb 1998	10.69	9.65
303	Airbus A320-200	Narrowbody	N443UA	820	V2527-A5	169,700	May 1998	10.95	9.88
304	Airbus A320-200	Narrowbody	N444UA	824	V2527-A5	169,700	May 1998	10.95	9.88
305	Airbus A320-200	Narrowbody	N445UA	826	V2527-A5	169,700	Jun 1998	11.04	9.96
306	Airbus A320-200	Narrowbody	N446UA	834	V2527-A5	169,700	Jun 1998	11.04	9.96
307	Airbus A320-200	Narrowbody	N447UA	836	V2527-A5	169,700	Jul 1998	11.12	10.03
308	Airbus A320-200	Narrowbody	N448UA	842	V2527-A5	169,700	Jul 1998	11.13	10.04
309	Airbus A320-200	Narrowbody	N449UA	851	V2527-A5	169,700	Jul 1998	11.13	10.04
310	Airbus A320-200	Narrowbody	N451UA	865	V2527-A5	169,700	Sep 1998	11.30	10.20
311 312	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N452UA N453UA	0955 1001	V2527-A5 V2527-A5	169,700 169,700	Mar 1999 Apr 1999	11.81 11.90	10.67 10.75
313	Airbus A320-200	Narrowbody	N454UA	1104	V2527-A5 V2527-A5	169,700	Nov 1999	12.43	11.24
314	Airbus A320-200	Narrowbody	N455UA	1105	V2527-A5	169,700	Nov 1999	12.43	11.24
315	Airbus A320-200	Narrowbody	N456UA	1128	V2527-A5	169,700	Dec 1999	12.50	11.30
316	Airbus A320-200	Narrowbody	N457UA	1146	V2527-A5	169,700	Jan 2000	12.56	11.38
317	Airbus A320-200	Narrowbody	N458UA	1163	V2527-A5	169,700	Feb 2000	12.64	11.45
318	Airbus A320-200	Narrowbody	N459UA	1192	V2527-A5	169,700	Apr 2000	12.78	11.58
319	Airbus A320-200	Narrowbody	N460UA	1248	V2527-A5	169,700	Jun 2000	12.92	11.71
320	Airbus A320-200	Narrowbody	N461UA	1266	V2527-A5	169,700	Jul 2000	13.03	11.80
321	Airbus A320-200	Narrowbody	N462UA	1272	V2527-A5	169,700	Jul 2000	13.03	11.80

Aircraft No.	Aircraft Type	Narrow / Widebody	Registration Number	Manufacturer's Serial Number	Engine Type	MTOW (lbs)	Manufacture Date	Half- BV	-Life CMV
322	Airbus A320-200	Narrowbody	N463UA	1282	V2527-A5	169,700	Aug 2000	13.13	11.90
323	Airbus A320-200	Narrowbody	N464UA	1290	V2527-A5	169,700	Aug 2000	13.13	11.90
324	Airbus A320-200	Narrowbody	N465UA	1341	V2527-A5	169,700	Nov 2000	13.44	12.18
325	Airbus A320-200	Narrowbody	N466UA	1343	V2527-A5	169,700	Nov 2000	13.44	12.18
326	Airbus A320-200	Narrowbody	N467UA	1359	V2527-A5	169,700	Dec 2000	13.54	12.27
327	Airbus A320-200	Narrowbody	N468UA	1363	V2527-A5	169,700	Dec 2000	13.54	12.27
328	Airbus A320-200	Narrowbody	N469UA	1409	V2527-A5	169,700	Feb 2001	13.44	12.20
329	Airbus A320-200	Narrowbody	N470UA	1427	V2527-A5	169,700	Mar 2001	13.54	12.30
330	Airbus A320-200	Narrowbody	N471UA	1432	V2527-A5	169,700	Mar 2001	13.54	12.30
331	Airbus A320-200	Narrowbody	N472UA	1435	V2527-A5	169,700	Apr 2001	13.65	12.39
332	Airbus A320-200	Narrowbody	N473UA	1469	V2527-A5	169,700	May 2001	13.75	12.48
333	Airbus A320-200	Narrowbody	N474UA	1475	V2527-A5	169,700	May 2001	13.75	12.48
334	Airbus A320-200	Narrowbody	N475UA	1495	V2527-A5	169,700	Jun 2001	13.85	12.58
335	Airbus A320-200	Narrowbody	N476UA	1508	V2527-A5	169,700	Jul 2001	13.94	12.66
336	Airbus A320-200	Narrowbody	N477UA	1514	V2527-A5	169,700	Jul 2001	13.94	12.66
337	Airbus A320-200	Narrowbody	N478UA	1533	V2527-A5	169,700	Aug 2001	14.03	12.74
338	Airbus A320-200	Narrowbody	N479UA	1538	V2527-A5	169,700	Aug 2001	14.03	12.74
339	Airbus A320-200	Narrowbody	N480UA	1555	V2527-A5	169,700	Sep 2001	14.12	12.82
340	Airbus A320-200	Narrowbody	N486UA	1620	V2527-A5	169,700	Dec 2001	14.39	13.07
341	Airbus A320-200	Narrowbody	N487UA	1669	V2527-A5	169,700	Jan 2002	14.72	13.39
342	Airbus A320-200	Narrowbody	N488UA	1680	V2527-A5	169,700	Feb 2002	14.81	13.47
343	Airbus A320-200	Narrowbody	N4901U	2680	V2527-A5	169,700	Feb 2006	18.34	16.84
344	Airbus A320-200	Narrowbody	N490UA	1728	V2527-A5	169,700	Apr 2002	14.99	13.64
345	Airbus A320-200	Narrowbody	N491UA	1741	V2527-A5	169,700	Apr 2002	14.99	13.64
346	Airbus A320-200	Narrowbody	N492UA	1755	V2527-A5	169,700	Apr 2002	14.99	13.64
347	Airbus A320-200	Narrowbody	N493UA	1821	V2527-A5	169,700	Jul 2002	15.24	13.86
348	Airbus A320-200	Narrowbody	N494UA	1840	V2527-A5	169,700	Sep 2002	15.38	13.99
349	Airbus A320-200	Narrowbody	N495UA	1842	V2527-A5	169,700	Aug 2002	15.31	13.93
350	Airbus A320-200	Narrowbody	N496UA	1845	V2527-A5	169,700	Sep 2002	15.38	13.99
351	Airbus A320-200	Narrowbody	N497UA	1847	V2527-A5	169,700	Sep 2002	15.38	13.99
352	Airbus A320-200	Narrowbody	N498UA	1865	V2527-A5	169,700	Oct 2002	15.45	14.06

# FIGURE 2 UNITED AIRLINES

# HALF-LIFE FUTURE BASE VALUES (2% ANNUAL INFLATION) ALL VALUES IN U.S. \$ MILLIONS VALUES AS OF SEPTEMBER 1, 2020

Aircraft	Aircraft	Narrow/	Registration	Manufacturer's	Engine	MTOW	Manufacture	2020	2024	2022	2022	2024	202	2025	202	2020
No. 1	Type Boeing 737-700	Widebody Narrowbody	Number N25705	Serial Number 28766	Type CFM56-7B24	(lbs) 154,500	May 1998	2020 8.94	2021 8.37	2022 7.78	7.51	2024 7.07	2025 6.52	2026 6.05	2027 5.62	2028 5.14
2	Boeing 737-700	Narrowbody	N24706	28767	CFM56-7B24	154,500	May 1998	8.94	8.37	7.78	7.51	7.07	6.52	6.05	5.62	5.14
3 4	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N23707 N23708	28768 28769	CFM56-7B24 CFM56-7B24	154,500 154,500	May 1998 Jun 1998	8.94 8.99	8.37 8.42	7.78 7.82	7.51 7.56	7.07 7.11	6.52 6.56	6.05 6.09	5.62 5.65	5.14 5.17
5	Boeing 737-700	Narrowbody	N16709	28779	CFM56-7B24	154,500	Aug 1998	9.10	8.52	7.92	7.65	7.20	6.64	6.16	5.72	5.23
6 7	Boeing 737-700	Narrowbody	N15710	28780	CFM56-7B24	154,500	Aug 1998	9.10 9.15	8.52	7.92	7.65	7.20	6.64	6.16	5.72	5.23
8	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N54711 N15712	28782 28783	CFM56-7B24 CFM56-7B24	154,500 154,500	Sep 1998 Sep 1998	9.15	8.57 8.57	7.96 7.96	7.70 7.70	7.24 7.24	6.68 6.68	6.20 6.20	5.76 5.76	5.26 5.26
9	Boeing 737-700	Narrowbody	N33714	28785	CFM56-7B24	154,500	Sep 1998	9.15	8.57	7.96	7.70	7.24	6.68	6.20	5.76	5.26
10 11	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N24715 N13716	28786 28787	CFM56-7B24 CFM56-7B24	154,500 154,500	Oct 1998 Dec 1998	9.21 9.32	8.62 8.73	8.01 8.11	7.74 7.83	7.28 7.37	6.72 6.80	6.24 6.31	5.79 5.86	5.29 5.35
12	Boeing 737-700	Narrowbody	N29717	28936	CFM56-7B24	154,500	Jan 1999	9.39	8.85	8.29	7.70	7.44	7.00	6.46	5.99	5.57
13	Boeing 737-700	Narrowbody	N13718 N17719	28937	CFM56-7B24	154,500	Jan 1999	9.39	8.85	8.29	7.70	7.44	7.00	6.46	5.99	5.57
14 15	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N17/19 N13720	28938 28939	CFM56-7B24 CFM56-7B24	154,500 154,500	Feb 1999 Feb 1999	9.44 9.44	8.90 8.90	8.34 8.34	7.74 7.74	7.48 7.48	7.04 7.04	6.50 6.50	6.03 6.03	5.60 5.60
16	Boeing 737-700	Narrowbody	N23721	28940	CFM56-7B24	154,500	Mar 1999	9.50	8.95	8.38	7.79	7.53	7.08	6.53	6.06	5.63
17 18	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N27722 N21723	28789 28790	CFM56-7B24 CFM56-7B24	154,500 154,500	Apr 1999 Apr 1999	9.55 9.55	9.00 9.00	8.43 8.43	7.83 7.83	7.57 7.57	7.12 7.12	6.57 6.57	6.10 6.10	5.66 5.66
19	Boeing 737-700	Narrowbody	N39728	28944	CFM56-7B24	154,500	Jul 1999	9.71	9.15	8.57	7.96	7.69	7.24	6.68	6.20	5.76
20	Boeing 737-700	Narrowbody	N24729	28945 28799	CFM56-7B24 CFM56-7B24	154,500	Jul 1999	9.71	9.15	8.57	7.96 8.00	7.69 7.73	7.24 7.27	6.68	6.20	5.76
21 22	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N14731 N16732	28948	CFM56-7B24	154,500 154,500	Aug 1999 Aug 1999	9.75 9.75	9.19 9.19	8.61 8.61	8.00	7.73	7.27	6.71 6.71	6.23 6.23	5.78 5.78
23	Boeing 737-700	Narrowbody	N27733	28800	CFM56-7B24	154,500	Sep 1999	9.80	9.24	8.65	8.04	7.77	7.30	6.74	6.26	5.81
24 25	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N27734 N14735	28949 28950	CFM56-7B24 CFM56-7B24	154,500 154,500	Sep 1999 Sep 1999	9.80 9.80	9.24 9.24	8.65 8.65	8.04 8.04	7.77 7.77	7.30 7.30	6.74 6.74	6.26 6.26	5.81 5.81
26	Boeing 737-700	Narrowbody	N24736	28803	CFM56-7B24	154,500	Sep 1999	9.80	9.24	8.65	8.04	7.77	7.30	6.74	6.26	5.81
27 28	Boeing 737-700	Narrowbody	N15751	29047 29048	CFM56-7B24	154,500	Mar 1999	9.50 9.61	8.95 9.06	8.38 8.48	7.79	7.53	7.08	6.53	6.06	5.63
20 29	Boeing 737-700 Boeing 737-700	Narrowbody Narrowbody	N17752 N7714B	32679	CFM56-7B24 CFM56-7B22	154,500 154,500	May 1999 May 2004		11.77	11.34	7.88 10.85	7.61 10.04	7.16 9.52	6.61 8.98	6.13 8.41	5.70 7.81
30	Boeing 737-700	Narrowbody	N7703A	32653	CFM56-7B22	154,500	Sep 2004	12.69	11.98	11.55	11.04	10.22	9.69	9.14	8.56	7.95
31 32	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N25201 N33209	28958 30581	CFM56-7B26 CFM56-7B26	174,200 174,200	Dec 1999 Aug 2000		11.98 12.70	11.28 12.04	10.54 11.34	10.24 10.59	9.68 10.29	8.99 9.73	8.39 9.03	7.83 8.43
33	Boeing 737-800	Narrowbody	N26210	28770	CFM56-7B26	174,200	Jun 1998		10.43	9.74	9.46	8.95	8.30	7.75	7.23	6.65
34	Boeing 737-800	Narrowbody	N24211	28771	CFM56-7B26	174,200	Jun 1998		10.43	9.74	9.46	8.95	8.30	7.75	7.23	6.65
35 36	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N24212 N27213	28772 28773	CFM56-7B26 CFM56-7B26	174,200 174,200	Jun 1998 Jul 1998		10.43 10.51	9.74 9.82	9.46 9.54	8.95 9.02	8.30 8.37	7.75 7.81	7.23 7.30	6.65 6.70
37	Boeing 737-800	Narrowbody	N14214	28774	CFM56-7B26	174,200	Jul 1998	11.17	10.51	9.82	9.54	9.02	8.37	7.81	7.30	6.70
38 39	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N26215 N12216	28775 28776	CFM56-7B26 CFM56-7B26	174,200 174,200	Aug 1998 Aug 1998		10.60 10.60	9.90 9.90	9.62 9.62	9.10 9.10	8.44 8.44	7.88 7.88	7.36 7.36	6.76 6.76
40	Boeing 737-800	Narrowbody	N16217	28777	CFM56-7B26	174,200	Jul 1998		10.51	9.82	9.54	9.02	8.37	7.81	7.30	6.70
41	Boeing 737-800	Narrowbody	N12218	28778	CFM56-7B26	174,200	Aug 1998		10.60	9.90	9.62	9.10	8.44	7.88	7.36	6.76
42 43	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N14219 N18220	28781 28929	CFM56-7B26 CFM56-7B26	174,200 174,200	Aug 1998 Nov 1998	11.26 11.54	10.60 10.86	9.90 10.15	9.62 9.86	9.10 9.32	8.44 8.65	7.88 8.07	7.36 7.54	6.76 6.92
44	Boeing 737-800	Narrowbody	N12221	28930	CFM56-7B26	174,200	Dec 1998	11.63	10.95	10.23	9.94	9.40	8.72	8.14	7.60	6.98
45 46	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N34222 N18223	28931 28932	CFM56-7B26 CFM56-7B26	174,200 174,200	Dec 1998 Dec 1998	11.63 11.63	10.95 10.95	10.23 10.23	9.94 9.94	9.40 9.40	8.72 8.72	8.14 8.14	7.60 7.60	6.98 6.98
47	Boeing 737-800	Narrowbody	N13227	28788	CFM56-7B26	174,200	May 1999		11.47	10.80	10.09	9.80	9.27	8.60	8.03	7.49
48 49	Boeing 737-800	Narrowbody	N14228	28792	CFM56-7B26	174,200	May 1999		11.47	10.80	10.09	9.80	9.27	8.60	8.03	7.49
50	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N26232 N16234	28942 28946	CFM56-7B26 CFM56-7B26	174,200 174,200	Jun 1999 Aug 1999		11.55 11.70	10.88 11.01	10.16 10.29	9.87 10.00	9.34 9.45	8.66 8.77	8.09 8.19	7.55 7.64
51	Boeing 737-800	Narrowbody	N14235	28947	CFM56-7B26	174,200	Aug 1999		11.70	11.01	10.29	10.00	9.45	8.77	8.19	7.64
52 53	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N35236 N14237	28801 28802	CFM56-7B26 CFM56-7B26	174,200 174,200	Sep 1999 Sep 1999		11.77 11.77	11.08 11.08	10.35 10.35	10.06 10.06	9.51 9.51	8.83 8.83	8.24 8.24	7.69 7.69
54	Boeing 737-800	Narrowbody	N14240	28952	CFM56-7B26	174,200	Oct 1999	12.49	11.84	11.15	10.42	10.12	9.57	8.88	8.29	7.74
55 56	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N18243 N17245	28806 28955	CFM56-7B26 CFM56-7B26	174,200 174,200	Oct 1999 Nov 1999		11.84 11.91	11.15 11.22	10.42 10.48	10.12 10.18	9.57 9.63	8.88 8.93	8.29 8.34	7.74 7.78
57	Boeing 737-800	Narrowbody	N14250	28957	CFM56-7B26	174,200	Dec 1999		11.98	11.28	10.54	10.24	9.68	8.99	8.39	7.83
58	Boeing 737-800	Narrowbody	N37252	30583	CFM56-7B26	174,200	Sep 2000		12.80	12.14	11.43	10.68	10.37	9.81	9.10	8.49
59 60	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N37253 N76254	30584 30779	CFM56-7B26 CFM56-7B26	174,200 174,200	Sep 2000 Sep 2000		12.80 12.80	12.14 12.14	11.43 11.43	10.68 10.68	10.37 10.37	9.81 9.81	9.10 9.10	8.49 8.49
61	Boeing 737-800	Narrowbody	N77258	30802	CFM56-7B26	174,200	Nov 2000	13.64	13.01	12.33	11.61	10.85	10.54	9.96	9.25	8.63
62 63	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N35260 N33266	30855 32403	CFM56-7B26 CFM56-7B26	174,200 174,200	Jun 2001 Aug 2001	14.13 14.32	13.15 13.33	12.54 12.70	11.89 12.04	11.19 11.34	10.45 10.59	10.16 10.29	9.61 9.73	8.91 9.03
64	Boeing 737-800	Narrowbody	N36272	31590	CFM56-7B26	174,200	Nov 2001	14.60	13.59	12.95	12.28	11.56	10.80	10.49	9.92	9.21
65 66	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N73276 N37277	31594 31595	CFM56-7B26 CFM56-7B26	174,200 174,200	Feb 2002 Mar 2002	15.14 15.23	14.56 14.65	13.55 13.63	12.92 13.00	12.24 12.32	11.53 11.60	10.77 10.84	10.46 10.53	9.89 9.95
67	Boeing 737-800	Narrowbody	N73278	31596	CFM56-7B26	174,200	Oct 2003	16.87	16.34	15.71	14.62	13.94	13.21	12.44	11.62	11.29
68	Boeing 737-800	Narrowbody	N79279	31597	CFM56-7B26	174,200	Nov 2003		16.43	15.80	14.71	14.02	13.29	12.51	11.69	11.35
69 70	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N36280 N37281	31598 31599	CFM56-7B26 CFM56-7B26	174,200 174,200	Dec 2003 Dec 2003	4 = 0.0	16.53 16.53	15.89 15.89	14.79 14.79	14.10 14.10	13.37 13.37	12.58 12.58	11.76 11.76	11.42 11.42
71	Boeing 737-800	Narrowbody	N33286	31600	CFM56-7B26	174,200	May 2004	17.30	16.42	15.91	15.29	14.24	13.57	12.86	12.11	11.32
72	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N37287 N76288	31636	CFM56-7B26 CFM56-7B26	174,200 174,200	May 2004 Jun 2004		16.42			14.24	13.57	12.86 12.94	12.11	11.32
73 74	Boeing 737-800	Narrowbody	N33289	33451 31607	CFM56-7B26	174,200	Jul 2004 Jul 2004		16.51 16.59	16.00 16.07	15.38 15.45	14.32 14.38	13.65 13.71	13.00	12.18 12.24	11.38 11.43
75	Boeing 737-800	Narrowbody	N37290	31601	CFM56-7B26	174,200	Sep 2004	17.63	16.74	16.22	15.59	14.51	13.84	13.11	12.35	11.54
76 77	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N33292 N77295	33455 34001	CFM56-7B26 CFM56-7B26	174,200 174,200	Dec 2004 Aug 2005		16.97 17.92	16.44 17.01		14.71 15.84	14.02 14.75	13.29 14.06	12.52 13.33	11.69 12.55
78	Boeing 737-800	Narrowbody	N77296	34002	CFM56-7B26	174,200	Sep 2005	18.73	18.00	17.10	16.56	15.92	14.82	14.13	13.39	12.61
79 80	Boeing 737-800	Narrowbody Narrowbody	N78501 N76502	31602	CFM56-7B26	174,200	Jul 2006		18.50	17.78	16.88	16.35	15.72	14.63	13.95	13.22
80 81	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N76502 N76503	31603 33461	CFM56-7B26 CFM56-7B26	174,200 174,200	Aug 2006 Aug 2006			17.83 17.83	16.93 16.93	16.40 16.40	15.77 15.77	14.68 14.68	13.99 13.99	13.26 13.26
82	Boeing 737-800	Narrowbody	N76504	31604	CFM56-7B26	174,200	Aug 2006	19.52	18.56	17.83	16.93	16.40	15.77	14.68	13.99	13.26
83 84	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N76505 N78506	32834 32832	CFM56-7B26 CFM56-7B26	174,200 174,200	Sep 2006 Oct 2006		18.61 18.67	17.89 17.94	16.98 17.04	16.45 16.50	15.82 15.87	14.72 14.77	14.04 14.08	13.30 13.34
85	Boeing 737-800	Narrowbody	N76519	30132	CFM56-7B26/3	174,200	Aug 2010	23.89	22.50	21.49	20.74	19.79	18.82	18.08	17.17	16.63
86	Boeing 737-800	Narrowbody	N77520	31658	CFM56-7B26/3	174,200	Aug 2010	23.89	22.50	21.49	20.74	19.79	18.82	18.08	17.17	16.63
87 88	Boeing 737-800 Boeing 737-800	Narrowbody Narrowbody	N79521 N76522	31662 31660	CFM56-7B26/3 CFM56-7B26/3	174,200 174,200	Aug 2010 Aug 2010	23.89 23.89	22.50 22.50	21.49 21.49	20.74 20.74	19.79 19.79	18.82 18.82	18.08 18.08	17.17 17.17	16.63 16.63
89	Boeing 737-800	Narrowbody	N76523	37101	CFM56-7B26/3	174,200	Aug 2010		22.50	21.49		19.79	18.82			16.63
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Aircraft No.	Aircraft Type	Narrow / Widebody	Registration Number	Manufacturer's Serial Number	Engine Type	MTOW (lbs)	Manufacture Date	2020	2021	2022	2023	2024	2025	2026	2027	2028
90	Boeing 737-800	Narrowbody	N78524	31642	CFM56-7B26/3	174,200	Aug 2010	23.89	22.50	21.49	20.74	19.79	18.82	18.08	17.17	16.63
91	Boeing 737-800	Narrowbody	N77525	31659	CFM56-7B26/3	174,200	Aug 2010	23.89	22.50	21.49	20.74	19.79	18.82		17.17	16.63
92	Boeing 737-800	Narrowbody	N76526	38700	CFM56-7B26/3	174,200	Aug 2010	23.89	22.50	21.49	20.74	19.79	18.82		17.17	16.63
93 94	Boeing 737-800 Boeing 737-900ER	Narrowbody Narrowbody	N87527 N27421	38701 37094	CFM56-7B26/3 CFM56-7B26/3	174,200 187,700	Aug 2010 Apr 2008	23.89 21.22	22.50 20.37	21.49 19.34	20.74 18.29	19.79 17.48	18.82 16.51	18.08 15.91	17.17 15.21	16.63 14.08
95	Boeing 737-900ER	Narrowbody	N37422	31620	CFM56-7B26/3	187,700	May 2008	21.29	20.44	19.40	18.35	17.54	16.56	15.96	15.26	14.13
96	Boeing 737-900ER	Narrowbody	N37434	33528	CFM56-7B26/3	187,700	Oct 2009	22.75	21.61	20.74	19.69	18.62	17.80	16.81	16.20	15.49
97 98	Boeing 737-900ER Boeing 737-900ER	Narrowbody	N57439 N45440	33534 33535	CFM56-7B26/3 CFM56-7B26/3	187,700 187,700	Aug 2009 Aug 2009	22.52 22.52	21.39 21.39	20.54 20.54	19.50 19.50	18.44 18.44	17.63 17.63	16.65 16.65	16.04 16.04	15.34 15.34
99	Boeing 737-900ER Boeing 737-900ER	Narrowbody Narrowbody	N53441	30131	CFM56-7B26/3	187,700	Sep 2009	22.64	21.50	20.54	19.59	18.53	17.71	16.73	16.12	15.42
100	Boeing 737-900ER	Narrowbody	N53442	33536	CFM56-7B26/3	187,700	Sep 2009	22.64	21.50	20.64	19.59	18.53	17.71	16.73	16.12	15.42
101	Boeing 757-200	Narrowbody	N21108	27298	RB211-535	255,000	Nov 1994	6.24	5.76	5.35	4.97	4.54	4.30	3.93	3.56	3.19
102 103	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N12109 N13110	27299 27300	RB211-535 RB211-535	255,000 255,000	Dec 1994 Dec 1994	6.30 6.30	5.81 5.81	5.40 5.40	5.01 5.01	4.58 4.58	4.33 4.33	3.97 3.97	3.60 3.60	3.22 3.22
103	Boeing 757-200	Narrowbody	N57111	27301	RB211-535	255,000	Dec 1994	6.30	5.81	5.40	5.01	4.58	4.33	3.97	3.60	3.22
105	Boeing 757-200	Narrowbody	N18112	27302	RB211-535	255,000	Feb 1995	6.45	6.07	5.60	5.20	4.83	4.41	4.18	3.82	3.47
106	Boeing 757-200	Narrowbody	N13113	27555	RB211-535	255,000	Apr 1995	6.56	6.17	5.70	5.29	4.91	4.49	4.25	3.89	3.52
107 108	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N12114 N12116	27556 27558	RB211-535 RB211-535	255,000 255,000	Jul 1995 Mar 1996	6.71 7.08	6.31 6.85	5.82 6.44	5.40 5.94	5.02 5.52	4.58 5.12	4.34 4.68	3.97 4.43	3.60 4.06
109	Boeing 757-200	Narrowbody	N19117	27559	RB211-535	255,000	Apr 1996	7.12	6.88	6.47	5.97	5.54	5.14	4.70	4.45	4.08
110	Boeing 757-200	Narrowbody	N14118	27560	RB211-535	255,000	Mar 1997	7.46	6.93	6.69	6.30	5.81	5.39	5.01	4.57	4.33
111 112	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N18119 N14120	27561 27562	RB211-535 RB211-535	255,000 255,000	May 1997 Jun 1997	7.56 7.62	7.03 7.08	6.79 6.84	6.39 6.43	5.89 5.94	5.47 5.51	5.08 5.11	4.64 4.67	4.39 4.43
113	Boeing 757-200	Narrowbody	N14121	27563	RB211-535	255,000	Jul 1997	7.66	7.12	6.88	6.47	5.97	5.54	5.14	4.70	4.45
114	Boeing 757-200	Narrowbody	N17122	27564	RB211-535	255,000	Aug 1997	7.70	7.16	6.91	6.50	6.00	5.57	5.17	4.73	4.48
115	Boeing 757-200	Narrowbody	N17126	27566	RB211-535	255,000	Feb 1998	7.98	7.47	6.94	6.71	6.31	5.82	5.40	5.02	4.58
116 117	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N48127 N17128	28968 27567	RB211-535 RB211-535	255,000 255,000	Feb 1998 Mar 1998	7.98 8.02	7.47 7.51	6.94 6.98	6.71 6.74	6.31 6.34	5.82 5.85	5.40 5.43	5.02 5.04	4.58 4.61
118	Boeing 757-200	Narrowbody	N29129	28969	RB211-535	255,000	Mar 1998	8.02	7.51	6.98	6.74	6.34	5.85	5.43	5.04	4.61
119	Boeing 757-200	Narrowbody	N19130	28970	RB211-535	255,000	May 1998	8.11	7.59	7.05	6.82	6.41	5.92	5.49	5.10	4.66
120	Boeing 757-200	Narrowbody	N34131	28971	RB211-535	255,000	Jun 1998	8.15	7.63	7.09	6.85	6.45	5.95	5.52	5.13	4.68
121 122	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N33132 N67134	29281 29283	RB211-535 RB211-535	255,000 255,000	Jun 1998 Feb 1999	8.15 8.59	7.63 8.09	7.09 7.58	6.85 7.04	6.45 6.81	5.95 6.40	5.52 5.91	5.13 5.48	4.68 5.09
123	Boeing 757-200	Narrowbody	N41135	29284	RB211-535	255,000	Feb 1999	8.59	8.09	7.58	7.04	6.81	6.40	5.91	5.48	5.09
124	Boeing 757-200	Narrowbody	N19136	29285	RB211-535	255,000	Mar 1999	8.64	8.15	7.63	7.09	6.85	6.44	5.94	5.52	5.12
125 126	Boeing 757-200	Narrowbody	N34137 N13138	30229 30351	RB211-535 RB211-535	255,000 255,000	Nov 1999 Dec 1999	8.98 9.01	8.47 8.50	7.93 7.96	7.37 7.39	7.12 7.15	6.69 6.72	6.18 6.20	5.73 5.76	5.32 5.35
127	Boeing 757-200 Boeing 757-200	Narrowbody Narrowbody	N17139	30352	RB211-535	255,000	Feb 2000	9.10	8.63	8.14	7.62	7.13	6.84	6.44	5.94	5.51
128	Boeing 757-200	Narrowbody	N41140	30353	RB211-535	255,000	Feb 2000	9.10	8.63	8.14	7.62	7.08	6.84	6.44	5.94	5.51
129	Boeing 757-200	Narrowbody	N19141	30354	RB211-535	255,000	Jun 2000	9.25	8.77	8.27	7.74	7.19	6.95	6.54	6.03	5.60
130 131	Boeing 757-300 Boeing 757-300	Narrowbody Narrowbody	N75851 N57852	32810 32811	RB211-535 RB211-535	273,000 273,000	Dec 2001 Dec 2001		12.34 12.34	11.70 11.70	11.03 11.03	10.33 10.33	9.60 9.60	9.27 9.27	8.72 8.72	8.05 8.05
132	Boeing 757-300	Narrowbody	N75853	32812	RB211-535	273,000	Feb 2002	13.77	13.16	12.19	11.56	10.89	10.20	9.48	9.16	8.62
133	Boeing 757-300	Narrowbody	N75854	32813	RB211-535	273,000	Feb 2002	13.77	13.16	12.19	11.56	10.89	10.20	9.48	9.16	8.62
134	Boeing 757-300	Narrowbody	N57855	32814	RB211-535	273,000	Jan 2004		14.96	14.41	13.78	12.76	12.10	11.41	10.68	9.92
135 136	Boeing 757-300 Boeing 757-300	Narrowbody Narrowbody	N74856 N57857	32815 32816	RB211-535 RB211-535	273,000 273,000	Jan 2004 Feb 2004		14.96 15.06	14.41 14.51	13.78 13.88	12.76 12.85	12.10 12.18	11.41 11.48	10.68 10.75	9.92 9.99
137	Boeing 757-300	Narrowbody	N75858	32817	RB211-535	273,000	Mar 2004		15.16	14.61	13.97	12.93	12.26	11.56	10.83	10.06
138	Boeing 757-300	Narrowbody	N56859	32818	RB211-535	273,000	Apr 2004		15.26	14.71	14.06	13.02	12.35	11.64	10.90	10.13
139 140	Boeing 767-300ER	Widebody	N664UA	29236 29238	PW4056 PW4052	407,000	Jun 1998		12.01	11.05	10.58	9.86 10.04	9.02	8.29 8.44	7.63 7.76	6.90 7.03
141	Boeing 767-300ER Boeing 767-300ER	Widebody Widebody	N666UA N667UA	29239	PW4056	407,000 407,000	Aug 1998 Aug 1998		12.23 12.23	11.25 11.25	10.78 10.78	10.04	9.18 9.18	8.44	7.76	7.03
142	Boeing 767-300ER	Widebody	N668UA	30024	PW4056	407,000	Mar 1999	13.98	13.06	12.12	11.15	10.68	9.95	9.10	8.37	7.69
143	Boeing 767-300ER	Widebody	N669UA	30025	PW4056	407,000	Jun 1999	14.33	13.39	12.42	11.43	10.95	10.20	9.33	8.58	7.89
144 145	Boeing 767-300ER Boeing 767-300ER	Widebody Widebody	N670UA N671UA	29240 30026	PW4056 PW4056	407,000 407,000	Aug 1999 Oct 1999	14.54 14.74	13.58 13.77	12.60 12.78	11.60 11.76	11.10 11.26	10.35 10.49	9.46 9.59	8.70 8.82	8.00 8.11
146	Boeing 767-300ER	Widebody	N673UA	29241	PW4052	407,000	Jan 2000	15.04	14.13	13.20	12.25	11.27	10.49	10.06	9.20	8.46
147	Boeing 767-300ER	Widebody	N674UA	29242	PW4052	407,000	Apr 2000	15.34	14.41	13.47	12.49	11.50	11.01	10.26	9.38	8.63
148	Boeing 767-300ER	Widebody	N675UA	29243	PW4056	407,000	Aug 2000		14.87	13.89	12.88	11.86	11.36	10.58	9.68	8.90
149 150	Boeing 767-300ER Boeing 767-300ER	Widebody Widebody	N676UA N684UA	30028 33466	PW4056 PW4060	407,000 407,000	Apr 2001 Sep 2002	16.57 18.89	15.20 17.90	14.28 16.42	13.34 15.42	12.38 14.41	11.39 13.37	10.91 12.30	10.17 11.78	9.29 10.98
151	Boeing 767-300ER	Widebody	N685UA	33467	PW4060	407,000	Nov 2002	19.10	18.10	16.59	15.59	14.56	13.51	12.44	11.91	11.10
152	Boeing 767-300ER	Widebody	N686UA	33468	PW4060	407,000	Jan 2003	19.34	18.47	17.50	16.05	15.08	14.09	13.07	12.03	11.52
153 154	Boeing 767-400ER Boeing 767-400ER	Widebody Widebody	N66051 N67052	29446 29447	CF6-80C2B CF6-80C2B	450,000 450,000	Aug 2000 Sep 2000	15.42 15.56	14.62 14.75	13.78 13.91	12.91 13.02	11.99 12.10	11.59 11.69	10.90 11.00	10.06 10.15	9.34 9.42
155	Boeing 767-400ER	Widebody	N59053	29448	CF6-80C2B	450,000	Oct 2000	15.69	14.88	14.03		12.21	11.79	11.00	10.13	9.50
156	Boeing 767-400ER	Widebody	N66056	29451	CF6-80C2B	450,000	Jun 2001	16.45	15.23	14.44	13.61	12.75	11.84	11.45	10.77	9.94
157	Boeing 767-400ER	Widebody	N66057	29452	CF6-80C2B	450,000	Jan 2002		17.31	16.02	15.19	14.32	13.42	12.46	12.04	11.33
158 159	Boeing 767-400ER Boeing 767-400ER	Widebody Widebody	N67058 N69059	29453 29454	CF6-80C2B CF6-80C2B	450,000 450,000	Jan 2002 Feb 2002		17.31 17.50	16.02 16.20	15.19 15.36	14.32 14.48			12.04 12.18	11.33 11.45
160	Boeing 767-400ER	Widebody	N78060	29455	CF6-80C2B	450,000	Feb 2002	18.30	17.50	16.20	15.36	14.48	13.56	12.60	12.18	11.45
161	Boeing 767-400ER	Widebody	N68061	29456	CF6-80C2B	450,000	Mar 2002		17.69	16.38	15.53	14.64	13.71	12.74	12.31	11.58
162 163	Boeing 767-400ER Boeing 767-400ER	Widebody Widebody	N76062 N69063	29457 29458	CF6-80C2B CF6-80C2B	450,000 450,000	Mar 2002 Apr 2002		17.69 17.88	16.38 16.55	15.53 15.70	14.64 14.80	13.71 13.86	12.74 12.88	12.31 12.44	11.58 11.70
164	Boeing 767-400ER	Widebody	N76064	29459	CF6-80C2B	450,000	Apr 2002 Apr 2002		17.88	16.55	15.70	14.80	13.86	12.88	12.44	11.70
165	Boeing 767-400ER	Widebody	N76065	29460	CF6-80C2B	450,000	May 2002	18.90	18.07	16.73	15.87	14.96	14.01	13.01	12.58	11.83
166	Boeing 767-400ER	Widebody	N77066	29461	CF6-80C2B	450,000	May 2002	18.90	18.07	16.73	15.87	14.96	14.01	13.01	12.58	11.83
167 168	Boeing 777-200 Boeing 777-200	Widebody Widebody	N210UA N215UA	30216 30221	PW4077 PW4077	545,000 545,000	Jan 2000 Aug 2000	22.05 23.44	20.91 22.23	19.71 20.96	18.46 19.63	17.15 18.24	16.57 17.62	15.59 16.58	14.39 15.30	13.35 14.20
169	Boeing 777-200	Widebody	N768UA	26919	PW4077	545,000	Jun 1995		10.92	10.07	9.35	8.68	7.93	7.51	6.88	6.23
170	Boeing 777-200	Widebody	N769UA	26921	PW4077	545,000	Jun 1995	11.60	10.92	10.07	9.35	8.68	7.93	7.51	6.88	6.23
171	Boeing 777-200	Widebody	N771UA	26932	PW4077	545,000	Nov 1995		11.85	10.94	10.15	9.42	8.61	8.15	7.47	6.77
172 173	Boeing 777-200 Boeing 777-200	Widebody Widebody	N772UA N773UA	26930 26929	PW4077 PW4077	545,000 545,000	Sep 1995 Jan 1996		11.48 12.68	10.59 11.92	9.83 11.00	9.13 10.21	8.34 9.48	7.90 8.66	7.23 8.20	6.55 7.51
174	Boeing 777-200	Widebody	N774UA	26936	PW4077	166,400	Mar 1996		13.06	12.28	11.34	10.52	9.77	8.93	8.45	7.74
175	Boeing 777-200	Widebody	N775UA	26947	PW4077	545,000	Jan 1996	13.12	12.68	11.92	11.00	10.21	9.48	8.66	8.20	7.51
176 177	Boeing 777-200 Boeing 777-200	Widebody Widebody	N776UA N777UA	26937 26916	PW4077 PW4077	545,000 545,000	Apr 1996 May 1995		13.25 10.73	12.47 9.90	11.50 9.19	10.68 8.53	9.91 7.80	9.06 7.38	8.58 6.76	7.85 6.12
177	Boeing 777-200 Boeing 777-200	Widebody	N7778UA	26916	PW4077 PW4077	545,000	May 1995 Jul 1996		13.83	13.01	12.00	11.14	10.34	9.45	8.95	8.19
179	Boeing 777-200	Widebody	N779UA	26941	PW4077	545,000	Jul 1996	14.31	13.83	13.01	12.00	11.14	10.34	9.45	8.95	8.19
180	Boeing 777-200	Widebody	N780UA	26944	PW4077	545,000	Aug 1996		14.02	13.19		11.30	10.49	9.58	9.07	8.31
181 182	Boeing 777-200 Boeing 777-200ER	Widebody Widebody	N781UA N78001	26945 27577	PW4077 GE90-90B	545,000 656,000	Sep 1996 Sep 1998	14.71 21.79	14.21 20.30	13.37 18.75	12.34 18.03	11.45 16.86	10.63 15.48	9.71 14.29	9.20 13.19	8.42 11.98
183	Boeing 777-200ER Boeing 777-200ER	Widebody	N78001 N78002	27578	GE90-90B	656,000	Sep 1998	21.79	20.30	18.75	18.03	16.86	15.48	14.29	13.19	11.98
184	Boeing 777-200ER	Widebody	N78003	27579	GE90-90B	656,000	Nov 1998	22.30	20.77	19.19	18.44	17.26	15.84	14.62	13.50	12.26
185 186	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N78004 N78005	27580 27581	GE90-90B GE90-90B	656,000 656,000	Nov 1998 Dec 1998	22.30 22.55	20.77 21.00	19.19 19.41	18.44 18.65	17.26 17.45	15.84 16.02	14.62 14.78	13.50 13.65	12.26 12.40
100		ucoouy	11/0003	27301	GE30-30D	550,000	DCC 1330	-2.33	_2.00	10.41	10.00	17.40	10.02	1 7.70	10.00	+0

Aircraft	Aircraft	Narrow /	Registration	Manufacturer's	Engine	MTOW	Manufacture									
No.	Type	Widebody	Number	Serial Number	Type	(lbs)	Date	2020	2021	2022	2023	2024	2025	2026	2027	2028
187	Boeing 777-200ER	Widebody	N77006	29476	GE90-90B	656,000	Dec 1998	22.55	21.00	19.41	18.65	17.45	16.02	14.78	13.65	12.40
188	Boeing 777-200ER	Widebody	N74007	29477	GE90-90B	656,000	Feb 1999	23.04	21.60	20.12	18.59	17.87	16.72	15.34	14.16	13.08
189 190	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N78008 N78009	29478 29479	GE90-90B GE90-90B	656,000 656,000	Mar 1999 Apr 1999	23.29 23.54	21.84 22.08	20.34 20.56	18.79 19.00	18.06 18.26	16.90 17.08	15.51 15.68	14.32 14.47	13.22 13.36
191	Boeing 777-200ER	Widebody	N76010	29480	GE90-90B	656,000	May 1999	23.80	22.31	20.78	19.20	18.46	17.27	15.85	14.63	13.51
192	Boeing 777-200ER	Widebody	N79011	29859	GE90-90B	656,000	Jun 1999	24.05	22.55	21.00	19.41	18.65	17.45	16.02	14.78	13.65
193	Boeing 777-200ER	Widebody	N78013	29861	GE90-90B	656,000	Sep 1999	24.70	23.16	21.57	19.93	19.16	17.92	16.45	15.18	14.02
194	Boeing 777-200ER	Widebody	N27015	28678	GE90-90B	656,000	Apr 2000	26.22	24.73	23.19	21.60	19.95	19.18	17.94	16.47	15.20
195 196	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N57016 N78017	28679 31679	GE90-90B GE90-90B	656,000 656,000	May 2000 Mar 2002	26.44 32.25	24.93 30.67	23.38 28.24	21.77 26.63	20.12 24.97	19.34 23.26	18.09 21.49	16.60 20.66	15.33 19.33
197	Boeing 777-200ER	Widebody	N37018	31680	GE90-90B	656,000	Apr 2002	32.50	30.92	28.46	26.84	25.17	23.44	21.66	20.82	19.48
198	Boeing 777-200ER	Widebody	N77019	35547	GE90-90B	656,000	Mar 2007	46.18	43.59	41.00	38.99	36.62	35.10	33.39	30.74	28.99
199	Boeing 777-200ER	Widebody	N69020	31687	GE90-90B	656,000	Apr 2007	46.44	43.84	41.24	39.21	36.83	35.31	33.58	30.92	29.16
200	Boeing 777-200ER	Widebody	N76021	39776	GE90-90B	656,000	Jul 2010	54.75	51.02	48.20	46.03	43.45	40.87	38.86	36.51	34.99
201 202	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N77022 N204UA	39777 28713	GE90-90B PW4090	656,000 648,000	Jul 2010 Feb 1999	54.75 22.68	51.02 21.27	48.20 19.81	46.03 18.30	43.45 17.59	40.87 16.46	38.86 15.11	36.51 13.94	34.99 12.87
202	Boeing 777-200ER Boeing 777-200ER	Widebody	N206UA	30212	PW4090	648,000	May 1999	23.44	21.98	20.47	18.92	18.18	17.01	15.61	14.41	13.31
204	Boeing 777-200ER	Widebody	N209UA	30215	PW4090	648,000	Dec 1999	24.99	23.44	21.83	20.17	19.39	18.14	16.65	15.37	14.19
205	Boeing 777-200ER	Widebody	N218UA	30222	PW4090	648,000	Jan 2001	27.61	25.42	23.97	22.48	20.94	19.34	18.59	17.40	15.97
206	Boeing 777-200ER	Widebody	N219UA	30551	PW4090	648,000	Jan 2001	27.61	25.42	23.97	22.48	20.94	19.34	18.59	17.40	15.97
207 208	Boeing 777-200ER	Widebody	N220UA	30223	PW4090	648,000 648,000	May 2001	28.72 29.00	26.44	24.94 25.18	23.39 23.61	21.78 21.99	20.12	19.34 19.53	18.10	16.61
209	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N221UA N222UA	30552 30553	PW4090 PW4090	648,000	Jun 2001 Jul 2001	29.26	26.70 26.93	25.40	23.82	22.19	20.32 20.50	19.70	18.27 18.43	16.77 16.92
210	Boeing 777-200ER	Widebody	N224UA	30225	PW4090	648,000	Dec 2001	30.53	28.11	26.51	24.86	23.15	21.39	20.56	19.24	17.66
211	Boeing 777-200ER	Widebody	N225UA	30554	PW4090	648,000	Dec 2001	30.53	28.11	26.51	24.86	23.15	21.39	20.56	19.24	17.66
212	Boeing 777-200ER	Widebody	N226UA	30226	PW4090	648,000	Jan 2002	31.29	29.76	27.39	25.84	24.23	22.56	20.85	20.04	18.75
213 214	Boeing 777-200ER	Widebody	N227UA	30555	PW4090 PW4090	648,000 648,000	Jan 2002 Mar 1997	31.29 17.10	29.76 15.80	27.39 15.19	25.84 14.21	24.23 13.04	22.56 12.04	20.85 11.12	20.04 10.10	18.75 9.51
214	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N782UA N783UA	26948 26950	PW4090 PW4090	648,000	Mar 1997 Mar 1997	17.10	15.80	15.19	14.21	13.04	12.04	11.12	10.10	9.51
216	Boeing 777-200ER	Widebody	N784UA	26951	PW4090	648,000	Apr 1997	17.35	16.03	15.41	14.41	13.23	12.21	11.27	10.24	9.65
217	Boeing 777-200ER	Widebody	N785UA	26954	PW4090	648,000	May 1997	17.59	16.25	15.62	14.62	13.42	12.38	11.43	10.39	9.78
218	Boeing 777-200ER	Widebody	N786UA	26938	PW4090	648,000	Apr 1997	17.35	16.03	15.41	14.41	13.23	12.21	11.27	10.24	9.65
219	Boeing 777-200ER	Widebody	N787UA	26939	PW4090	648,000	Jun 1997	17.84	16.48	15.84	14.82	13.60	12.55	11.59	10.53	9.92
220 221	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N788UA N791UA	26942 26933	PW4090 PW4090	648,000 648,000	Jul 1997 Aug 1997	18.08 18.32	16.71 16.93	16.06 16.27	15.02 15.23	13.79 13.97	12.73 12.90	11.75 11.91	10.68 10.82	10.06 10.19
222	Boeing 777-200ER	Widebody	N792UA	26934	PW4090	648,000	Sep 1997	18.57	17.16	16.49	15.43	14.16	13.07	12.07	10.96	10.13
223	Boeing 777-200ER	Widebody	N793UA	26946	PW4090	648,000	Oct 1997	18.81	17.38	16.71	15.63	14.35	13.24	12.23	11.11	10.46
224	Boeing 777-200ER	Widebody	N794UA	26953	PW4090	648,000	Nov 1997	19.06	17.61	16.92	15.83	14.53	13.41	12.38	11.25	10.60
225	Boeing 777-200ER	Widebody	N795UA	26927	PW4090	648,000	Dec 1997	19.30	17.83	17.14	16.04	14.72	13.59	12.54	11.40	10.73
226 227	Boeing 777-200ER Boeing 777-200ER	Widebody Widebody	N796UA N797UA	26931 26924	PW4090 PW4090	648,000 648,000	Jan 1998 Feb 1998	19.49 19.73	18.15 18.38	16.77 16.98	16.12 16.32	15.08 15.27	13.84 14.01	12.78 12.94	11.80 11.94	10.72 10.85
228	Boeing 777-200ER	Widebody	N798UA	26928	PW4090	648,000	Feb 1998	19.73	18.38	16.98	16.32	15.27	14.01	12.94	11.94	10.85
229	Boeing 777-200ER	Widebody	N799UA	26926	PW4090	648,000	May 1998	20.46	19.06	17.61	16.93	15.84	14.53	13.42	12.39	11.25
230	Airbus A319-100	Narrowbody	N801UA	686	V2522-A5	166,400	Jun 1997	7.51	6.98	6.74	6.34	5.85	5.43	5.04	4.61	4.36
231	Airbus A319-100	Narrowbody	N802UA	690	V2522-A5	166,400	Jun 1997	7.51	6.98	6.74	6.34	5.85	5.43	5.04	4.61	4.36
232 233	Airbus A319-100	Narrowbody	N803UA	0748 0759	V2522-A5	166,400	Nov 1997	7.83 7.90	7.28 7.34	7.03 7.09	6.61	6.10	5.67 5.71	5.26 5.30	4.81	4.55
233	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N804UA N805UA	0783	V2522-A5 V2522-A5	166,400 166,400	Dec 1997 Feb 1998	8.00	7.49	6.96	6.67 6.73	6.15 6.33	5.84	5.42	4.85 5.03	4.59 4.60
235	Airbus A319-100	Narrowbody	N806UA	0788	V2522-A5	166,400	Feb 1998	8.00	7.49	6.96	6.73	6.33	5.84	5.42	5.03	4.60
236	Airbus A319-100	Narrowbody	N807UA	0798	V2522-A5	166,400	Mar 1998	8.06	7.55	7.02	6.78	6.38	5.89	5.46	5.07	4.63
237	Airbus A319-100	Narrowbody	N808UA	0804	V2522-A5	166,400	Mar 1998	8.06	7.55	7.02	6.78	6.38	5.89	5.46	5.07	4.63
238	Airbus A319-100	Narrowbody	N809UA	0825	V2522-A5	166,400	May 1998	8.19	7.67	7.13	6.89	6.48	5.98	5.55	5.15	4.71
239 240	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N810UA N811UA	0843 0847	V2522-A5 V2522-A5	166,400 166,400	Jun 1998 Jul 1998	8.26 8.31	7.73 7.79	7.18 7.23	6.94 6.99	6.53 6.57	6.03 6.07	5.59 5.63	5.19 5.23	4.74 4.78
241	Airbus A319-100	Narrowbody	N812UA	0850	V2522-A5	166,400	Jul 1998	8.31	7.79	7.23	6.99	6.57	6.07	5.63	5.23	4.78
242	Airbus A319-100	Narrowbody	N813UA	0858	V2522-A5	166,400	Jul 1998	8.31	7.79	7.23	6.99	6.57	6.07	5.63	5.23	4.78
243	Airbus A319-100	Narrowbody	N814UA	0862	V2522-A5	166,400	Aug 1998	8.37	7.84	7.28	7.04	6.62	6.11	5.67	5.26	4.81
244	Airbus A319-100	Narrowbody	N815UA	0867	V2522-A5 V2522-A5	166,400	Aug 1998	8.37	7.84	7.28	7.04	6.62	6.11	5.67	5.26 5.30	4.81
245 246	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N816UA N817UA	0871 0873	V2522-A5 V2522-A5	166,400 166,400	Sep 1998 Sep 1998	8.43 8.43	7.89 7.89	7.33 7.33	7.08 7.08	6.66 6.66	6.15 6.15	5.71 5.71	5.30	4.84 4.84
247	Airbus A319-100	Narrowbody	N818UA	0882	V2522-A5	166,400	Oct 1998	8.48	7.94	7.38	7.13	6.71	6.19	5.75	5.33	4.87
248	Airbus A319-100	Narrowbody	N819UA	0893	V2522-A5	166,400	Oct 1998	8.48	7.94	7.38	7.13	6.71	6.19	5.75	5.33	4.87
249	Airbus A319-100	Narrowbody	N820UA	0898	V2522-A5	166,400	Oct 1998	8.48	7.94	7.38	7.13	6.71	6.19	5.75	5.33	4.87
250 251	Airbus A319-100	Narrowbody	N821UA	0944 0948	V2522-A5 V2522-A5	166,400	Jan 1999 Feb 1999	8.63	8.14	7.62 7.67	7.08	6.84 6.89	6.44 6.48	5.94 5.98	5.51	5.12
252	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N822UA N823UA	0952	V2522-A5	166,400 166,400	Feb 1999	8.69 8.69	8.19 8.19	7.67	7.13 7.13	6.89	6.48	5.98	5.55 5.55	5.15 5.15
253	Airbus A319-100	Narrowbody	N824UA	0965	V2522-A5	166,400	Feb 1999	8.69	8.19	7.67	7.13	6.89	6.48	5.98	5.55	5.15
254	Airbus A319-100	Narrowbody	N825UA	0980	V2522-A5	166,400	Mar 1999	8.75	8.25	7.72	7.17	6.93	6.52	6.02	5.59	5.19
255	Airbus A319-100	Narrowbody	N826UA	0989	V2522-A5	166,400	Mar 1999	8.75	8.25	7.72	7.17	6.93	6.52	6.02	5.59	5.19
256	Airbus A319-100	Narrowbody	N827UA	1022	V2522-A5	166,400	May 1999	8.86	8.35	7.82	7.27	7.02	6.61	6.10	5.66	5.25
257	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N828UA N829UA	1031 1211	V2522-A5 V2522-A5	166,400 166,400	Jun 1999 Apr 2000	9.41	8.41	8.41	7.88	7.07	7.07	6.65	6.14	5.29
259	Airbus A319-100	Narrowbody	N830UA	1243	V2522-A5	166,400	Jun 2000	9.51	9.02	8.50	7.96	7.40	7.15	6.72	6.20	5.76
260	Airbus A319-100	Narrowbody	N831UA	1291	V2522-A5	166,400	Aug 2000	9.66	9.16	8.63	8.08	7.51	7.26	6.83	6.30	5.85
261	Airbus A319-100	Narrowbody	N832UA	1321	V2522-A5	166,400	Sep 2000	9.73	9.23	8.70	8.15	7.57	7.31	6.88	6.35	5.89
262	Airbus A319-100	Narrowbody	N833UA	1401	V2522-A5	166,400	Jan 2001	9.80	9.07	8.60	8.11	7.59	7.06	6.82	6.41	5.92
263 264	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N834UA N835UA	1420 1426	V2522-A5 V2522-A5	166,400 166,400	Feb 2001 Feb 2001	9.87 9.87	9.14 9.14	8.67 8.67	8.17 8.17	7.65 7.65	7.11 7.11	6.87 6.87	6.46 6.46	5.96 5.96
265	Airbus A319-100	Narrowbody	N836UA	1460	V2522-A5	166,400	Mar 2001	9.95	9.21	8.73	8.23	7.71	7.16	6.92	6.51	6.01
266	Airbus A319-100	Narrowbody	N837UA	1474	V2522-A5	166,400	Apr 2001	10.02	9.28	8.80	8.29	7.77	7.21	6.97	6.56	6.05
267	Airbus A319-100	Narrowbody	N838UA	1477	V2522-A5	166,400	Apr 2001	10.02	9.28	8.80	8.29	7.77	7.21	6.97	6.56	6.05
268	Airbus A319-100	Narrowbody	N839UA	1507	V2522-A5	166,400	May 2001	10.09	9.34	8.86	8.35	7.82	7.27	7.02	6.61	6.10
269 270	Airbus A319-100	Narrowbody Narrowbody	N840UA	1522	V2522-A5	166,400	Jun 2001	10.17	9.41	8.93 8.98	8.42	7.88 7.93	7.32	7.07 7.12	6.65 6.70	6.14
270 271	Airbus A319-100 Airbus A319-100	Narrowbody	N841UA N842UA	1545 1569	V2522-A5 V2522-A5	166,400 166,400	Jul 2001 Sep 2001	10.23 10.36	9.47 9.59	9.09	8.47 8.57	8.03	7.37 7.46	7.12	6.78	6.18 6.26
271	Airbus A319-100 Airbus A319-100	Narrowbody	N843UA	1573	V2522-A5	166,400	Aug 2001	10.29	9.53	9.04	8.52	7.98	7.40	7.16	6.74	6.22
273	Airbus A319-100	Narrowbody	N844UA	1581	V2522-A5	166,400	Nov 2001	10.48	9.71	9.20	8.68	8.13	7.55	7.29	6.86	6.33
274	Airbus A319-100	Narrowbody	N845UA	1585	V2522-A5	166,400	Nov 2001	10.48	9.71	9.20	8.68	8.13	7.55	7.29	6.86	6.33
275	Airbus A319-100	Narrowbody	N846UA	1600	V2522-A5	166,400	Nov 2001	10.48	9.71	9.20	8.68	8.13	7.55	7.29	6.86	6.33
276 277	Airbus A319-100 Airbus A319-100	Narrowbody Narrowbody	N847UA N848UA	1627 1647	V2522-A5 V2522-A5	166,400 166,400	Nov 2001 Jan 2002	10.48 10.78	9.71 10.31	9.20 9.55	8.68 9.05	8.13 8.53	7.55 7.99	7.29 7.42	6.86 7.17	6.33
277	Airbus A319-100 Airbus A319-100	Narrowbody	N848UA N849UA	1647 1649	V2522-A5 V2522-A5	166,400 166,400	Feb 2002	10.78	10.31	9.55	9.05	8.58	8.04	7.42	7.17	6.75 6.79
279	Airbus A319-100	Narrowbody	N850UA	1653	V2522-A5	166,400	Feb 2002	10.85	10.37	9.60	9.10	8.58	8.04	7.47	7.22	6.79
280	Airbus A319-100	Narrowbody	N851UA	1664	V2522-A5	166,400	Mar 2002	10.91	10.43	9.66	9.16	8.63	8.09	7.51	7.26	6.83
281	Airbus A319-100	Narrowbody	N852UA	1671	V2522-A5	166,400	Mar 2002	10.91	10.43	9.66	9.16	8.63	8.09	7.51	7.26	6.83
282 283	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N1902U N423UA	2714 504	V2527-A5	169,700 169,700	Feb 2006 Feb 1995	18.34 8.01	17.35 7.53	16.58 6.95	15.66	15.09	14.43	13.36	12.67 4.74	11.94 4.30
203	1110us 11320-200	ranowoody	11423UA	504	V2527-A5	103,700	1.60 1333	0.01	7.33	0.33	6.45	5.99	5.47	5.18	4./4	4.30

Aircraft	Aircraft	Narrow/	Registration	Manufacturer's	Engine	MTOW	Manufacture									
No.	Type	Widebody	Number	Serial Number	Type	(lbs)	Date	2020	2021	2022	2023	2024	2025	2026	2027	2028
284	Airbus A320-200	Narrowbody	N424UA	506	V2527-A5	169,700	Feb 1995	8.01	7.53	6.95	6.45	5.99	5.47	5.18	4.74	4.30
285	Airbus A320-200	Narrowbody	N425UA	508	V2527-A5	169,700	Mar 1995	8.10	7.62	7.03	6.53	6.06	5.54	5.24	4.80	4.35
286	Airbus A320-200	Narrowbody	N426UA	510	V2527-A5	169,700	Mar 1995	8.10	7.62	7.03	6.53	6.06	5.54	5.24	4.80	4.35
287	Airbus A320-200	Narrowbody	N427UA	512	V2527-A5	169,700	Apr 1995	8.19	7.71	7.11	6.60	6.13	5.60	5.30	4.85	4.40
288 289	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N428UA N429UA	523 539	V2527-A5 V2527-A5	169,700 169,700	May 1995 Jun 1995	8.29 8.38	7.80 7.88	7.19 7.28	6.68 6.75	6.20 6.27	5.66 5.73	5.36 5.42	4.91 4.97	4.45 4.50
290	Airbus A320-200 Airbus A320-200	Narrowbody	N430UA	568	V2527-A5 V2527-A5	169,700	Feb 1996	9.04	8.73	8.21	7.58	7.03	6.53	5.97	5.65	5.17
291	Airbus A320-200	Narrowbody	N431UA	571	V2527-A5	169,700	Mar 1996	9.10	8.80	8.27	7.64	7.09	6.58	6.01	5.69	5.21
292	Airbus A320-200	Narrowbody	N432UA	587	V2527-A5	169,700	May 1996	9.24	8.93	8.40	7.75	7.19	6.68	6.10	5.78	5.29
293	Airbus A320-200	Narrowbody	N433UA	589	V2527-A5	169,700	Jun 1996	9.31	9.00	8.46	7.81	7.25	6.73	6.15	5.82	5.33
294	Airbus A320-200	Narrowbody	N434UA	592	V2527-A5	169,700	Jun 1996	9.31	9.00	8.46	7.81	7.25	6.73	6.15	5.82	5.33
295	Airbus A320-200	Narrowbody	N435UA	613	V2527-A5	169,700	Sep 1996	9.57	9.25	8.70	8.03	7.45	6.92	6.32	5.99	5.48
296	Airbus A320-200	Narrowbody	N436UA	638	V2527-A5	169,700	Dec 1996	9.83	9.50	8.94	8.25	7.65	7.11	6.49	6.15	5.63
297	Airbus A320-200	Narrowbody	N437UA	655	V2527-A5	169,700	Feb 1997	9.68	8.99	8.69	8.18	7.54	7.00	6.50	5.94	5.63
298	Airbus A320-200	Narrowbody	N438UA	678	V2527-A5	169,700	May 1997	9.94	9.24	8.93	8.40	7.75	7.19	6.68	6.10	5.78
299 300	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N439UA N440UA	683 702	V2527-A5 V2527-A5	169,700 169,700	Jun 1997 Jul 1997	10.03 10.12	9.32 9.40	9.00 9.08	8.47 8.54	7.82 7.88	7.25 7.32	6.74 6.79	6.15 6.21	5.83 5.88
301	Airbus A320-200 Airbus A320-200	Narrowbody	N441UA	751	V2527-A5 V2527-A5	169,700	Dec 1997	10.12	9.80	9.47	8.91	8.22	7.63	7.08	6.47	6.13
302	Airbus A320-200 Airbus A320-200	Narrowbody	N442UA	780	V2527-A5 V2527-A5	169,700	Feb 1998	10.55	10.02	9.30	8.99	8.46	7.81	7.24	6.73	6.15
303	Airbus A320-200	Narrowbody	N443UA	820	V2527-A5	169,700	May 1998	10.95	10.26	9.53	9.21	8.66	7.99	7.42	6.89	6.29
304	Airbus A320-200	Narrowbody	N444UA	824	V2527-A5	169,700	May 1998	10.95	10.26	9.53	9.21	8.66	7.99	7.42	6.89	6.29
305	Airbus A320-200	Narrowbody	N445UA	826	V2527-A5	169,700	Jun 1998	11.04	10.34	9.60	9.28	8.73	8.06	7.48	6.94	6.34
306	Airbus A320-200	Narrowbody	N446UA	834	V2527-A5	169,700	Jun 1998	11.04	10.34	9.60	9.28	8.73	8.06	7.48	6.94	6.34
307	Airbus A320-200	Narrowbody	N447UA	836	V2527-A5	169,700	Jul 1998	11.12	10.42	9.68	9.35	8.80	8.12	7.54	7.00	6.39
308	Airbus A320-200	Narrowbody	N448UA	842	V2527-A5	169,700	Jul 1998	11.13	10.42	9.68	9.35	8.80	8.12	7.54	7.00	6.39
309	Airbus A320-200	Narrowbody	N449UA	851	V2527-A5	169,700	Jul 1998	11.13	10.42	9.68	9.35	8.80	8.12	7.54	7.00	6.39
310 311	Airbus A320-200	Narrowbody	N451UA	865 0955	V2527-A5 V2527-A5	169,700	Sep 1998	11.30	10.59 11.13	9.83 10.42	9.50 9.69	8.94 9.36	8.25 8.80	7.66 8.12	7.11 7.54	6.50 7.00
312	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N452UA N453UA	1001	V2527-A5 V2527-A5	169,700 169,700	Mar 1999 Apr 1999	11.81 11.90	11.13	10.42	9.76	9.43	8.87	8.19	7.60	7.05
313	Airbus A320-200	Narrowbody	N454UA	1104	V2527-A5	169,700	Nov 1999	12.43	11.72	10.98	10.20	9.85	9.27	8.55	7.94	7.37
314	Airbus A320-200	Narrowbody	N455UA	1105	V2527-A5	169,700	Nov 1999	12.43	11.72	10.98	10.20	9.85	9.27	8.55	7.94	7.37
315	Airbus A320-200	Narrowbody	N456UA	1128	V2527-A5	169,700	Dec 1999	12.50	11.79	11.04	10.26	9.91	9.32	8.60	7.99	7.41
316	Airbus A320-200	Narrowbody	N457UA	1146	V2527-A5	169,700	Jan 2000	12.56	11.91	11.23	10.52	9.77	9.44	8.88	8.20	7.61
317	Airbus A320-200	Narrowbody	N458UA	1163	V2527-A5	169,700	Feb 2000	12.64	11.98	11.30	10.58	9.83	9.50	8.93	8.24	7.65
318	Airbus A320-200	Narrowbody	N459UA	1192	V2527-A5	169,700	Apr 2000	12.78	12.12	11.43	10.70	9.94	9.61	9.04	8.34	7.74
319	Airbus A320-200	Narrowbody	N460UA	1248	V2527-A5	169,700	Jun 2000	12.92	12.26	11.55	10.82	10.05	9.71	9.14	8.43	7.83
320 321	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N461UA N462UA	1266 1272	V2527-A5 V2527-A5	169,700 169,700	Jul 2000 Jul 2000	13.03 13.03	12.35 12.35	11.65 11.65	10.91 10.91	10.13 10.13	9.79 9.79	9.21 9.21	8.50 8.50	7.89 7.89
322	Airbus A320-200 Airbus A320-200	Narrowbody	N463UA	1282	V2527-A5 V2527-A5	169,700	Aug 2000	13.13	12.45	11.74	10.91	10.13	9.87	9.28	8.57	7.95
323	Airbus A320-200	Narrowbody	N464UA	1290	V2527-A5	169,700	Aug 2000	13.13	12.45	11.74	10.99	10.21	9.87	9.28	8.57	7.95
324	Airbus A320-200	Narrowbody	N465UA	1341	V2527-A5	169,700	Nov 2000	13.44	12.74	12.01	11.25	10.45	10.10	9.50	8.77	8.14
325	Airbus A320-200	Narrowbody	N466UA	1343	V2527-A5	169,700	Nov 2000	13.44	12.74	12.01	11.25	10.45	10.10	9.50	8.77	8.14
326	Airbus A320-200	Narrowbody	N467UA	1359	V2527-A5	169,700	Dec 2000	13.54	12.84	12.11	11.34	10.53	10.18	9.57	8.84	8.20
327	Airbus A320-200	Narrowbody	N468UA	1363	V2527-A5	169,700	Dec 2000	13.54	12.84	12.11	11.34	10.53	10.18	9.57	8.84	8.20
328	Airbus A320-200	Narrowbody	N469UA	1409	V2527-A5	169,700	Feb 2001	13.44	12.44	11.80	11.12	10.42	9.68	9.35	8.80	8.12
329	Airbus A320-200	Narrowbody	N470UA	1427	V2527-A5	169,700	Mar 2001	13.54	12.54	11.89	11.21	10.50	9.75	9.42	8.86	8.18
330 331	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N471UA N472UA	1432 1435	V2527-A5 V2527-A5	169,700 169,700	Mar 2001 Apr 2001	13.54 13.65	12.54 12.63	11.89 11.98	11.21 11.29	10.50 10.58	9.75 9.83	9.42 9.49	8.86 8.93	8.18 8.24
332	Airbus A320-200 Airbus A320-200	Narrowbody	N473UA	1469	V2527-A5 V2527-A5	169,700	May 2001	13.75	12.73	12.07	11.38	10.56	9.90	9.57	9.00	8.30
333	Airbus A320-200	Narrowbody	N474UA	1475	V2527-A5	169,700	May 2001	13.75	12.73	12.07	11.38	10.66	9.90	9.57	9.00	8.30
334	Airbus A320-200	Narrowbody	N475UA	1495	V2527-A5	169,700	Jun 2001	13.85	12.82	12.16	11.46	10.74	9.97	9.64	9.07	8.37
335	Airbus A320-200	Narrowbody	N476UA	1508	V2527-A5	169,700	Jul 2001	13.94	12.91	12.24	11.54	10.81	10.04	9.70	9.12	8.42
336	Airbus A320-200	Narrowbody	N477UA	1514	V2527-A5	169,700	Jul 2001	13.94	12.91	12.24	11.54	10.81	10.04	9.70	9.12	8.42
337	Airbus A320-200	Narrowbody	N478UA	1533	V2527-A5	169,700	Aug 2001	14.03	12.99	12.32	11.61	10.87	10.10	9.76	9.18	8.48
338	Airbus A320-200	Narrowbody	N479UA	1538	V2527-A5	169,700	Aug 2001	14.03	12.99	12.32	11.61	10.87	10.10	9.76	9.18	8.48
339 340	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N480UA N486UA	1555 1620	V2527-A5 V2527-A5	169,700 169,700	Sep 2001 Dec 2001	14.12 14.39	13.07 13.32	12.40 12.63	11.69 11.91	10.94 11.15	10.17 10.36	9.83 10.01	9.24 9.42	8.53 8.69
341	Airbus A320-200 Airbus A320-200	Narrowbody	N487UA	1669	V2527-A5 V2527-A5	169,700	Jan 2002	14.72	14.07	13.03	12.35	11.15	10.56	10.01	9.42	9.21
342	Airbus A320-200 Airbus A320-200	Narrowbody	N488UA	1680	V2527-A5	169,700	Feb 2002	14.81	14.16	13.11	12.43	11.72	10.97	10.13	9.85	9.27
343	Airbus A320-200	Narrowbody	N4901U	2680	V2527-A5	169,700	Feb 2006	18.34	17.35	16.58	15.66	15.09	14.43	13.36	12.67	11.94
344	Airbus A320-200	Narrowbody	N490UA	1728	V2527-A5	169,700	Apr 2002	14.99	14.33	13.26	12.58	11.86	11.11	10.32	9.97	9.38
345	Airbus A320-200	Narrowbody	N491UA	1741	V2527-A5	169,700	Apr 2002	14.99	14.33	13.26	12.58	11.86	11.11	10.32	9.97	9.38
346	Airbus A320-200	Narrowbody	N492UA	1755	V2527-A5	169,700	Apr 2002	14.99	14.33	13.26	12.58	11.86	11.11	10.32	9.97	9.38
347	Airbus A320-200	Narrowbody	N493UA	1821	V2527-A5	169,700	Jul 2002	15.24	14.57	13.49	12.79	12.06	11.29	10.49	10.14	9.53
348	Airbus A320-200	Narrowbody	N494UA	1840	V2527-A5	169,700	Sep 2002	15.38	14.70	13.61	12.91	12.17	11.39	10.59	10.23	9.62
349	Airbus A320-200	Narrowbody	N495UA	1842	V2527-A5	169,700	Aug 2002	15.31	14.64	13.55	12.85	12.11	11.34	10.54	10.18	9.58
350 351	Airbus A320-200 Airbus A320-200	Narrowbody Narrowbody	N496UA N497UA	1845 1847	V2527-A5 V2527-A5	169,700 169,700	Sep 2002 Sep 2002	15.38 15.38	14.70 14.70	13.61 13.61	12.91 12.91	12.17 12.17	11.39 11.39	10.59 10.59	10.23 10.23	9.62 9.62
352	Airbus A320-200 Airbus A320-200	Narrowbody	N498UA	1865	V2527-A5 V2527-A5	169,700	Oct 2002	15.45	14.77	13.67	12.96	12.17	11.45	10.63	10.23	9.67
332	1111003 AJ20-200	1 tarrow body	14-30 U.A	1003	+ 4347-A3	103,700	OCI 2002	10.40	14.//	13.07	12.30	14.44	11.43	10.03	10.20	3.07



## An Appraisal of Certain Aircraft and Spare Engines of United Airlines, Inc.

October 7, 2020

Project No. 200163.003 Submitted to: United Airlines, Inc. Submitted by: ICF 630 Third Ave, 11th Floor New York, NY 10017

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#### Introduction and Determination

ICF SH&E Inc. ("ICF") has been retained by United Airlines, Inc. ("UA" or the "Client") to prepare an appraisal of certain commercial jet transport aircraft and commercial turbofan engines.

#### 1. Subject Assets

The "Subject Assets" being appraised are comprised of 352 commercial jet aircraft (collectively known as the "Subject Aircraft") and 99 commercial turbofan engines (the "Subject Engines") owned by UA.

The Subject Aircraft portfolio consists of 63 Boeing 777 aircraft, 28 Boeing 767 aircraft, 38 Boeing 757 aircraft, 100 Boeing 737NG aircraft, and 123 Airbus A320 family aircraft. The Subject Engines portfolio includes three (3) CF6-80C, nine (9) GE90, and nine (9) GEnx engines manufactured by General Electric ("GE"). In addition, the Subject Engines include 26 CFM56-7B and three (3) CFM-LEAP engines manufactured by CFM International ("CFMI"), 14 V2500 engines manufactured by International Aero Engines AG ("IAE"), 25 PW4000 engines manufactured by Pratt & Whitney ("P&W"), and ten (10) RB211-535 engines manufactured by Rolls-Royce ("R-R").

#### 2. Valuation Overview

ICF has been instructed to opine as to the Base Values ("BVs"), Current Market Values ("CMVs") and Residual Values ("RVs") of the Subject Assets assuming Half-Life/Half-Time condition<sup>1</sup>.

ICF conforms to the fundamental concepts and definitions of aircraft valuation established by the International Society of Transport Aircraft Trading ("ISTAT"). For the purpose of this report, ICF has undertaken a Desktop Appraisal.

A desktop appraisal is one which does not include any inspection of the aircraft or review of its maintenance records. It is based upon assumed aircraft condition and maintenance status or information provided to the appraiser or from the appraiser's own database. A desktop appraisal would normally provide a value for a mid-time, mid-life aircraft

This Desktop Appraisal provides an opinion of value for the assets based on documentation provided by UA relating to the condition and maintenance status of the Subject Assets. The values herein are presented as of September 1, 2020 in 2020 U.S. dollars.

<sup>&</sup>lt;sup>1</sup> Half-Time, Half-Life. These are two terms commonly used by appraisers to describe the maintenance time status of an aircraft or engine. Half-Time pertains to scheduled inspections or overhauls that are repeated at specified intervals of time, with "Half-Time" implying that the status is halfway through such an interval. Half-Life pertains to items with mandated life limits (engine disks, for example), and "Half-Life" implies that such items have been in service for one-half of their life limits.



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#### 3. Value Determination

ICF is of the opinion that the values of the Subject Assets are as displayed, below with further detail provided in Appendix A:

Exhibit I-1 - Subject Aircraft as of September 1, 2020 (2020 USD millions)

							Resid	lual (Future	Base) Valı	ues		
Aircraft Model	Qty	Vintage Range	СМУ	в۷	2021	2022	2023	2024	2025	2026	2027	2028
737-700	30	1998 - 2004	\$302.5	\$367.0	\$338.0	\$309.6	\$282.4	\$256.5	\$233.9	\$215.2	\$198.3	\$182.9
737-800	63	1998 - 2010	\$847.6	\$1,000.0	\$924.0	\$851.5	\$780.3	\$709.9	\$641.8	\$579.0	\$523.7	\$475.2
737-900ER	7	2008 - 2009	\$129.6	\$168.5	\$156.3	\$145.0	\$133.8	\$122.3	\$110.6	\$99.9	\$90.2	\$81.9
757-200	29	1994 - 2000	\$164.9	\$226.8	\$198.9	\$175.9	\$157.6	\$143.3	\$131.6	\$121.4	\$112.1	\$103.5
757-300	9	2001 - 2004	\$78.2	\$101.7	\$88.9	\$77.0	\$66.7	\$57.5	\$50.0	\$43.8	\$39.7	\$35.4
767-300ER	14	1998 - 2003	\$124.4	\$149.0	\$127.2	\$108.5	\$93.0	\$80.5	\$71.0	\$63.9	\$58.4	\$56.8
767-400ER	14	2000 - 2002	\$121.8	\$181.3	\$156.9	\$135.7	\$117.9	\$103.2	\$91.7	\$83.2	\$76.6	\$70.7
777-200	15	1995 - 2000	\$101.3	\$162.0	\$153.3	\$144.4	\$135.6	\$126.8	\$118.5	\$110.8	\$103.6	\$96.5
777-200ER	48	1997 - 2010	\$424.1	\$658.8	\$599.5	\$549.8	\$506.0	\$466.2	\$430.7	\$399.1	\$370.7	\$345.1
A319-100	52	1997 - 2002	\$500.2	\$631.9	\$591.6	\$556.3	\$524.7	\$494.9	\$466.8	\$441.2	\$417.5	\$395.4
A320-200	71	1995 - 2006	\$787.5	\$994.2	\$943.9	\$895.4	\$848.3	\$802.3	\$758.6	\$717.9	\$679.8	\$644.5
<b>Grand Total</b>	352		\$3,582.1	\$4,641.3	\$4,278.5	\$3,949.2	\$3,646.3	\$3,363.3	3,105.2	\$2,875.3	\$2,670.5	\$2,487.9

Source: ICF, UA.



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Exhibit I-2 - Subject Engines as of September 1, 2020 (2020 USD millions) Residual (Future Base) Values **2028** \$4.7 \$12.1 0t 3 5 **BV** \$8.8 CF6-80C2B8I CFM56-7B24 \$17.5 \$20.1 \$19.4 \$18.5 \$17.5 \$16.3 \$15.1 \$14.0 \$13.0 CFM56-7B26/3 \$68.9 \$6.0 \$65.7 \$5.8 \$62.0 \$5.6 \$57.8 \$5.4 \$53.7 \$5.2 \$49.9 \$4.9 16 \$62.9 \$71.5 \$46.3 \$43.0 \$6.1 \$4.7 \$4.5 \$5.5 CEM56-7B26E 3 \$20.3 \$22.5 \$22.3 \$7.7 \$21.8 \$21.2 \$20.4 \$19.4 \$18.5 \$17.5 \$16.6 CFM56-7B27E/F GE90-115BL \$7.8 \$7.5 \$7.0 \$6.3 \$5.7 \$37.7 \$46.6 \$54.8 \$52.3 \$49.9 \$47.6 \$45.4 \$43.4 \$41.4 \$39.5 \$27.7 \$62.3 \$24.1 \$64.8 GE90-90B \$23.6 \$29.5 \$25.8 \$22.5 \$21.0 \$19.7 \$18.4 \$17.1 4 \$66.6 \$75.0 Genx-1B70/P2 \$58.0 \$61.1 \$63.5 \$65.8 \$66.5 \$66.8 \$66.1 Genx-1B74/75/P2 \$65.3 \$68.8 \$70.2 \$71.6 \$73.0 \$74.2 \$74.9 \$75.2 \$74.4 Genx-1B76/P2 LEAP-1B26/28 \$18.2 \$19.4 \$19.7 \$19.9 \$19.9 \$19.7 \$30.9 3 \$27.4 \$30.4 \$30.6 \$30.7 \$31.0 \$31.1 \$31.0 \$30.7 \$30.3 \$5.3 PW4056 PW4077 \$6.2 \$21.1 \$5.8 \$19.9 \$4.9 \$17.5 \$4.5 \$16.2 \$4.2 \$14.9 \$3.9 \$13.8 \$3.6 \$12.7 \$3.3 \$11.8 \$5.9 \$17.9 \$18.7 \$44.5 \$16.3 \$5.8 PW4090 16 \$61.3 \$68.1 \$64.3 \$60.4 \$56.4 \$52.2 \$48.2 \$41.1 \$38.0 RB211-535E4-B V2522-A5 \$23.6 \$7.2 \$21.9 \$7.0 \$17.5 \$6.1 10 \$24.1 \$25.4 \$20.3 \$18.9 \$15.1 \$14.1 \$7.4 \$6.7 \$5.6 V2524-A5 3 \$10.9 \$12.4 \$12.1 \$11.7 \$11.2 \$10.7 \$10.2 \$9.8 \$9.3 \$8.9 V2527-A5 \$37.4 \$42.5 \$41.3 \$39.9 \$38.4 \$36.7 \$35.0 \$33.4 \$31.9 \$30.4 **Grand Total** 99 \$524.2 \$582.9 \$568.2 \$552.5 \$535.8 \$517.7 \$499.1 \$480.5 \$462.1 \$443.7

Source: ICF, UA

#### 3.1 Notes to the Determination

- n Although the COVID-19 coronavirus had been impacting Asia since late 2019, the global industry didn't see significant effects until early March 2020. Since the middle of March the commercial airline industry has been facing extraordinary challenges due to a massive reduction in passenger traffic as a result, variously, of changes in consumer behavior, government-imposed restrictions on social gatherings, and international border restrictions in an effort to limit the spread of COVID-19. The impacts of these changes in consumer behavior both voluntary and involuntary are not limited to the commercial airline industry, with all areas of the world economy experiencing significant dislocation. As a result the global economy has entered a significant downturn. Globally, GDP shrank in the second quarter of 2020 by nearly 32% according to the U.S. Bureau of Economic Analysis.
- n In response to the destruction of demand for air travel, airlines worldwide have parked aircraft at unparalleled speed. There is substantial uncertainty and divergent industry opinion regarding when airline traffic will return to some level of normalcy, with forecasts

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ranging from three to five years before domestic and international traffic return to pre-COVID-19 levels.

- n ICF holds the opinion that values, demand and lease rates for all commercial aircraft have been adversely impacted by the current pandemic and economic downturn. However, there has been limited transaction data to guide the appraiser as to the actual impact on values. ICF has therefore made value adjustments based in large part on historic information from previous downturns.
- n At the time these values were initially provided to UA, ICF held the opinion that over the near-term nearly all aircraft would experience declines in values and lease rates, but had not made any firm determinations as to the final level of these reductions.

#### 3.1.1 Pre-COVID-19 Market & Values

- n Prior to the current market downturn, aircraft values were still relatively strong. Although by early 2020 the aircraft value cycle was past its cyclical peak which ICF has determined to be 2018/early 2019.
- n Although airline traffic and profitability were expected to be lower in 2020 compared to 2019, the industry was expected to produce net profits of over \$25 billion for the full year 2020.
- n As noted previously in this report, the economic downturn which has occurred as a result of the changes to consumer behavior and government actions to reduce the spread of COVID-19 has been substantial, with all sectors of the global economy impacted.
- n There is significant uncertainty as to how long current economic conditions will last as well as how rapid traffic will recover once the current crisis abates or if COVID-19 infections rise later in 2020 and beyond, resulting in an extended period of depressed economic conditions.

#### 3.1.2 Additional Aircraft assumptions:

- n ICF has relied on Client for all Asset Specifications including Maximum Takeoff Weight ("MTOW"), Engine types and thrust and added options such as overhead flight crew rests.
- n Manufacture year was provided by UA. Month of manufacture provided by CAPA is assumed if CAPA year of manufacture matched UA; if not, the UA year of manufacture was used and a January month-of-build was assumed.



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#### 4. Definition of Terms

#### 4.1 Base Value (BV)

Base Value is the Appraiser's opinion of the underlying economic value of an aircraft in an open, unrestricted, stable market environment with a reasonable balance of supply and demand, and assumes full consideration of its "highest and best use." An aircraft's Base Value is founded in the historical trend of values and in the projection of value trends and presumes an arm's-length, cash transaction between willing, able and knowledgeable parties, acting prudently, with an absence of duress and with a reasonable period of time available for marketing. In most cases, the Base Value of an aircraft assumes its physical condition is average for an aircraft of its type and age, and its maintenance time status is at Half-Life, Half-Time (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be).

#### 4.2 Current Market Value (CMV)

The CMV is the appraiser's opinion of the most likely trading price that may be generated for an asset under the market circumstances that are perceived to exist at the time in question. Current Market Value assumes that the asset is valued for its highest, best use; that the parties to the hypothetical sale transaction are willing, able, prudent and knowledgeable; that neither is under any unusual pressure for a prompt sale; and that the transaction would be negotiated in an open and unrestricted market on an arm's-length basis, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers.

The Aggregate CMV of multiple assets represents the total of the individual assets' CMVs were they to be sold on an asset-by-asset basis, rather than the value of the assets if sold in bulk. When multiple assets are sold together, however, the value that could be realized from the portfolio of assets is often less than the Aggregate CMV. For this reason, an opinion of the Realizable CMV for the portfolio of assets may be provided.

#### 4.3 Residual Value (RV)

Residual Value is the value of an aircraft, engine or other item at a future date, often used in connection with the conclusion of a lease term. The Residual Values set forth in this appraisal assume 1.5% inflation per annum compounded annually.

For the purpose of this report, ICF has provided Future Base Values which assume supply and demand for the aircraft is in reasonable balance and overall market conditions are neutral.



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## II. Appraisal of the Subject Aircraft

#### 1. Appraisal Methodology

Since ICF was formed in 1963, the firm has appraised virtually every major commercial jet and turboprop aircraft type, in addition to many general aviation and corporate aircraft. ICF's appraisals are performed in accordance with the Principles of Appraisal Practice and Code of Ethics established by the International Society of Transport Aircraft Trading ("ISTAT").

The ICF valuation approach starts by determining a Half-Life value for the appraised asset. The term Half-Life, as used by ICF, refers to an asset that is midway between scheduled or routine major repairs and overhauls and also refers to components with mandated life limits, such as engine disks, that have been in service for one-half of their life limits. Depending on specific appraisal requirements, this initial value can then be adjusted (positive or negative) for each individual unit to reflect the asset's maintenance status relative to the next overhaul. In most cases, Half-Time, Half-Life value of an asset assumes that its physical condition is average and that its maintenance time status is at Half-Time, Half-Life (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be).

ICF Half-Life values are determined on an annual basis, or more frequently as market dynamics dictate, by reviewing recent past sales, aircraft and engine availability trends, technological aspects, environmental constraints, and maintenance requirements.

When valuing aircraft, ICF adjusts the Half-Life value to reflect non-standard engines and the aircraft's MTOW. The value can be further refined to reflect the actual physical condition of the aircraft or any other specific circumstances that may affect its value.

#### 2. Appraisal Assumptions

ICF relied on the following assumptions regarding the Subject Aircraft while performing this appraisal:

- n That the Subject Aircraft meet all specifications and performance capabilities for typical aircraft of the same types, models and configuration.
- n That all normally required maintenance has been performed, including compliance with all Airworthiness Directives ("ADs").
- That, where parked, the Subject Aircraft are in active service or stored and maintained in a manufacturer- or United States Federal Aviation Administration ("FAA") storage program in "flyaway" condition.
- n That all the data and information provided by the Client are accurate representations of the actual conditions or circumstances of the Subject Aircraft.



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- n That all maintenance records are complete and accurate, written in the English language, in compliance with all regulatory requirements, and in accordance with accepted industry standards, and that all life-limited parts ("LLP")<sup>3</sup> records are traceable "back-to-birth"<sup>4</sup>.
- n That all parts and components are of Original Equipment Manufacturer's ("OEM's") origin and are not manufactured under Parts Manufacturer Approval ("PMA") design approval.
- n That the Subject Aircraft have not been involved in any major incident or accident resulting in significant damage.
- n That the Subject Aircraft will remain in their current configurations and continue to be certified for operations under the FAA (or a comparable authority) and have maintenance performed in accordance with industry recognized standards.
- n That the Subject Aircraft are owned by the Client; ICF has not addressed any issues of ownership.

ICF's opinions are based upon historical relationships and expectations that it believes are reasonable. Some of the underlying assumptions, including those described above are detailed explicitly or implicitly elsewhere in this report, and may not materialize because of unanticipated events and circumstances. ICF's opinions could, and would, vary materially, should any of the above assumptions prove to be inaccurate.

<sup>&</sup>lt;sup>4</sup> "Back-to-birth" records are those that provide operating history information for each LLP from the date of its first delivery by the OEM to its first operator and for each subsequent installation.



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<sup>&</sup>lt;sup>3</sup> All jet engines and many landing gear assemblies have **Life-Limited Parts ("LLP's")** installed. LLPs have a finite operating life, measured in either operating hours or cycles (individual flights) and, when a LLP reaches its life-limit, it cannot be overhauled or repaired and must be scrapped.

## III. Appraisal of the Subject Engines

#### 1. Appraisal Methodology

#### 1.1 Half Life Value

The ICF valuation approach starts by determining a Half-Life CMV for the engine model in the bare condition, without a QEC kit. ICF determines the Half-Life CMV by reviewing recent sale and lease transactions, aircraft and engine availability trends, fuel burn and other technical aspects, noise and emission environmental constraints, and maintenance requirements. Imputed Half-Life value may also be obtained by discounting lease rental streams and forecast residual values.

ICF routinely works with aircraft operators, engine repair vendors, and aircraft engine lessors, and through these interactions ICF reviews and exchanges a significant amount of engine financial and technical information, including engine shop visit costs, mean times between engine shop visits, LLP prices, and limits of specific LLPs. ICF catalogs this information into its technical database. From this database, ICF extracts and analyzes the discrete data points to formulate its maintenance cost and interval estimates. Through ICF's extensive work in aircraft and engine asset backed securitization transactions, these maintenance costs and interval assumptions are routinely validated.

#### 1.2 QEC Adjustment

An additional adjustment is made to the value of an individual bare engine if it has a quick engine change ("QEC") kit installed. The QEC kit contains some (in the case of "partial" or "neutral" QEC kits) or all (in the case of "Full" QEC kits) of the hardware necessary to install the engine on the airframe, such as integrated drive generators, pneumatic anti-icing valves, wiring harnesses, etc. The Full QEC kits do not include cowls or thrust reversers. As with engine Half-Life CMVs, ICF regularly reviews market intelligence to form its opinion of QEC kit values.

#### 2. Appraisal Assumptions

ICF relied on the following assumptions with regard to the Subject Engines while performing this valuation:

- n That the Subject Engines meet all specifications and performance capabilities for standard engines of the relevant type and model as appropriate.
- n That the Subject Engines are Serviceable.
- n That the Subject Engines are NOT equipped with QEC kits.
- n That the Subject Engines' maintenance records are in compliance with FAA standards and, furthermore, that all LLP records are traceable "back to birth".



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- n That all parts and components are of OEM's origin and are not manufactured under PMA<sup>6</sup> design approval.
- n That all normally required maintenance has been performed on the Subject Engines, including compliance with ADs and mandatory service bulletins ("SBs").
- n That all of the data and information provided by the Client and used by ICF to calculate the value were an accurate representation of the actual conditions or circumstances of the Subject Engines as of the date such information was presented.
- n That the Subject Engines will continue to be certified by the FAA (or a comparable authority), and have maintenance performed that is in accordance with an approved maintenance program.
- n That where stored, the Subject Engines are maintained in accordance an OEM or FAA-approved maintenance storage program.
- n ICF has not addressed any issues of ownership.

Some of the underlying assumptions, including those described above are detailed explicitly or implicitly elsewhere in this report, and may not materialize because of unanticipated events and circumstances. ICF's opinions could, and would, vary materially should any of the above assumptions change.

 $<sup>^6</sup>$  Parts Manufacturer Approval (PMA) is a design approval granted by the FAA to a manufacturer of aircraft parts.



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#### IV. **Aircraft Market Assessment**

Fleet statistics for the largest aircraft platforms represented in the appraisal, showing the date of first and last deliveries; number of aircraft delivered, on backlog, and currently in active service; the number of current operators for the aircraft models are shown in the exhibits below. In October 2020, the active fleet has reduced significantly due to the unprecedented travel restrictions imposed by governments globally due to the Coronavirus pandemic (COVID-19). Numerous airlines across the world have grounded their fleets between February - October 2020.

Exhibit IV-1 Fleet Statistics of Selected Aircraft Programs, February 2020 (Pre-COVID-19)

	Deli Ye	very ar	Fleet									
Aircraft Type	First	Last	Delivered	Order Backlog	Active	Parked	Active % of Delivered	Operators (Active a/c)				
737-700	1997	TBD	1,164	3	1,012	70	87%	79				
737-800	1998	TBD	5,110	37	4,874	190	98%	194				
737-900ER	2007	2019	505	0	495	10	88%	21				
757-200	1982	2005	995	0	620	105	62%	61				
757-300	1999	2004	55	0	52	3	95%	4				
767-300ER/400ER	1988	2014	622	0	489	56	79%	71				
777-200/200ER	1995	2013	510	0	344	91	67%	31				
A319-100	1996	2019	1.410	5	1,200	123	85%	107				
A320-200	1987	TBD	4.736	16	4.004	306	85%	240				

Source: CAPA Fleets as at 1 February 2020, ICF.

Note: The count of delivered aircraft includes active, parked, retired and destroyed aircraft; All sub-variants included unless specified. 737-800 orders include military variant (P-8) only. Last commercial 737-800 delivered in early 2020. Operators count include only those of active aircraft.

Exhibit IV-2 Fleet Statistics of Selected Aircraft Programs, October 2020 (Post-COVID-19)

		very Fleet Order Active % of									
Aircraft Type	First	Last	Delivered	Order Backlog	Active	Parked	Active % of Delivered	Operators (Active a/c)			
737-700	1997	TBD	1,164	3	769	310	66%	51			
737-800	1998	TBD	5,110	55	3,468	1,590	68%	149			
737-900ER	2007	2019	505	0	308	197	61%	19			
757-200	1982	2005	995	0	362	361	36%	49			
757-300	1999	2004	55	0	31	24	56%	4			
767-300ER/400ER	1988	2014	622	0	238	308	38%	50			
777-200/200ER	1995	2013	510	0	119	310	23%	19			
A319-100	1996	2019	1,411	4	815	492	58%	80			
A320-200	1987	TBD	4,737	15	2,845	1,458	60%	197			

Source: CAPA Fleets as at 1 October 2020, ICF.

Note: The count of delivered aircraft includes active, parked, retired and destroyed aircraft; All sub-variants included unless specified. 737-800 orders include military variant (P-8) only. Operators count include only those of active aircraft.



#### V. Aircraft Market Overviews

#### 1. Boeing 737 Next Generation Aircraft

The Next Generation ("NG") series of the Boeing 737 was launched in November 1993. These aircraft have a fundamentally different wing design from that of the earlier 737 aircraft. With greater chord, span, and wing area, this wing design allows for significantly faster cruise speeds together with higher operating altitudes and greater range capabilities encompassing transcontinental and medium-range international sectors up to 3,060 nm. Compared to earlier generation Boeing 737 engines, the more advanced CFM International ("CFMI") CFM56-7B engines provide reduced maintenance costs, superior time on-wing, and reduced noise and emissions levels. An updated six-panel electronic flight instrument system ("EFIS") flight deck avionics suite, similar to that of the Boeing 777, may be fitted with an optional head up display ("HUD").

The 737NG series is available in five main variants of generally increasing size: 737-600, 737-700, 737-800, 737-900, and 737-900ER.

Prior to the current industry downturn as a result of government and consumer measures to limit the spread of COVID-19, demand for 737NG aircraft was strong, and nearly all of the over 7,000 aircraft delivered were in active service. As commercial airlines have rapidly adjusted to the steep drops in traffic, they have parked a significant share of the global fleet, with some older aircraft being permanently retired. As a result, CMVs, lease rates and demand for all models of the 737NG have softened, a circumstance that is likely to continue for the near-to-medium term as the industry contends with the softer economic conditions.

#### 2. Boeing 757 Family

Boeing announced the introduction of the Boeing 757 and Boeing 767 jointly in 1980s. The smaller of the two new types – the narrowbody 757-200 – was intended as a replacement for the three-engine Boeing 727 which, at the time, was the most widely used commercial jet aircraft in the world. Later, Boeing would offer a stretched variant of the 757-200, named the 757-300.

Improved performance in the 757 came from two new high-bypass engines and an advanced-technology wing with less sweepback than that of the 727. Flight deck enhancements included an EFIS cockpit and advanced flight management systems.

The 757-200 entered commercial service in 1983 with launch customers Eastern Airlines and British Airways. Typical passenger accommodation ranges from 178 seats to 239 seats in high-density configuration.

The 757-300 model features increased MTOW, by virtue of a strengthened wing, and also a 280 inch stretch of the fuselage, with a range of 3,270 nautical miles ("nm") in a typical two-class passenger layout of 243 seats. Up to 289 passengers may be accommodated in a single-class configuration. Available cargo capacity also increased by nearly 50% and seat mile operating costs dropped by 10% relative to its 757-200 predecessor.



Of the ~1,000 Boeing 757 aircraft delivered between 1982 and 2005, over 600 were in active service as of February 2020, with 270 aircraft having been retired or destroyed. There were ~110 parked aircraft as of February 2020, many of which are undergoing transition between operators or awaiting freighter conversion. The parked fleet had increased to 385 aircraft, as of early October 2020, due to COVID-19.

#### 2.1 Boeing 757-200 Market Assessment

As the largest and longest-range narrowbody aircraft, the Boeing 757 is a mission-versatile aircraft capable of operating transcontinental routes, leisure routes, and some transatlantic flights, and has proved a favorite of European charter operators. Many carriers, including all of the U.S. legacy carriers, continue to operate this aircraft type. Operational capability of the type has also been improved by the availability of aftermarket winglets, supplied by Aviation Partners Boeing, which has increased market demand in recent times.

In addition, the 757 had a successful freighter conversion programs. FedEx has, over time, acquired 115 Boeing 757 aircraft for conversion to freighter configuration and all converted aircraft are currently in service. With a hitherto relative absence of suitable narrow body passenger-to-freighter ("PTF") narrowbody freighter feedstock, the type maintains a leading position in the conversion market and continues to perform well. However, at more than 30 years since launch, the age of the 757-200 is clearly showing and its days as a transcontinental workhorse for the U.S. major airlines are clearly numbered in the face of competition from younger, more efficient families of aircraft in the Boeing 737 and Airbus A320 with the same seating, payload and range capabilities.

With disposal of large quantities of the type and a stored population over a third of the 757-200 fleet, CMVs and residual values have already deteriorated significantly and can expect to fall precipitately as the stored population rises significantly in a post-COVID-19 environment.

#### 2.2 Boeing 757-300 Market Assessment

The Boeing 757-300 was a stretched variant introduced by Boeing to revitalize a mature program and appeal to a wider operator base, including charter carriers such as Thomas Cook and Condor. Longer by 23 ft and accommodating an additional 40 passengers, the 757-300 had reduced range over the –200 variant and suffered from significantly increased ground turnaround times as passengers embarked and disembarked. The type was introduced some 20 years after the introduction of the 757-200 and its size and dated technology proved a hindrance when competing in a market which had move to smaller more-efficient aircraft operated at higher frequencies.

As a result, the 757-300 never proved a commercial success and after five years and only 55 sales, the type had proved unpopular with operators and lessors alike. The limited operator base has included Arkia, Condor, Delta, Icelandair and United, with Delta and United inheriting the type following takeovers of other airlines. Given the small production run, limited operator base and a lack of a cargo conversion program, CMVs and residual values have performed relatively poorly, and are expected to deteriorate further in a post-COVID-19 environment.



#### 3. Boeing 767-300ER/400ER

The Boeing 767-300ER/400ER aircraft first entered service in 1988 and as of February, nearly 490 of the type were in active service. The order backlog has shrunk significantly with the introduction of the Boeing 787, which replaced the 767 in the Boeing product line. However, the fleet received another boost in 2018 with additional orders from FedEx and UPS. Of the approximately 110 aircraft on order, around 60 were freighter variants for FedEx and UPS, acquired at discounted prices while Boeing kept the production line open during the competition for the contract to fulfill the U.S. Air Force's replacement for the aging KC-135 aerial tanker.

Of the ~620 total Boeing 767-300ER/400ER aircraft delivered thus far, there are ~310 parked aircraft with an average age of about 21 years.

As a result, CMVs, lease rates and demand for all models of the 737NG have softened, a circumstance that is likely to continue for the near-to-medium term as the industry contends with the softer economic conditions.

The 767 is a capable aircraft, providing operators with reasonably good operating flexibility and efficiency – especially in times of lower fuel prices – at lower capital costs than newer fleet types like the 787. In addition there is active demand for passenger aircraft for freighter conversion – a segment that has exhibited significant growth as a result of increased activity in e-commerce in the wake of COVID-19 related closures and restrictions. However, since the late-2000s the 767-300ER has faced increasing challenges in the small/medium widebody segment – initially from the Airbus A330 followed by the fraternal 787. The 767-300ER is now a generation behind current production widebodies and as a result values had been softening even before the COVID-19 stimulated economic downturn 19 and the dramatic decline in international passenger travel. As noted previously large numbers of 767-300ERs are currently parked and although some of these aircraft are likely to return to service once passenger traffic returns – and others will be converted to freighters – a portion of the fleet will not go back into service and be retired.

#### 4. Boeing 777-200/200ER

As of February, there were ~345 Boeing 777-200/200ER series aircraft in active service, about two-thirds of the total fleet delivered, with around 90 aircraft parked.

#### 4.1 Boeing 777-200

Values and lease rates have long since suffered due to market concerns that the Boeing 777-200 is an inferior aircraft to the successor Boeing 777-200ER, a variant that was introduced within seven years of initial entry into service of the 777-200 and which, itself, has fallen from favor. The Boeing 777-200 has also come under pressure from low-cost carriers in the U.S. domestic market and has suffered from strong competition from the A330-300 which is more efficient from an operating cost perspective and enjoys longer range. These factors have limited its commercial success.

The operator base is constrained with only seven airlines but is reasonably well distributed geographically.

Most airline interest now lies with the Boeing 777-300ER or Airbus A330 variants, which offer superior range and payload performance and in light of these concerns, there is no current order



backlog for the 777-200. Existing operators are highly unlikely to add additional, ageing 777-200 aircraft, except as a stop gap measure, and targets for remarketing are difficult to identify as aircraft size and reconfiguration costs are too large for smaller operators.

#### 4.2 Boeing 777-200ER

The versatile Boeing 777-200ER has, until recently, proved popular with operators worldwide. Its combination of twin-engine economics and strong payload/range capability has provided significant operational flexibility during challenging market conditions and its operating economics are compelling on longer sectors for which traffic demand does not justify larger 747-400 or Airbus A380 aircraft. The type competes most directly with the out-of-production Airbus A340-300 and to a lesser extent the high gross weight ("HGW") version of the A330-300.

The last 777-200ER variant was delivered to Asiana in 2013 and no backlog exists as market sentiment has moved to the larger Boeing 777-300ER and to some extent the A330-300 HGW aircraft; the latter able to fulfill most 777-200ER missions at lower operating costs.

While, historically the operator base of the aircraft was relatively robust for a widebody (around 35 operators in 2016-17), an active secondary market has not materialized. This is a result of a multitude of factors including the aircraft's size and operating expense, cabin reconfiguration costs, the costs of engine refurbishment – which are particularly onerous for Rolls-Royce ("R-R") Trent – powered aircraft due to OEM control of the aftermarket, and three engine choices further fragmenting the market for the aircraft. The Boeing 777-200ER is now significantly overshadowed by the Airbus A350 and Boeing 787 series aircraft, which have entered the fleet in large numbers. First tier operators such as China Southern, Emirates, and Kenya Airlines have already phased-out the 777-200ER, while others including Malaysia Airlines, Singapore Airlines, and Air New Zealand are in the process of phasing-out the aircraft. This has led to a significant increase in the stored population and availability of the type.

Some solace may be offered by a potential freighter conversion program. However, no such program is currently offered and with the launch of the 777-300ER freighter conversion program, it is unlikely a passenger-to-freighter program will provide a new lease on life for existing 777-200ERs.

As such, values and lease rates have fallen by up to 40% over the past three years, market interest has largely eroded, and little likelihood for recovery is anticipated.

#### 5. Airbus A320 Family

The A320 was the first of an entirely new generation of short- to medium-range, narrowbody, single-aisle commercial transport aircraft designed and produced by Airbus to replace older generation Boeing 727s and 737s and McDonnell Douglas DC-9s and MD-80s. Later to include the A318, A319, and A321 models, the A320 family currently offers seating capacity from 100 to 200 seats. A high level of A320 family commonality facilitates a common pilot type rating for all derivatives, in addition to the cross-crew qualification benefits, which permit pilots to be licensed to fly both single-aisle and twin-aisle Airbus models. To date, total A320 family deliveries exceed 9,300 units.

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The Airbus A319-100 first flew in 1996. The designed is a shortened fuselage version of the A320.

Two of the over-wing emergency exits found in other variants were removed to increase seating



capacity and appeal to low-cost carriers. The current Airbus A319-100ceo ("current engine option") fitted with sharklets, with virtually the same fuel capacity as the A320-200, has a range of approximately 3,750 nm with a typical two-class configuration. The maximum seating capacity is 156 passengers in a high-density layout. This high-density configuration has been the workhorse of EasyJet with 172 A319-100 aircraft delivered.

Airbus designed two versions of the baseline A320. The initial A320-100, first delivered in March 1988, was powered by either two CFMI CFM56-5A1 or two International Aero Engines AG ("IAE") IAE V2500-A1 engines. The A320-100 featured a MTOW of 149,900 pounds ("Ib") and had a range of approximately 1,750 nm with 150 passengers, baggage, and 200 nm reserves. Some 21 aircraft were produced before the advent of the A320-200 model.

The A320-200 received JAA certification in November 1988. The -200 was quickly established as the preferred version of the type and superseded the -100 as the standard version. Now known simply as the A320, this variant features an increased MTOW of 162,000 lb, extra fuel capacity conferred by a wing center section fuel tank, and wingtip fences for improved aerodynamics. Airbus recently developed a midlife "A320 Enhanced" variant involving a new interior, weight savings, aerodynamic improvements, and upgraded engines. The current A320-200 has a range of approximately 2,900 nm with 150 passengers, baggage, and 200 nm reserves. A maximum of 179 passengers can be accommodated in a high-density layout.

Compared with other single-aisle aircraft, the A320 offers the largest fuselage cross section, which allows for larger, more comfortable seats. In addition, the larger A320 fuselage provides wider aisles for quicker turnarounds and less in-flight cabin congestion. The larger cross section of the A320 accommodates seven industry standard underfloor LD3-46 containers, a feature not available in other comparable narrowbody aircraft.

The A321 is a stretch of the A320, incorporating fuselage plugs of 14 ft. and 8 ft., 9 in. fore and aft of the wings respectively. Launched in November 1988, the A321 is designed to carry 185 passengers in a typical two-class configuration and can seat up to 236 passengers in a high-density layout. Consistently improved over the years, the latest models – which feature higher MTOWs up to 93.5 tonnes- are deployed on a variety of missions including United States transcontinental routes such as JFK-LAX and Miami-Seattle.

#### 5.1 Airbus A319-100 Market Assessment

The A319-100 is a shortened fuselage variant of the larger baseline A320 that competes in the 130-seat market with the Boeing 737-700. The type is a commercial success, with over 1,200 aircraft in service in October 2020 with a broad global base of about 110 operators and, until superseded by the A321, was second only to the A320 in popularity.

In recent years it has suffered from higher seat-mile costs in comparison to its larger siblings, a key driver in many airline up-gauge decisions.

As the smallest Airbus A320 variant, the A319 has also been affected by strong competition from the 737-700 and new entrants in the form of the more-efficient Airbus A220 and the Embraer 195-E2. Value erosion has occurred given the aging age profile of the type with most deliveries having occurred prior to 2010. As such, supply has increased as larger operators like

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easyJet phase out the type, albeit offset by acquisition by low-cost carrier ("LCC") operators such as Allegiant and Volotea acquiring aircraft to replace older MD-80 and Boeing 717 equipment.

While values can be expected to erode further in the current market conditions, as airlines seek to reinstitute service with lower load factors, the A319 will present a useful alternative to larger Airbus and Boeing aircraft.

#### 5.2 Airbus A320-200 Market Assessment

As the baseline aircraft of the Airbus narrowbody aircraft family, the A320-200 has proved to be one of the most successful commercial jets in history. With more than 197 operators in October 2020, and in excess of 2,800 aircraft in service, the type has proved more popular than its prime competitor, the 737-800. Newer aircraft with higher MTOW and later CFMI CFM56-5B4 and IAE V2500-A5 Select engines are preferred, with aircraft built prior to 1996 less-favored and subject to higher storage rates.

Boeing's travails with its 737 MAX aircraft led to a significant uptick in A320 demand and values however this situation has eroded in the wake of the ongoing economic downturn. Values for A320s appear to have suffered more than the competing 737-800, mainly as a result of demand for the Boeing product as interim lift due to 737MAX delays. However the size and diversity of the installed customer base and the very large global fleet are expected to support continued liquidity and, along with the development of a PTF freighter conversion program, will provide an element of protection from the wholescale value deterioration for all types before recovery ensues in a post-COVID-19 market.



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#### VI. Engine Descriptions

#### 1. CFM International CFM56 Series Engine

The CFM56 engine ("Commercial Fan, M56") was developed by CFMI, a joint venture between General Electric and SNECMA, which has proven to be one of the most successful in the aviation industry. The current CFM56 family includes four fan sizes and thrusts from 18,500 to 34,000 pounds of static thrust on take-off ("lb st.") Applications cover short, medium, and long-range aircraft. SNECMA is responsible for the fan, low pressure ("LP") booster, LP turbine, and accessory gearbox, and provides installation design. GE provides the high pressure ("HP") core, main fuel control, and system design integration.

CFM56 engines power the DC-8-70 series aircraft, Airbus A320 and A340 aircraft, and Boeing 737-300, -400, and -500 models. The latest CFM56-7 variant is installed on the Boeing 737-600, -700, -800, -900, and -900ER "Next Generation" series aircraft.

The CFM56 is a two-shaft engine and is short by design. This feature makes the engine stiff and therefore durable as blade tip rub rates are low. Consequently, it achieves some of the highest on-wing times and lowest in-flight shutdown rates ("IFSD") in the industry.

#### 1.1 CFM56-7 Series

The CFM56-7 Series engine is the exclusive engine for the Boeing 737NG family of aircraft. These aircraft began to enter into service in 1997 almost a decade after its primary competitor, the A320 family, and quickly gained a significant market presence. To date, more than 7,000 737NG aircraft have been produced with almost 6,900 remaining in the installed fleet and 60 aircraft remaining on firm order. Despite being in service for 20 years, the 737NG has had a minimal number of aircraft part-outs (155 as of September 2020) which implies that market demand for engine parts and spares is likely still strong as only about 2% of the fleet has been potentially parted out. The CFM56-7B is part of the same engine line as the CFM56-3 series that powers the Boeing 737 Classic series of aircraft and the CFM56-5B series that is one of the engine choices for the Airbus A320 family, and is rated for between 19,500 pounds static thrust on take-off ("lb st") to 27,300 lb st.

In comparison to its immediate predecessor on the 737 classic series, the CFM56-3, the -7B offers fuel burn improvement of 8% and a reported 15% improvement in maintenance costs. The improvements are achieved in part through aerodynamic efficiencies and the use of advanced materials, such as the solid titanium wide-chord fan and N5 single-crystal material in the high pressure turbine ("HPT").

In 2006, CFM introduced the "Tech Insertion" program to both its -5B and -7B series engines and it became the delivery standard on 737NG aircraft as of mid-2007. These engines featured improvements to the high pressure sections and to the low pressure turbine ("LPT"). Overall, time-on-wing for these engines was improved by around 5%, lowered emissions, and provided a further slight boost to fuel burn.



The CFM56-7B Evolution improvement package (-7BE) was introduced 2009 with entry into service in 2011. Further refinements were made to the HPC, HPT, and LPT and the number of HPT and LPT parts were reduced.

#### 2. International Aero Engines AG V2500 Series Engine

International Aero Engines AG ("IAE") is a consortium formed in 1983 by the industrial groups Rolls-Royce, Pratt & Whitney, Japan Aero Engines Corporation ("JAEC"), Fiat Avio and MTU Aero Engines to develop an all-new turbofan engine in the 22,000-33,000 pounds of static thrust on take-off ("lb st") class, with each partner developing separate modules and components within the engine.

The IAE V2500 series is installed on variants of the Airbus A319, A320 and A321 aircraft, on the Airbus Corporate Jetliner ("ACJ"), on the McDonnell Douglas MD-90-30 aircraft, and on Embraer's military transporter, the KC-390. All variants of the V2500 engine are mechanically similar; an "A" suffix denotes an Airbus application, a "D" suffix denotes suitability for the McDonnell Douglas aircraft, and an "E" suffix denotes suitability for the Embraer aircraft although given the differing engine pylon mountings and fan modules, the "A", "D" and "E" variants are not considered economically interchangeable.

The initial variant, the V2500-A1, was rated at 25,000 lb st solely and entered commercial service on the A320 in May 1989 although service entry was too late for inclusion on the Boeing 737 program. A total of 143 A320-200 aircraft were delivered with V2500-A1 engines, the three largest operators being Air India, Indian Airlines, and Bulgarian Air Charter. Although it offered fuel savings over the rival CFM56-5A1 engine, initial on-wing life proved disappointing and an extensive aftermarket modification program, the V2500-A1 Phoenix package, was made available and introduced with America West in January, 1999.

The improved V2500-A5 series was introduced in 1993, and incorporated an enlarged low pressure compressor to improve performance and reliability. Optional thrust ratings range from 22,000 lb st to a current high of 33,000 lb st.

These high-bypass turbofan engines incorporate unique wide chord snubberless fan blades and four low pressure compressor blades to improve engine efficiency. Specialized combustors and an advanced turbine section combine with computerized Full Authority Digital Engine Control ("FADEC") engine controls to provide a claimed 4% fuel burn advantage over the CFM56 series engine. Like CFM International ("CFMI"), IAE currently offers retrofittable upgrade packages (IAE SelectOne/Two) for its engines to reduce fuel burn and CO2 emissions, and to improve on-wing maintenance life which, if installed on a given engine, would have a material positive impact on values. The present installed base of all V2500-A5/-D5 engines total over 3,100 aircraft.

#### 3. CFM International LEAP Engine Program Overview

The LEAP ("Leading Edge Aviation Propulsion") engine is produced by CFM International, a 50-50 partnership between France's Safran Aircraft Engines (formerly Snecma) and GE Aviation formed in 1974. CFM International, responsible for the CFM56 engine, launched the LEAP-X engine program in 2008 as a successor to the CFM56 engine in powering single-aisle commercial jets, extending the partnership of the parent companies through 2040.



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As a part of the partnership agreement, GE develops and builds the core, comprising the high-pressure compressor, high-pressure turbine, and the combustor, while Safran Aircraft Engines designs and builds the fan, the accessory gearbox, and the low-pressure compressor and turbine. Both GE and Safran Aircraft Engines facilities perform final assembly of CFM engines.

LEAP engines power the Airbus A320neo family aircraft (LEAP-1A), the Boeing 737 MAX family aircraft (LEAP-1B), and the COMAC C919 (LEAP-1C). Airbus and COMAC selected the LEAP engines to power their respective aircraft in 2010, and Boeing followed suit in 2011, announcing the LEAP-1B as the sole powerplant for the 737 MAX. The first LEAP engine powered aircraft to enter into service was an A320neo with LEAP-1A engines operated by Pegasus Airlines, introduced in August 2016. Then in 2017, Lion Air became the first airline to put the LEAP-1B-powered 737 MAX 8 into commercial service. The LEAP-1C, which was the first LEAP engine to begin flight testing in September 2014, was certified in 2016, and operated its first flight in Shanghai in 2017. The C919 aircraft is pending certification, which is expected in 2021.

The LEAP family of engines is designed to power commercial aircraft requiring 20,000 to 35,000 lb st. The program incorporates numerous technology innovations. The fan blades and fan case are manufactured from 3-D woven RTM (Resin Transfer Molding) carbon fiber composite, which have helped reduce engine weight by 500 pounds ("lbs") per engine.

Further, the LEAP program was the first program to incorporate advanced materials such as ceramic matrix composites (CMC). LEAP engines use CMC in the high-pressure turbine shroud, one of the hottest sections of the engine. The materials have a 20% better thermal resistance (reducing cooling needs), are stronger and lighter than metallic alloys that they have replaced, contributing to better fuel efficiency of the engine. The LEAP program promises up to 16 percent better fuel efficiency compared to the best CFM56 engines. The design improvements also facilitate a higher bypass ratio of 11:1 for the LEAP-1A and LEAP-1C engines, and 9:1 for the LEAP-1B.

There were over 2,100 LEAP-1A and LEAP-1B engines installed on aircraft with over 120 operators at the end of May 2020, and over 15,000 LEAP engines on order at the end of April 2020, as per data reported by CFM International. Over 1,700 LEAP engines were delivered in 2019, as demand grew and the engine production rate doubled over 2018 rates. However, given the uncertainties around COVID-19 and the 737 MAX grounding, Safran estimates that less than 1,000 LEAP engines will be delivered in 2020.

#### 4. General Electric CF6-80C2 Series Engine

The GE CF6-80C2 engine series was a significant redesign of the CF6-80A series, incorporating many major mechanical design changes to increase thrust and reduce specific fuel consumption. Initial entry into service was in 1985. Changes included a new, wider, 93-inch fan with 38 titanium blades, a new four-stage low-pressure compressor, and an aerodynamically improved five-stage low-pressure turbine. An optional full authority digital engine control ("FADEC") engine control system became available to replace the standard hydromechanical engine control. Engine thrust capability range was increased to 52,700-61,960 pounds static ("lb st") from the 48,000-50,000 lb st of the CF6-80A.

The CF6-80C2 series engines are installed on numerous Boeing, Airbus, and McDonnell Douglas aircraft widebody types, including the Boeing 767-200, 767-300, 767-400, 747-200, 747-400, the



Airbus A300-600 series, the Airbus A310-300, and the McDonnell-Douglas (since acquired by Boeing) MD-11. With approximately 681 of these aircraft types in service and inactive as of September 2020, and an estimated installed population of almost 2,600 engines, this engine family is the most widely deployed CF6 model, with nearly 20 variants. There is a large degree of parts commonality across all CF6-80C2 variants, thus adding to its versatility and marketability.

#### 5. Rolls-Royce RB211-535E4 Engine

The three-shaft RB211-535E4 turbofan engine was derived from the -535C, the launch engine for the Boeing 757-200 aircraft, which first entered service in January 1983. This series of engines has evolved from the problem-plagued RB211-22B variant to become one of the most successful and reliable engines in service. The initial RB211-535C variant incorporated a scaled-down RB211-524 fan stage and a derivative high-pressure module from the RB211-22B series engine.

The RB211-535E4, certified in 1983, was the first engine to introduce hollow wide-chord fan blade technology, representing a significant technological improvement and offering increased thrust, together with reduced fuel consumption relative to the -535C. The RB211-535E4 provides just over 40,000 lb st of thrust and the newer RB211-535E4B produces up to 43,500 lb of thrust. Entry into service of the -E4 variant occurred in 1984, with 120 and 180-minute ETOPS approvals gained in 1986 and 1990 respectively.

#### 6. Pratt and Whitney PW4000 Series Engine

The PW4000 engine, launched at the end of 1983 and entering service in 1987, is a third generation continuation of Pratt & Whitney's successful JT9D family of high bypass turbofan engines, and is used to power a range of widebody aircraft including the Boeing 747, 767, and 777, the Airbus A300, A310 and A330 types, and the Boeing MD11. The engine is manufactured in three thrust series and is categorized by fan size in inches. The classes include the PW4000-94, the PW4000-100, and the PW4000-112. There is some level of parts commonality between the various models, thus influencing the supply of spare parts.

This series of engines has historically been beset by operational deficiencies. Since 1992, the PW4000-94 engine has suffered numerous single- and dual-engine surge events on takeoff and at cruise. Though P&W developed remedial modifications for the engine, including hardware upgrades and modifications to FADEC software, continuing problems necessitated a second round of modifications in which the high pressure compressor and rear stators were replaced with a design similar to later-build PW4000-100 turbofans. Modification was mandatory and was successfully completed for all in service aircraft. The history of technical problems for the PW4000 series has necessitated a larger than usual population of spare engines.

#### 7. General Electric GE90-115 Engine Series

On 16 January 1990 GE announced that it was developing a high bypass turbofan in the range 75,000 to 100,000 pounds thrust, capable of powering all new and derivative wide-body aircraft that may enter the market in the mid 1990s. The first GE engine to run reached a record 105,400 pounds thrust in April 1993. Flight testing began on a 747 began in September 1993.



The design is based on a compressor scaled directly from the GE/NASA joint funded Energy Efficient Engine (E<sup>3</sup>) program aimed at establishing a technology base for engines of the 1990s. It features the largest diameter fan yet built (10ft 3in) and wide chord composite fan blades giving the engine a bypass ration of 8.4, the highest of any current engine design. This high bypass ration is claimed to achieve a 10% improvement in specific fuel consumption and reduced noise when compared with today's other large turbofans. Combustor improvements also reduce emissions. Safran Aircraft Engines, Avio Aero and IHI Corporation are revenue-sharing participants of the program. With the GE90, the first-ever composite fan blade was introduced for commercial aviation. Carbon fiber and toughened epoxy delivered more strength with less weight than conventional titanium blades. It's new aerodynamic shape and design allowed the engine to intake larger volumes of air altogether making the powerplant quieter.

A full authority digital engine control (FADEC), variable geometry compressor and active clearance control complete the package.

In 1995, the GE90 entered into service on a 777 aircraft owned by British Airways.

The GE90-115B was the latest variant of the engine program and entered in service with a 777-300ER from Air France in 2004. With a certified 115,00 pounds (512 kN) the -115B supported the 777-300ER, 777-200LR and 777 freighter variants. Some enhancements include re-bladed low-pressure turbine in the first three stages, improved high-pressure compressor clearances and leakage reduction. Since its introduction, more than 1,700 GE90-115B engines have been delivered to support a fleet of 860 aircraft, and the current fleet has an average age of less than five years.

#### 8. GENx Engine Series

The General Electric GEnx (General Electric Next-generation) family entered commercial service on a Cargolux Boeing 747-8F in October 2011. With a fan bypass ratio of 9.6:1 and a thrust range of 57,400 – 80,400 lb st"), the GEnx is produced in two variants. The GEnx-1B variant powers the Boeing 787 while the smaller fan diameter GEnx-2B67 is installed on the Boeing 747-8 series aircraft. Derived from the earlier GE90 series and incorporating its HPT and LPC technologies, the GEnx engine is also the world's first commercial jet engine with both a front fan case and fan blades made of carbon-fiber composites. In addition, new metal alloys, coatings, and cooling technologies have been introduced to extend the life of engine parts.

Intended to replace the GE CF6 engine in service, the GEnx is claimed to deliver a 15% fuel burn advantage and 15% less  $CO_2$  emissions, and incorporates reduced weight, parts counts and lower operating temperatures to improve operating performance and reduce maintenance costs relative to its CF6 predecessor. Of note, the GEnx-2B67 variant incorporates traditional bleed air systems to power aircraft starting, air-conditioning and anti-ice systems while the GEnx-1B incorporates bleedless technologies in support of the Boeing 787's predominantly electric design, which further reduces weight and maintenance costs, and improves efficiencies.

The program entered into service in 2011, with the GENx-1B was designed exclusively for the 787, while the GENx-2B to power the four-engine 747-8. Both the -1B and -2B share a common engine core, but they have some slight differences. The GEnx -1B engine fan is larger (111 inches vs 104 inches on the -2B) in diameter and produces about 70,000 pounds of thrust, compared to



60,000 pounds of thrust for the four-engine platform. Also, some functions are still served by bleed air for the 747-8, but not for the 787 that uses electrical power from the starter-generators. In addition, the -2B features a de-staged booster and low-pressure turbine.

Since its entry into service, more than 1,800 GEnx engines of all versions have been delivered through September 2020.



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#### VII. Engine Market Assessment

#### 1. General Value Trends over the Engine Life Cycle

The general value trends for engines can be characterized over three phases of the asset life cycle.

Phase 1 of the life cycle is characterized by continued strong new engine demand with used engine values increasing slightly faster than the rate of inflation in accordance with engine manufacturer escalation rates for new engines and spare parts. During this phase spare engine supply is tight as OEM production capacity is focused on supplying engines for new airframes.

As demand for the platform aircraft begins to wane and the tempo of orders and deliveries begins to ebb, the engine enters the second phase of the life cycle. This phase is characterized by a period of stable supply and demand, and the slight depreciation of engine value is more or less offset by inflation. Engines in this phase of the value cycle tend to hold their value well.

The third and final phase of the engine value cycle is represented by changes in demand for the aircraft that the engine supports. As demand falls due to nearing obsolescence of the host aircraft type – whether from stricter regulatory standards, market references or the entry into service of new products – the engine enters the third and final phase of the value cycle. Characterized by rapid changes in prices, engines begin to lose value quickly. Eventually, it becomes more economical to disassemble the engine into parts than to undertake costly overhauls. Engine values in this phase may be extremely volatile, as the supply of engines may fluctuate depending on part out levels.

#### 2. CFM International CFM56-7B

Through September 2020, more than 14,000 CFM56-7B series engines had been delivered supporting more than 7,000 Boeing 737NG family aircraft. Some 155 aircraft with CFM56-7B engines have been removed from service and 2,147 of such aircraft are currently parked due to the on-going COVID-19 pandemic. As of October 2020, there are 10 CFM56-7B series engines available for sale or lease suggesting significant demand relative to supply.

The engine type exhibited strong performance throughout 2019 on the back the continued grounding of the Boeing 737 MAX series of aircraft. Accordingly shop visit demand was also high and the CFM56-7B engine value premium has remained, albeit tempered by the market effects of COVID 19. Relatively strong continued performance can be expected until the 737 MAX returns to service in significant numbers over the next two years and should be maintained with the continued use particularly of the Boeing 737-800 in both passenger and freighter roles.

Over the longer term, the outlook is not quite as positive as the replacement CFMI LEAP-1B – which powers the 737 MAX and A320neo models is now entering service in numbers and is expected to offer double-digit improvement in fuel efficiency. However, it will be some time before the 737 MAX enters the fleet in large enough numbers to displace existing 737NGs and, by abstraction the venerable CFM56-7B.



#### 3. International Aero Engines V2500 Series Engine

Demand for the V2500 series engine remains strong as the engine is one of two options to power the A320ceo ("current engine option") family of aircraft. More than 6,900 V2500 engines have been delivered as of September 2020, and over 3,100 A319-100, A320-200, A321-100 and A321-200 aircraft remain in the installed fleet, with over a third currently parked due to COVID-19. The replacement for the A320ceo series of aircraft, labeled the A320neo, entered into service in 2016 and as a result, the majority of the backlog has shifted to these newer aircraft. As of September 2020, no backlog remains for V2500 powered aircraft.

Prior to the current downturn, market trading conditions and values for most models of the V2500 series were remained steady, in part due to the entry into service issues around the GTF and LEAP engines for the A320neos which had led deliveries of the A320neo fleet to lag behind the original schedule. As of October 2020, ICF is aware of 12 IAE V2500 series engines listed as available for sale or lease, all of them -A5 variants.

As the aviation industry continues to navigate the ongoing COVID-19 downturn the near term outlook for the V2500 market will be a challenge as operators have reduced capacity in response to declining demand. However as airlines strive to limit maintenance costs during the current crisis, demand for green time engines to avoid shop visits should augur well for V2500 demand and values over the near term. As the industry manages through the recovery phase demand and values for the V2500 should slowly improve as operators bring aircraft back into service in greater numbers. Over the longer term as the population of A320neos increases older generation aircraft will be phased out in greater numbers with a corresponding decline in demand and values for assets like the V2500 series. However like the CFM56-7B it will be some time before the A320neo enters the fleet in large enough numbers to displace existing A320ceos.

#### 4. LEAP-1B Engine

The COVID-19 pandemic has brought global air passenger traffic to a halt, an unprecedented situation in reach, duration, and severity. ICF is forecasting global passenger demand to recover in approximately four years in 2024, with the recovery led by domestic and regional markets, and long-haul traffic lagging a year or two behind to 2025 or 2026. Overall, more than 50% of the world fleet active in January 2020 has been parked, although there is variation between aircraft models.

While single-aisle aircraft are still relatively in favor, the 737 MAX is an exception. The global fleet of the aircraft has been grounded since March 2019, following the second crash of a MAX aircraft within a six-month period. Boeing halted the production of the MAX in January 2020, but has stated that it expects production rates to resume at low rates in 2020, and expects to gradually increase this to an average rate of 31 aircraft per month in 2021. The FAA started conducting its certification test flights at the end of June 2020.

Despite the adversities facing the aircraft that the LEAP-1B supports, CFM International continues to report a strong backlog for the engine series, with over 4,100 MAX aircraft on order at the end of September 2020, equivalent of 60% of the LEAP aircraft backlog. The OEM has noted that it has received numerous requests for delivery deferrals but stated that order cancellations have not been too significant.



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By thrust setting, LEAP engines operating at the -1B27 level comprise 44% of the delivered (currently parked) aircraft as of September 2020 (where engine thrust setting is identified).

Being a new engine type, there is no secondary market for the LEAP engines yet. CFM International does not expect to see any shop visits of the LEAP-1B engines on the return to service of the 737 MAX, due to extensive planning and experience with CFM56 storage.

#### 5. General Electric CF6-80C2 Series Engine

Demand for the CF6-80C2 series engine has declined from its peak, with values for those engines primarily operating on 747s and MD-11s exhibiting softness while the market for the 767 engine variants is holding up a little stronger. As of October 2020, ICF is aware of nine CF6-80C2 engines publicly available for sale, seven of which are -80C2B variants.

Market trading conditions and values for most models of the CF6-80C2 have shown steady decline over the past several years, especially for the -B1F variant which flies on the 747-400. Consistent with the effective demise of the Boeing 747-400 in widespread passenger service, the -C2B1F and -C2B6F have experienced a significant fall in demand, values and lease rates as the number of the host 747-400 aircraft parked and retiring has increased in the wake of large deliveries of highly capable big twins like the 777-300ER. This has been further exacerbated by the impact of the COVID-19 induced downturn which has resulted in several airlines retiring their fleets of older widebodies as opposed to remarketing the aircraft. Several US carriers have announced plans to removed CF6-80C2B powered aircraft from their fleets, with some portfolios slated for conversion to freighter.

Like the PW4000-94, there is near term demand for the CF6-80C2 given ongoing freighter conversions of 767-300ERs, which have experienced renewed demand with the development of Amazon's Prime Air operation.

#### 6. Rolls Royce RB211-535

The RB211-535E4 series engine has been selected by approximately 55% of all Boeing 757 operators and has a much wider geographical distribution than its Pratt & Whitney competitor, which is largely concentrated in North America. There are presently 946 RB211-535E4 engines installed on 472 aircraft and of these, 159 have the higher thrust - E4B variant. As of October 2020, there are three RB211-535E4 listed for sale or lease.

As with most commercial jetliners, demand and values have been adversely impacted by the COVID-19 downturn due to the massive reduction in passenger traffic necessitating airlines to reduce capacity. Given the age of the host 757 aircraft – the last unit was delivered in 2004 and the remaining aircraft stored and in service average over 25 years of age – it is likely that many of the aircraft in storage may not return to service as the industry recover from the current crisis. Over the near term demand for RB211-535 engines is expected to be soft with limited rebound anticipated as the industry recovers. However demand in the form of green time engines for airlines looking to avoid shop visits as well as engines for freighter conversions should afford some solace for asset owners in the current climate.



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#### 7. PW4000 Series Engines

#### 7.1 PW4000-94

As an engine that flies on older generation widebodies like the 747, 767 and A300, demand and values for the PW4000-94 series have been softening for some time. As airlines have responded to the massive decline in passenger traffic – particularly on international routes – many aircraft that operate the PW4000-94 have been placed into storage or retired. As a result, the supply of PW4000-94 engines has been increasing.

However, the dramatic uptick in demand for freighters to support increased e-commerce activity as well as the movement of critical materials as countries combat COVID-19 has resulted in increased demand for 747 and 767 freighters. This has led to a corresponding increase in demand for the engines that power these types both for used serviceable material to support maintenance activity as well as to avoid engine shop visits, allowing operators to conserve cash. Given these current dynamics, PW4000-94 engine values have been holding steady and are likely to show limited further decline over the near term. As of October 2020, there are no PW4000 engines publicly listed for sale or lease.

#### 7.2 PW4000-112

The PW4000-112 series accounts for about 30% of the total – combined in-service and parked – 777-200/200ER/300 fleet. As demand and values for the host 777-200/200ER/300 aircraft have declined over the past several years there has been a corresponding decline in values for the PW4000-112 engines. As increased numbers of 777-200/200ER/300s are retired – as of October 2020 about 75 of these aircraft had been retired, of which around 25 were powered by the PW4000-112 – availability of used engines will increase with a corresponding adverse impact on values. Around 50% of the installed fleet is currently parked due to COVID-19.

Over the medium term, as the industry recovers from the current COVID-19 induced downturn, values may show limited recovery as once international passenger traffic returns demand for older twin airless like the 777-200/200ER/300 is expected to be limited with airlines expected to favor more modern types like the 787 and A350.

#### 8. GE90-115 Series Engines

The GE90-115 family is sole sourced on the 777-200LR, 777-300ER and 777F. The 777-300ER is one of the best selling twin-aisle programs in history, with over 800 units delivered and a further 18 on order as of October 2020. The 777F has also been a strong seller, with just over 190 aircraft delivered and a further 39 on firm order backlog as of October 2020. The total number of GE90-115 engines delivered exceeds 2,000 units and a further 120 will enter service on those aircraft remaining to be delivered.

In response to the COVID-19 induced downturn and the corresponding decline in passenger traffic, airlines worldwide have parked large numbers of aircraft to reduce costs and preserve operating margins. International passenger travel – the focus of large widebodies like the 777-300ER – has taken a significant hit and recovery in this segment is expected to take longer than for domestic travel. As a result demand for all twin-aisle commercial passenger aircraft have



experienced have declined and are expected to remain at low levels for the near/medium term. As the market for the host aircraft behaves through the current cycle the GE90-115 series engine should exhibit similar characteristics with respect to demand and values. However engine values may be buoyed by current increased demand for 777Fs as well as the need for spare engines as airline attempt to avoid shop visits in an effort to conserve cash.

## 9. GENx Series Engines

Installed on over 600 787 aircraft worldwide with a further 275 units to be delivered, the GEnx-1B is the most popular engine choice for the Dreamliner, accounting for nearly 65% of the aircraft delivered to date. The GEnx has not had the same level of in-service issues as the competing Rolls-Royce Trent 1000 and as a result General Electric has been able to increase market share at the expense of their European competitor.

All airlines have dramatically reduced capacity in the wake of the COVID-19 crisis and as a result demand for aircraft has fallen and the host 787 is not immune. Demand for the GENx-1B has declined accordingly, and this phenomenon is expected to continue over the near/medium term. However as the market recovers from the current downturn, ICF expects airlines will value the operational flexibility and efficiency that smaller widebodies like the 787 provide and therefore anticipate values to gradually improve once the market recovery begins to gain steam.



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## VIII. Qualifications

Founded in 1963 and with offices in New York, Boston, London and New Delhi, ICF is one of the world's largest consulting firm specializing in commercial aviation. Its staff of approximately 70 personnel encompasses expertise in all disciplines of the industry and the firm has provided appraisal, consulting, strategic planning, and technical services to airlines, leasing companies, government agencies, airframe and engine manufacturers, and financial institutions.

ICF's appraisal staff are all members of the International Society of Transport Aircraft Trading ("ISTAT"), the internationally recognized body for the certification of aircraft appraisers. ICF performs all appraisals in accordance with the definitions, guidelines, and standards set forth by ISTAT. ICF's officer responsible for all appraisals is an ISTAT Senior Appraiser.

ICF annually values approximately \$30 billion of aviation assets including commercial and military equipment, international routes, airline fleets, and lease portfolios. The appraisals range from full appraisals involving detailed aircraft and record inspections conducted by ICF's technical staff to the valuation of tax-based leases. ICF's proprietary aircraft residual value model is widely accepted by the rating agencies as a reliable forecasting tool. In addition to the above aircraft valuations, ICF annually values in excess of \$10 billion worth of aircraft spare parts and spare engines. ICF routinely values flight simulators, hangar tooling, ground equipment, gates, slots, maintenance facilities, and Fixed Base Operations ("FBOs").

A related service that ICF offers its clients is Asset Management. Over the last few years, ICF has been the principal asset manager responsible for the recovery and subsequent remarketing of approximately 300 aircraft, nearly 150 engines, and some significant inventories of spare parts.

This active participation in the marketplace provides ICF with practical and first-hand knowledge of the values and lease rates of aircraft, engines, and parts.



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## IX. Limitations

ICF used information supplied by the Client, together with in-house data accumulated through other recent studies of aviation transactions.

ICF's opinions are based upon historical relationships and expectations that ICF believes are reasonable.

Some of the underlying assumptions, including those detailed explicitly or implicitly in this report, may not materialize because of unanticipated events and circumstances. ICF's opinions could, and would, vary materially, should any of the above assumptions prove to be inaccurate.

The opinions expressed herein are not given for, or as an inducement or endorsement for, any financial transaction. They are prepared for the exclusive use of the addressee unless ICF shall otherwise consent. ICF accepts no responsibility for damages, if any, that result from decisions made or actions taken based on this report.

This report does not address the validity of title or ownership of the items discussed herein.

This report reflects ICF's expert opinion and best judgment based upon the information available to it at the time of its preparation. ICF does not have, and does not expect to have, any financial interest in the appraised property.

For ICF

Stuart Rubin

Vice President, Managing Director Aviation, ICF ISTAT Certified Senior Appraiser

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# X. Appendix A

See Exhibit A Attachments



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1300   137-100   1396   120   1306   1316					-						Future Bar	se Values			
1979   1979	MSN	Model	Year	Age	Engine	CMV	611 07	2021	2022	2023	2024	2025	2026	2027	2028
1779   1779				22											
2700   173700   1798   22   1708   281   291   181   281						59.74									
2007   273   270   290   291   27   CPMS 2021   291   291   291   291   291   292				22											\$6.09
2700   2700   290   29   27   CPMS 2014   2914															56.09
1979   1979   1994   22   CRASS SERI   1994   1914   1916   1916   1917   1916   1917   1918   191															
200   277-200   1984   27   CPMS-SEM   99.04   1118   11167   10				22		59.81	\$11.94	\$11.04				57.74	\$7.14		\$6.09
270   270															36.10
12790   17790   1790   1791   1797												57.74			
1977   1777													\$7.15		
															\$6.10
1999   177-700   1999   12															56.10
	28936			22											56.11
1999   177-700   1999   22   CMMA-TRAS   931   53297   53112   53021   531.5   536.6   577   77.5   56.0   56.0   56.0   57.0															
1998   177-700   1999   22   CMAS-TRIA   99.94   59.211   59.125   59.12   5						59.91							57.16		56.11
127700   177700   1999   22   CMMARTMA   9588   512.18   511.18   530.15   59.17   59.18   57.77   57.18   56.0   56.11   52.18   52				22									\$7.16		56.11
2000   277-700   1999   22   CMM6-7014   5080   53217   53118   53015   59.07   59.0												57.76			
29846   777-700   1999   22   CMM6-7034   1,000   13,127   13,127   13,131   13,000   13,00															56.11
2906   777-700   1909   22   CMM6-7024   15101   33.11   13.12   15104   151															
20090   737-700   1999   22   CMM6-7014   1911   3111   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114   3112   3114				22											56.12
2000   777-700   1999   22   CMM6-7034   30.11   30.13   31.12   30.04   39.44   55.6   77.8   79.8   52.18   56.6   56.12   20.00   777-700   1999   22   CMM6-7034   30.11   30.10   30.10   30.10   30.00   30.00   30.00   30.10															
28000   777-700   1999   22															
29000   777.700   1999   22   CMMS-7024   Sph.11   Sph.22   Sph.11   Sph.22   Sph.12   Sph.11   Sph.22   Sph.12   Sph.				22									\$7.18		\$6.12
28900   777-700   1999   22															\$6.12
2000    777-700   1999   22   CMMS-7014   5994   512.11   511.15   510.24   59.15   59.10   57.76   57.16   56.61   56.11										\$9.47		\$7.81	\$7.18		\$6.12
2000    777-700   1999   22   CMMS-7014   5994   512.11   511.15   510.24   59.15   59.10   57.76   57.16   56.61   56.11				22					\$10.40	\$9.47		\$7.81	\$7.18	\$6.63	\$6.12
2000   797700   1999   22   CHMSC-7024   31001   31121   31028   93.95   85.51   57.77   57.00   57.00   57.00   57.00   57.70   57.00   57.															\$6.12
130-07   727-700   2004   22   CHMSC-7022   512-03   531-04   531-07   531-05   531-07   531-05   531-07   531-05   531-07   531-05   531-07   53															
2005   773700   2004   22   CHMS-7822   512.75   542.05   511.70   510.05   510.05   531.75   52.74   54.05   55.06   55.06   531.05   5	29048	737-700	1999	22		\$10.01		\$11.22	\$10.28	\$9.39	\$8.53		\$7.17	\$6.62	\$6.11
2005    717-000   1999   22															
2005    777-200   1998   22   CTMM6-7026   511-09   511															
22777   777-200   1998   22   CTMMS-7026   510-98   531-31   531-41   531-52   510-66   59.79   58.90   58.12   57.40   56.75   52777   777-200   1998   22   CTMMS-7026   510-98   531-31   531-41   531-52   510-66   59.77   58.90   58.12   57.40   56.75   58.77   58.90   58.12   57.40   56.75   58.77   58.90   58.12   57.40   56.75   58.77   58.90   58.12   57.40   56.75   58.90   58.12   57.40   56.75   58.90   58.9	28958	737-800	1999	22		\$11.30					\$9.86	\$8.97	\$8.14	\$7.40	\$6.75
22777   777-800   1998   22   CTMM6-7026   510-95   513-18   513-14   511-52   510-66   59.79   58.92   58.12   57.40   56.75															
22777 773-000 1998 22 CTMM6-7026 510-06 5131-0				22									\$8.12		\$6.75
22777 777-7800 1998 22 CFM567-7816 510-66 511-16 511-16 511-16 510-66 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-68 511-16 511-16 510-16 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-16 511-16 511-16 510-16 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-16 511-16 511-16 511-16 510-16															\$6.75
22777 777-7800 1998 22 CFM567-7816 510-66 511-16 511-16 511-16 510-66 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-68 511-16 511-16 510-16 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-16 511-16 511-16 510-16 5979 58.93 58.12 57.06 58.75 12.75 777-7800 1998 22 CFM567-7816 510-16 511-16 511-16 511-16 510-16		737-800	1998	22	CFM56-7B26	\$10.95	\$13.33	512.41	\$11.52	\$10.66	59.79	\$8.92	58.12	57.40	\$6.75
22775 737-800 1998 22 CYMSC-706 51308 513138 51245 51154 51067 59.00 58.00 58.00 58.01 57.00 56.75 50.70 50.	28773			22											\$6.75
22775 773-7800 1998 22 CYMMC-7026 51098 513.83 513.45 510.67 59.00 58.03 58.12 57.00 56.75 22777 773-7800 1998 22 CYMMC-7026 510.66 513.46 513.45 510.67 59.00 58.03 58.03 58.12 573.00 56.75 22777 773-7800 1998 22 CYMMC-7026 510.66 513.46 513.46 513.46 513.47 510.67 59.00 58.03 58.12 573.00 56.75 22777 773-7800 1998 22 CYMMC-7026 510.66 513.48 513.46 513.48 510.67 59.00 58.03 58.12 573.00 56.75 22777 773-7800 1998 22 CYMMC-7026 510.66 513.48 513.46 513.46 513.46 510.67 59.00 58.00 58.00 58.01 573.00 56.75 22731 773-7800 1998 22 CYMMC-7026 510.68 513.48 513.46 513.48 510.67 59.00 58.00 58.00 58.01 573.00 56.75 22731 773-7800 1998 22 CYMMC-7026 510.68 513.47 513.69 513.48 513.48 513.48 513.48 513.48 510.67 59.00 5	28774	737-800	1998	22	CFM56-7826	\$10.96	\$13.36	\$12.43	\$11.53	\$10.66	\$9.79	\$8.93	\$8.12	\$7.40	\$6.75
22777   773-900   1998   22   CMM67826   510-96   513-16   513-15   510-67   59.00   58.03   58.12   57.00   56.75   52777   773-900   1998   22   CMM67826   510-96   513-16   513-15   510-67   59.00   58.03   58.12   57.00   56.75   52778   773-900   1998   22   CMM67826   510-96   513-16   513-15   510-16   510-07   59.00   58.03   58.12   57.00   56.75   52779   773-900   1998   22   CMM67826   510-96   513-16   513-15   510-07   59.00   58.03   58.12   57.00   56.75   52799   773-900   1998   22   CMM67826   511-16   510-07   510-07   59.00   58.03   58.12   57.00   56.75   59.00   58.00   58.00   58.12   57.00   56.75   59.00   58.00   58.00   58.00   58.12   57.00   56.75   59.00   59.00   58.00   58.00   58.12   57.00   56.75   59.00   59.	28775	737-800	1998	22	CFM56-7B26	\$10.98	\$13.38	\$12.45	\$11.54	\$10.67	59.80	\$8.93	\$8.12	57.40	\$6.75
22777 737-800 1998 22 CMS6-7216 519.66 513.67 513.6 513.6 513.6 513.6 513.6 517.5 518.6 527.8 54.9 54.1 57.40 55.7 56.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52	28776	737-800	1998	22	CFM56-7B26	\$10.98	\$13.38	\$12.45	\$11.54	\$10.67	\$9.80	\$8.93	\$8.12	\$7.40	
227721   772-7800   1998   22   CMM56-72816   510.98   513.88   512.64   511.54   510.67   59.80   58.91   59.70   55.75	28777	737-800	1998	22	CFM56-7826	\$10.96	\$13.36	\$12.43	\$11.53	\$10.66	\$9.79	\$8.93	\$8.12	\$7.40	\$6.75
2007   2007   2008   2008   22			1998	22			\$13.38			\$10.67	59.80		\$8.12	57.40	\$6.75
29997   737-800   1998   22   CMMS-7826   511.04   513.45   513.50   513.57   510.68   59.80   58.12   57.40   56.75	28781	737-800			CFM56-7B26		\$13.38								
29930   737-800   1998   22   CMMS-7826   511.06   513.47   512.50   511.58   510.09   59.81   58.94   58.12   57.40   56.75		737-800	1998	22	CFM56-7826	\$11.04	\$13.45	\$12.50	\$11.57	\$10.68	\$9.80	\$8.93	\$8.12	\$7.40	
29931   737-800   1998   22   CMMS-7826   511.06   511.47   512.50   511.58   510.09   59.81   58.94   58.12   57.40   56.75	28930	737-800			CFM56-7B26								58.12	57.40	\$6.75
289312   737-800   1998   22   CFMMS-Pi26   51106   51347   312-50   511168   510.73   59.81   58.95   58.12   57.40   56.75     28792   737-800   1999   22   CFMMS-Pi26   511.14   513.57   512.58   511.64   510.73   59.82   58.95   58.12   57.40   56.75     28940   737-800   1999   22   CFMMS-Pi26   511.14   513.57   512.58   511.64   510.73   59.82   58.95   58.12   57.40   56.75     28940   737-800   1999   22   CFMMS-Pi26   511.17   511.60   511.66   511.66   511.76   59.84   58.95   58.12   57.40   56.75     28940   737-800   1999   22   CFMMS-Pi26   511.21   513.65   512.64   511.69   510.76   59.84   58.96   58.13   57.40   56.75     28940   737-800   1999   22   CFMMS-Pi26   511.21   513.65   512.64   511.69   510.76   59.84   58.96   58.13   57.40   56.75     28801   737-800   1999   22   CFMMS-Pi26   511.23   513.68   512.66   511.70   510.77   59.84   58.96   58.13   57.40   56.75     28802   737-800   1999   22   CFMMS-Pi26   511.23   513.68   512.66   511.70   510.77   59.84   58.96   58.13   57.40   56.75     28952   737-800   1999   22   CFMMS-Pi26   511.26   513.71   510.76   59.88   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CFMMS-Pi26   511.26   513.71   510.77   59.84   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CFMMS-Pi26   511.26   513.71   510.77   59.84   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CFMMS-Pi26   511.26   513.71   510.72   510.78   59.85   58.96   58.13   57.40   56.75     29955   737-800   1999   22   CFMMS-Pi26   511.26   513.74   513.72   510.72   59.85   59.96   58.13   57.40   56.75     29955   737-800   1999   22   CFMMS-Pi26   511.26   513.74   513.75   510.77   59.84   58.96   58.13   57.40   56.75     29955   737-800   1999   22   CFMMS-Pi26   511.26   513.74   513.75   510.78   59.85   59.96   58.13   57.40   56.75     29950   737-800   1999   22   CFMMS-Pi26   511.26   513.74   513.75   510.78   59.86   58.97   58.13   57.40   58.75     29950   737-800   1999   22   CFMMS-Pi26   511.26   513.74   510	28931	737-800			CFM56-7B26										\$6.75
28912 737400 1999 22 CMMSC-RDG \$11.14 \$13.57 \$13.58 \$11.64 \$10.73 \$93.8 \$9.55 \$3.12 \$57.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.17 \$13.65 \$13.64 \$11.69 \$10.76 \$93.81 \$93.95 \$3.12 \$57.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.21 \$13.65 \$13.64 \$11.69 \$10.76 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.21 \$13.65 \$13.64 \$11.69 \$10.76 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.166 \$11.70 \$10.77 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.166 \$11.70 \$10.77 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.16 \$13.17 \$10.75 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2805 737400 1999 22 CMMSC-RDG \$11.28 \$13.74 \$13.72 \$10.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2805 737400 1999 22 CMMSC-RDG \$11.28 \$13.74 \$13.72 \$10.78 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$3.55 \$10.78 \$10.	28932	737-800	1998		CFM56-7B26		\$13.47	\$12.50	\$11.58	\$10.69	59.81	\$8.94	\$8.12	\$7.40	\$6.75
28912 737400 1999 22 CMMSC-RDG \$11.14 \$13.57 \$13.58 \$11.64 \$10.73 \$93.8 \$9.55 \$3.12 \$57.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.17 \$13.65 \$13.64 \$11.69 \$10.76 \$93.81 \$93.95 \$3.12 \$57.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.21 \$13.65 \$13.64 \$11.69 \$10.76 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2894 737400 1999 22 CMMSC-RDG \$11.21 \$13.65 \$13.64 \$11.69 \$10.76 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.166 \$11.70 \$10.77 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.166 \$11.70 \$10.77 \$93.84 \$9.96 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.23 \$13.68 \$13.16 \$13.17 \$10.75 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2800 737400 1999 22 CMMSC-RDG \$11.26 \$13.71 \$13.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2805 737400 1999 22 CMMSC-RDG \$11.28 \$13.74 \$13.72 \$10.72 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$2805 737400 1999 22 CMMSC-RDG \$11.28 \$13.74 \$13.72 \$10.78 \$10.78 \$93.85 \$9.86 \$3.13 \$7.40 \$6.75 \$3.55 \$10.78 \$10.			1999	22	CFM56-7826	\$11.14	\$13.57	512.58		\$10.73		\$8.95	58.12	57.40	\$6.75
28942 737-000 1999 22 CFM6-P286 511.17 S13.60 S11.66 S10.74 S9.81 S8.95 S8.12 S7.40 S6.75 28947 737-000 1999 22 CFM6-P286 511.21 S13.65 S12.64 S11.09 S10.76 S9.84 S8.96 S8.13 S7.40 S6.75 28947 737-000 1999 22 CFM6-P286 S11.23 S13.65 S12.64 S11.09 S10.75 S9.84 S8.96 S8.13 S7.40 S6.75 28802 737-000 1999 22 CFM6-P286 S11.23 S13.68 S12.66 S11.70 S10.77 S9.84 S8.96 S8.13 S7.40 S6.75 28802 737-000 1999 22 CFM6-P286 S11.23 S13.68 S12.66 S11.70 S10.77 S9.84 S8.96 S8.13 S7.40 S6.75 28802 737-000 1999 22 CFM6-P286 S11.26 S11.26 S12.71 S12.68 S11.72 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 28806 737-000 1999 22 CFM6-P286 S11.26 S11.71 S12.68 S11.72 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 28806 737-000 1999 22 CFM6-P286 S11.26 S13.71 S12.68 S11.72 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 28807 737-000 1999 22 CFM6-P286 S11.26 S13.71 S12.68 S11.72 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 S2857 737-000 1999 22 CFM6-P286 S11.26 S13.71 S12.78 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 S2857 737-000 1999 22 CFM6-P286 S11.26 S13.74 S12.77 S11.72 S10.78 S9.85 S8.96 S8.13 S7.40 S6.75 S2857 737-000 1999 22 CFM6-P286 S11.26 S13.74 S12.78 S12.78 S12.78 S12.79 S1		737-800			CFM56-7B26										56.75
28946   737-800   1999   22   CMMG-PB26   511.21   513.65   512.64   511.09   510.76   59.84   58.96   58.13   57.40   56.75     28850   737-800   1999   22   CMMG-PB26   511.23   513.68   512.66   511.70   510.77   59.84   58.96   58.13   57.40   56.75     28850   737-800   1999   22   CMMG-PB26   511.23   513.68   512.66   511.70   510.77   59.84   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CMMG-PB26   511.26   511.21   513.68   511.72   510.78   59.85   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CMMG-PB26   511.26   511.27   511.28   511.72   510.78   59.85   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CMMG-PB26   511.26   511.27   511.27   510.78   59.85   58.96   58.13   57.40   56.75     28950   737-800   1999   22   CMMG-PB26   511.26   511.37   511.74   510.78   59.86   58.97   58.13   57.40   56.75     30533   737-800   1999   22   CMMG-PB26   511.26   511.30   5															\$6.75
28947   737-800   1999   22   CFMSC-7026   511.21   513.65   511.66   511.07   593.84   58.96   58.11   57.40   56.75						\$11.21							58.13	57.40	56.75
28801 737-800 1999 22 CFM56-7826 511.23 513.68 512.16 511.70 510.77 593.84 58.96 58.13 57.40 56.75 28952 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 593.84 58.96 58.13 57.40 56.75 28952 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 593.85 58.96 58.13 57.40 56.75 28955 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 593.85 58.96 58.13 57.40 56.75 28955 737-800 1999 22 CFM56-7826 511.26 513.71 512.72 510.79 593.66 58.77 58.13 57.40 56.75 28955 737-800 1999 22 CFM56-7826 511.30 513.74 512.71 511.72 510.79 593.66 58.77 58.13 57.40 56.75 595.83 737-800 1999 22 CFM56-7826 511.30 513.74 512.71 511.72 510.79 593.66 58.77 58.13 57.40 56.75 595.83 737-800 2000 22 CFM56-7826 511.30 51.74 512.71 511.72 510.79 593.66 58.77 58.11 57.40 56.75 595.83 737-800 2000 22 CFM56-7826 511.31 514.03 512.94 511.90 510.92 599.4 59.00 58.16 57.40 56.75 30022 737-800 2000 22 CFM56-7826 512.11 514.03 512.94 511.90 510.92 599.4 59.00 58.16 57.40 56.75 30022 737-800 2000 22 CFM56-7826 512.11 514.03 512.94 511.90 510.92 599.4 59.00 58.16 57.40 56.75 30022 737-800 2000 22 CFM56-7826 512.14 514.07 511.00 510.93 510.92 599.94 59.00 58.16 57.40 56.75 30022 737-800 2001 22 CFM56-7826 512.31 514.07 514.03 512.94 511.90 510.92 599.94 59.00 58.16 57.40 56.75 30022 737-800 2001 22 CFM56-7826 512.34 514.07 514.03 512.94 511.00 510.04 59.06 58.10 57.44 56.75 30022 737-800 2001 22 CFM56-7826 512.34 514.07 514.03 512.94 511.00 510.04 59.06 58.10 57.44 56.75 3240 514.74 512.75 514.00 514.74 512.75 512.74 512.75 514.49 513.35 512.24 511.00 510.14 59.14 59.14 59.14 59.14 59.74 59.00 59.00 58.16 57.44 56.75 315.94 512.00 510.14 59															
28802 737-800 1999 22 CFM56-7826 511.28 513.74 513.68 517.70 50.77 50.84 58.96 58.13 57.40 58.75 28856 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 59.85 58.96 58.13 57.40 58.75 28856 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 59.85 58.96 58.13 57.40 58.75 28857 737-800 1999 22 CFM56-7826 511.28 513.74 512.68 511.72 510.79 59.86 58.97 58.13 57.40 58.75 28857 737-800 1999 22 CFM56-7826 511.28 513.74 512.68 511.72 510.79 59.86 58.97 58.13 57.40 58.75 28857 737-800 1999 22 CFM56-7826 511.28 513.74 512.70 510.79 59.86 58.97 58.14 57.40 58.75 30581 737-800 2000 122 CFM56-7826 512.11 514.03 513.77 512.79 510.79 59.86 58.97 58.14 57.40 58.75 30583 737-800 2000 22 CFM56-7826 512.11 514.03 513.79 510.92 59.94 59.00 58.16 57.40 58.75 30584 737-800 2000 22 CFM56-7826 512.11 514.03 513.94 511.90 510.92 59.94 59.00 58.16 57.40 58.75 30593 737-800 2000 22 CFM56-7826 512.11 514.03 513.94 511.90 510.92 59.94 59.00 58.16 57.40 58.75 30593 737-800 2000 22 CFM56-7826 512.14 514.07 513.00 511.94 510.94 59.96 59.01 58.16 57.40 58.75 30585 737-800 2000 12 CFM56-7826 512.14 514.07 513.00 511.94 510.94 59.96 59.01 58.16 57.40 58.75 30585 737-800 2001 22 CFM56-7826 512.14 514.07 513.00 511.94 510.94 59.96 59.01 58.16 57.44 58.75 31.90 51.90 511.05 510.04 59.06 58.19 57.44 58.75 31.90 51.90 511.05 510.04 59.06 58.19 57.44 58.75 31.90 51.90 51.00 51.00 51.00 59.00 58.19 57.44 58.75 31.90 51.90 51.00 51.00 59.00 58.19 57.44 58.75 31.90 51.90 51.00 51.00 59.00 58.19 57.44 58.75 31.90 51.90 51.00 51.00 59.00 58.19 57.44 58.75 31.90 51.90 51.00 51.00 59.00 58.19 57.44 58.75 57.45 58.75 31.90 51.00 51.00 59.00 58.19 57.44 58.75 57.45 58.75 31.90 59.10 59															
28952 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.78 59.85 58.96 58.13 57.40 56.75 28955 737-800 1999 22 CFM56-7826 511.26 513.71 512.68 511.72 510.72 59.85 58.96 58.13 57.40 56.75 28957 537-800 1999 22 CFM56-7826 511.26 513.71 511.72 510.79 59.86 58.97 58.14 57.40 56.75 30.85 37.78 50.00 1999 22 CFM56-7826 511.26 513.70 513.77 510.72 510.79 59.86 58.97 58.14 57.40 56.75 30.85 37.78 50.00 1999 22 CFM56-7826 511.26 513.70 513.77 510.70 59.86 58.97 58.14 57.40 56.75 30.85 37.78 50.00 1999 22 CFM56-7826 511.21 514.03 512.74 510.80 510.92 59.86 58.97 58.14 57.40 56.75 30.85 37.78 50.00 1999 22 CFM56-7826 511.21 514.03 512.94 511.90 510.92 59.86 58.97 58.16 57.40 56.75 30.74 57.80 30.70 19.78 50.00 19.78 50			1999	22		\$11.23				\$10.77	59.84	\$8.96	58.13	57.40	56.75
28806   737-800   1999   22   CFM56-7826   511.26   513.74   512.71   511.72   510.72   59.85   58.96   58.13   57.40   56.75     28857   737-800   1999   22   CFM56-7826   511.80   513.74   513.77   513.73   511.74   510.80   59.86   58.97   58.13   57.40   56.75     28857   737-800   1999   22   CFM56-7826   511.10   513.77   513.73   511.74   510.80   59.86   58.97   58.14   57.40   56.75     305381   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75     305384   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75     30779   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75     30779   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75     30802   737-800   2000   22   CFM56-7826   512.14   514.07   513.00   511.95   510.92   59.94   59.00   58.16   57.40   56.75     30802   737-800   2001   22   CFM56-7826   512.33   514.29   513.00   510.95   510.95   510.95     32403   737-7800   2001   22   CFM56-7826   512.33   514.29   513.85   512.20   511.05   510.05   59.06   58.19   57.43   56.75     31590   737-800   2001   22   CFM56-7826   512.50   514.47   513.25   512.45   511.00   510.05   59.06   58.19   57.43   56.75     31590   737-800   2001   22   CFM56-7826   512.50   514.49   513.85   512.22   511.15   510.10   59.11   58.21   57.44   56.75     31590   737-800   2000   22   CFM56-7826   512.50   514.49   513.85   512.22   511.15   510.10   59.11   58.21   57.44   56.75     31596   737-800   2000   22   CFM56-7826   512.55   514.89   513.45   51															
28955   737-800   1999   22   CFM56-7826   511.28   513.74   512.77   511.72   510.79   59.86   58.97   581.13   57.46   56.75															
28957   737-800   1999   22   CFM56-7826   511.10   511.77   511.78   511.74   510.00   59.96   58.97   58.14   57.40   56.75															
30588   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75				22		\$11.20			511.74				58 14		\$6.75
305584   737-800   2000   22   CFM56-7826   512.11   514.03   512.94   511.90   510.92   59.94   59.00   58.16   57.40   56.75															
30779   737-800   2000   22   CFM56-7826   512.14   514.07   513.00   511.90   510.92   59.94   59.00   58.16   57.40   56.75								\$12.94						57.40	66.75
\$\begin{array}{c c c c c c c c c c c c c c c c c c c															
30555   737-800   2001   22   CFM56-7826   512.43   514.29   513.85   512.09   511.05   510.06   59.06   58.19   57.48   56.76   31590   737-800   2001   22   CFM56-7826   512.50   514.49   513.35   512.22   511.15   510.01   59.11   58.21   57.44   56.76   515.95   514.49   513.35   512.22   511.15   510.10   59.11   58.21   57.44   56.76   515.95   51.250   514.49   513.35   512.22   511.15   510.10   59.11   58.21   57.44   56.76   515.95   51.250   514.49   513.35   512.22   511.15   510.10   59.11   58.21   57.44   56.76   515.95   515.95   514.58   515.95   514.58   515.25   514.58   512.22   511.25   510.14   59.1														57.40	56.75
32403   737-800   2001   22   CFM56-7826   511-40   514-37   513-25   512-14   511.09   510.06   59.08   58.19   57.48   56.76   31550   737-800   2001   22   CFM56-7826   512-55   514-49   513.35   512-22   511.15   510.10   59.11   58.21   57.44   56.76   31595   737-800   2002   22   CFM56-7826   512-58   514-58   514-42   512-29   511.20   510.14   59.14   59.14   58.22   57.46   56.77   31595   737-800   2002   22   CFM56-7826   512-58   514-58   514-42   512-29   511.20   510.15   59.15   58.21   57.45   56.77   31595   737-800   2003   22   CFM56-7826   513-36   515-48   511-42   512-29   511.20   510.15   59.15   58.23   57.45   56.77   31596   737-800   2003   22   CFM56-7826   513-36   515-48   511-37   512-98   511.77   510.58   59.45   54.44   57.57   56.83   31598   737-800   2003   22   CFM56-7826   513-46   515-59   514-26   510.05   511.80   510.61   59.47   54.45   57.57   56.84   31599   737-800   2003   22   CFM56-7826   513-45   515-59   514-26   510.05   511.80   510.61   59.47   58.45   57.57   56.84   31500   737-800   2004   22   CFM56-7826   513.45   515.59   514-26   510.02   511.80   510.61   59.47   58.45   57.57   56.84   31600   737-800   2004   22   CFM56-7826   513.45   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   58.86   3451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   56.86   3451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   56.86   3451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   56.86   3451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   58.86   3451   737-800   2004   22   CFM56-7826   513.85   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   58.86   3451   737-800   2004   22   CFM56-7826   513.85   515.81   514.46   513.19   511.94   510.73   59.56   58				22									68 16		66.75
31590 737-800 2002 22 CFM56-7826 512.50 514.49 513.85 512.22 511.15 510.10 59.11 58.21 57.44 56.75 31594 737-800 2002 22 CFM56-7826 512.62 514.62 513.64 512.32 511.20 510.14 59.16 58.22 57.65 56.77 31596 737-800 2003 22 CFM56-7826 513.65 515.68 515.68 51.68 51.67 512.58 512.59 51.67 512.58 51.67 512.58 512.59 51.67 512.58 51.67 512.58 512.59 51.67 512.58 512.59 51.67 512.58 512.59 51.67 512.58 512.59 51.67 512.58 512.59 5															\$6.76
31594   737-800   2002   22   CFM56-7826   512.52   514.58   513.42   512.29   511.20   510.14   50.34   58.22   57.45   56.77															\$6.76
31556   737-800   2003   22   CFM56-7826   513.64   515.48   515.48   514.17   519.29   511.73   510.55   59.15   58.23   57.45   56.73     31597   737-800   2003   22   CFM56-7826   513.44   515.53   514.21   512.98   511.77   510.58   59.42   534.47   57.57   56.83     31598   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.00   511.80   510.61   59.47   53.45   57.57   56.83     31598   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.00   511.80   510.61   59.47   53.45   57.57   56.83     31598   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.00   511.80   510.61   59.47   53.45   57.57   56.84     31600   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.00   511.80   510.61   59.47   53.45   57.57   56.84     31600   737-800   2004   22   CFM56-7826   513.45   515.59   514.26   513.00   511.80   510.61   59.47   53.45   57.57   56.84     31636   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   58.86     33451   737-800   2004   22   CFM56-7826   513.45   515.81   514.46   513.19   511.94   510.73   59.56   58.52   57.62   58.86     33451   737-800   2004   22   CFM56-7826   513.45   515.81   514.50   513.24   511.89   510.73   59.56   58.55   57.64   58.87     31601   737-800   2004   22   CFM56-7826   513.47   515.93   514.55   513.24   511.89   510.73   59.56   58.55   57.64   58.87     33401   737-800   2004   22   CFM56-7826   513.43   515.59   514.55   513.24   511.98   510.73   59.56   58.55   57.64   58.87     33401   737-800   2004   22   CFM56-7826   513.43   516.04   514.66   513.27   510.29   510.85   59.66   58.59   57.67   58.89     33405   737-800   2004   22   CFM56-7826   513.43   516.64   514.66   513.27   512.21   510.94   59.74   58.66   57.77   58.99     33405   737-800   2006   22   CFM56-7826   514.03   516.22   513.81   512.21   511.19   59.94   58.81   57.81   59.94     33400   737-800   2006   22   CFM56-7826   514.03   516.62   515.57   517.46															
31597 737-800 2001 22 CFM56-7826 513.45 515.57 514.26 513.02 511.00 510.61 59.47 58.48 57.57 56.83 31597 737-800 2001 22 CFM56-7826 513.45 515.57 514.26 513.02 511.00 510.61 59.47 58.45 57.57 56.83 31598 737-800 2003 22 CFM56-7826 513.45 515.59 514.26 513.02 511.00 510.61 59.47 58.45 57.57 56.83 31599 737-800 2001 22 CFM56-7826 513.45 515.59 514.26 513.02 511.00 510.61 59.47 58.45 57.57 56.84 515.99 510.00 510.0															\$6.77
31597   737-800   2003   22   CFM56-7826   513.44   515.53   514.21   512.98   511.77   510.58   59.45   59.45   59.41   57.57   56.84   31599   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.02   511.80   510.61   59.47   53.45   57.57   56.84   31599   737-800   2003   22   CFM56-7826   513.45   515.59   514.26   513.02   511.80   510.61   59.47   53.45   57.57   56.84   31600   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   53.52   57.62   58.86   33451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   53.52   57.62   58.86   33451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   53.52   57.62   58.86   33451   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   53.52   57.62   58.86   33451   737-800   2004   22   CFM56-7826   513.67   513.67   515.59   513.24   511.88   510.75   59.59   53.53   57.63   56.87   316.01   737-800   2004   22   CFM56-7826   513.74   515.93   514.55   513.24   511.88   510.75   59.59   59.55   57.67   58.87   316.01   737-800   2004   22   CFM56-7826   513.74   515.93   514.55   513.25   512.02   510.05   59.66   53.59   57.67   58.87   316.01   737-800   2004   22   CFM56-7826   514.00   516.22   514.81   513.75   512.21   510.94   59.74   58.65   57.77   58.92   34002   737-800   2005   22   CFM56-7826   514.00   516.22   514.81   513.75   512.21   510.94   59.74   58.65   57.71   58.92   34002   737-800   2005   22   CFM56-7826   514.03   516.22   513.81   512.21   511.19   59.94   58.81   57.81   59.91   316.02   737-800   2006   22   CFM56-7826   514.03   516.72   515.93   515.59   512.55   511.35   512.21   511.19   59.94   58.81   57.81   59.01   316.02   737-800   2006   22   CFM56-7826   514.40   515.92   514.46   513.02   511.64   510.31   59.11   58.06   57.16   316.04   377-800   2006   22   CFM56-7826   515.03   517.46   515.92   514.46   513.02   511.64															
31598   737-800   2003   22   CFM55-7826   531.45   531.59   544.26   531.00   531.00   530.61   594.77   58.48   57.57   58.84   31599   737-800   2003   22   CFM55-7826   531.45   531.59   544.26   531.00   531.00   531.00   530.61   594.77   58.64   537.57   58.84   31599   737-800   2004   22   CFM56-7826   531.65   535.81   534.46   531.19   531.94   530.73   59.56   535.51   57.62   58.86   33.451   737-800   2004   22   CFM56-7826   531.65   531.81   534.46   531.19   531.94   530.73   59.56   535.21   57.62   58.86   33.451   737-800   2004   22   CFM56-7826   531.84   531.87   534.46   531.24   531.28   530.73   59.56   535.21   57.62   58.86   33.451   737-800   2004   22   CFM56-7826   531.84   531.87   534.46   531.24   531.28   530.75   59.59   53.53   57.62   56.86   33.451   737-800   2004   22   CFM56-7826   531.84   531.87   531.66   531.37   531.28   530.20   530.79   59.61   53.55   57.62   56.87   33.655   737-800   2004   22   CFM56-7826   531.84   531.66   531.37   531.28   530.20   530.85   59.66   53.59   57.67   56.89   33.455   737-800   2004   22   CFM56-7826   531.84   531.60   531.24   531.25   531.25   531.25   531.85   530.66   53.59   57.67   56.89   34.55   737-800   2004   22   CFM56-7826   531.84   531.60   531.25   531.85   530.20   530.85   59.66   53.59   57.67   56.89   34.00   737-800   2005   22   CFM56-7826   531.84   531.60   531.25   531.85   531.25   531.85   530.85   59.66   53.59   57.67   56.89   34.00   737-800   2005   22   CFM56-7826   531.84   531.60   531.25   531.85   531.25   531.17   59.94   53.81   57.38															
31599   737-800   2004   22   CFM56-7826   513.45   515.59   514.46   513.02   511.80   510.75   59.56   58.55   57.62   58.86   316.02   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.55   57.62   58.86   38.51   737-800   2004   22   CFM56-7826   513.65   515.81   514.46   513.19   511.94   510.73   59.56   58.55   57.62   58.86   38.51   737-800   2004   22   CFM56-7826   513.65   515.87   514.59   512.88   511.99   510.75   59.59   58.53   57.62   58.87   31607   737-800   2004   22   CFM56-7826   513.74   515.93   514.59   512.88   512.02   510.75   59.59   58.53   57.64   56.87   31607   737-800   2004   22   CFM56-7826   513.84   516.04   514.66   513.37   512.29   510.85   59.66   53.55   57.67   58.87   31601   737-800   2004   22   CFM56-7826   514.00   516.22   513.88   512.20   510.85   59.66   53.59   57.67   58.87   31601   737-800   2004   22   CFM56-7826   514.00   516.22   518.81   515.57   512.21   510.94   59.74   58.65   57.77   58.97   34001   737-800   2005   22   CFM56-7826   514.00   516.22   518.81   515.57   512.21   510.94   59.74   58.65   57.77   58.97   34001   737-800   2005   22   CFM56-7826   514.38   516.67   515.57   513.85   512.21   511.19   59.99   58.81   57.81   59.90   58.00   57.16   510.00   57.16   510.00   57.16   510.00   57.16   510.00   517.46   515.90   51															
31600 737-800 2004 22 CFM56-7826 5113.65 515.81 514.46 513.19 511.94 510.73 59.56 58.52 57.62 58.86 34511 737-800 2004 22 CFM56-7826 513.65 515.81 515.81 514.46 513.19 511.94 510.73 59.56 58.55 57.62 58.86 34511 737-800 2004 22 CFM56-7826 513.69 515.81 5				22											30.04
31666   737-800   2004   22   CFM56-7826   511.85   515.81   514.46   511.99   511.94   510.73   59.56   58.52   57.62   58.85   38.55   37.62   58.85   38.55   37.62   58.85   38.55   37.62   58.85   38.55   37.62   58.85   38.55   37.62   58.87   31607   737-800   2004   22   CFM56-7826   511.84   515.93   514.55   513.28   512.02   510.75   59.59   58.55   57.64   56.87   31607   737-800   2004   22   CFM56-7826   513.84   515.04   514.66   511.37   512.29   510.85   59.66   58.55   57.64   56.87   31601   737-800   2004   22   CFM56-7826   514.00   516.22   518.81   513.21   510.24   59.74   58.65   57.77   58.87   38.00   737-800   2005   22   CFM56-7826   514.00   516.22   518.81   513.55   512.21   510.94   59.74   58.65   57.71   58.97   34001   737-800   2005   22   CFM56-7826   514.38   516.72   515.51   513.85   512.25   511.19   59.94   58.81   57.81   59.94   59.00	31500	737.900		22			\$15.59					59.47	\$8.45	37.37	30.84
33451   737-800   2004   22   CFM56-7826   513.69   515.87   514.50   513.24   511.88   510.75   59.99   58.53   57.68   58.87     31607   737-800   2004   22   CFM56-7826   513.84   516.04   514.65   513.27   512.09   510.79   59.61   55.55   57.64   58.87     316101   737-800   2004   22   CFM56-7826   513.84   516.04   514.66   513.37   512.09   510.95   59.66   58.59   57.67   58.89     33455   737-800   2004   22   CFM56-7826   513.84   516.04   514.66   513.27   512.21   510.94   59.74   58.65   57.71   56.92     34001   737-800   2005   22   CFM56-7826   514.83   516.67   515.81   512.21   510.94   59.74   58.65   57.71   56.92     34000   737-800   2005   22   CFM56-7826   514.83   516.67   515.31   519.95   512.55   511.93   59.94   58.81   57.81   59.94     31602   737-800   2005   22   CFM56-7826   515.50   517.39   515.86   514.38   512.27   511.29   59.97   58.83   57.84   57.01     31602   737-800   2006   22   CFM56-7826   515.07   517.46   515.97   517.46   515.97   511.99   510.28   59.09   58.01   57.16     31603   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31604   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31604   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31832   737-800   2006   22   CFM56-7826   515.13   515.97   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31832   737-800   2006   22   CFM56-7826   515.13   515.97   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31832   737-800   2006   22   CFM56-7826   515.13   515.97   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31838   737-800   2006   22   CFM56-7826   515.13   515.97   517.46   515.92   514.44   513.00   511.64   510.31   59.11   58.66   57.16     31838   737-800   2000   22   CFM56-7826															
31607 737-800 2004 22 CFM56-7826 513.74 515.93 514.65 513.28 512.02 510.79 59.6.1 58.55 57.64 58.87 31601 737-800 2004 22 CFM56-7826 513.84 516.04 515.62 513.84 516.05 51.05 51.05 59.66 58.99 57.67 56.89 34.05 737-800 2005 22 CFM56-7826 514.00 516.22 514.81 513.51 512.21 510.94 59.74 58.66 57.71 56.92 34.00 737-800 2005 22 CFM56-7826 514.38 516.02 513.31 513.05 512.51 511.19 59.94 58.81 57.83 56.92 34.00 737-800 2005 22 CFM56-7826 514.38 516.72 513.31 513.05 512.51 511.19 59.94 58.81 57.83 57.83 56.92 34.00 737-800 2005 22 CFM56-7826 514.38 516.72 513.31 513.05 512.51 511.19 59.94 58.81 57.83 57.83 57.93 34.00 737-800 2005 22 CFM56-7826 514.38 516.72 513.31 513.05 512.55 511.23 59.97 58.81 57.84 57.01 316.02 737-800 2005 22 CFM56-7826 514.00 517-39 515.86 514.38 512.27 511.23 59.97 58.81 57.84 57.01 316.03 737-800 2005 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.44 513.31 59.11 58.06 57.16 334.61 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 316.44 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.91 517-46 515.92 514.45 513.02 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.91 517-46 515.92 514.45 513.07 511.64 510.31 59.11 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.91 517-46 515.92 514.45 513.07 511.68 510.38 59.14 58.06 57.16 334.44 737-800 2006 22 CFM56-7826 515.91 517-4															
31601   737-800   2004   22   CFM56-7826   513.84   516.04   514.66   513.37   512.09   510.85   59.66   58.59   57.67   58.89   34.55   727.800   2004   22   CFM56-7826   514.00   516.22   514.81   515.15   512.21   510.94   59.74   58.65   57.71   56.92   34.001   737-800   2005   22   CFM56-7826   514.83   516.66   515.25   513.85   512.21   511.91   59.94   58.81   57.81   59.94   58.81   57.81   59.94   58.81   57.81   59.94   59.94   58.81   57.81   59.94   59.94   58.81   57.81   59.94   59.94   59.94   58.81   57.81   59.94	33431	737-800													
33455 737-800 2006 22 CFM56-7826 514.00 516.22 514.81 513.51 512.21 510.94 59.74 58.65 57.71 58.92 34001 737-800 2005 22 CFM56-7826 514.84 516.66 515.52 513.85 512.51 511.19 59.94 58.81 57.84 59.99 34002 737-800 2005 22 CFM56-7826 514.43 516.67 515.25 513.85 512.51 511.19 59.94 58.81 57.84 57.94 59.91 31602 737-800 2006 22 CFM56-7826 515.01 517.39 515.86 514.83 512.97 511.98 510.28 59.97 58.83 57.84 57.04 31603 737-800 2006 22 CFM56-7826 515.01 517.39 515.86 514.84 513.02 511.64 510.31 59.11 58.66 57.16 33461 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.66 57.16 33461 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.66 57.16 33634 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.66 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.66 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.49 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.49 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.13 517-33 515.98 514.90 513.07 511.68 510.35 59.14 58.08 57.16 32834 737-800 2006 22 CFM56-7826 515.19 517-6 517-6 510.31 511.87 517.21 515.70 514.28 513.00 511.84 31668 737-800 2000 2010 22 CFM56-7826/3 50.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31669 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 510						\$13.74			\$13.28				38.55	57.64	36.87
Mod01   737-800   2005   22   CFM56-7826   514.85   516.72   515.85   512.85   512.55   511.91   59.94   58.81   57.81   59.94   59.94   36.92   37.80   2005   22   CFM56-7826   514.85   516.72   515.91   519.95   512.55   511.93   59.97   58.81   57.81   57.01   31602   737-800   2006   22   CFM56-7826   515.91   517.39   515.86   516.38   512.97   511.93   510.28   59.08   58.01   57.16   316.02   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   316.04   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   316.04   737-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   316.04   737-800   2006   22   CFM56-7826   515.97   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   318.32   312.32   37.7800   2006   22   CFM56-7826   515.31   515.97   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   318.32   312.32   37.7800   2006   22   CFM56-7826   515.31   515.93														\$7.67	\$6.89
34002 737-800 2006 22 CFM56-7826 514.43 516.72 515.31 513.90 512.55 511.23 59.97 58.81 57.84 57.01 31602 737-800 2006 22 CFM56-7826 515.01 517.39 515.86 513.85 512.97 511.59 510.28 59.08 58.03 57.14 31603 727-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 33451 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 31604 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.93 517.46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.93 517.46 515.92 514.45 513.07 511.68 510.35 59.14 58.08 571.6 32834 737-800 2006 22 CFM56-7826 515.93 517.61 515.05 515.05 513.12 511.03 59.17 58.10 57.20 301.22 737-800 2010 22 CFM56-7826/3 501.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 516.00 737-800 2010 22 CFM56-7826/3 50.11 523.31 521.76 50.31 518.76 517.21 515.70 514.28 513.00 511.84 513.00 511.84 513.00															
31602 737-800 2006 22 CFM56-7826 515.01 517.39 515.86 514.38 512.37 511.59 510.28 59.08 58.03 57.14 11603 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 513.03 59.11 58.06 57.16 11604 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 513.03 59.11 58.06 57.16 11604 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 513.03 59.11 58.06 57.16 11604 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.44 513.02 511.64 513.03 59.11 58.06 57.16 328.34 737-800 2006 22 CFM56-7826 515.07 517.46 515.92 514.65 513.07 511.64 513.03 59.11 58.06 57.16 328.34 737-800 2006 22 CFM56-7826 515.19 517.61 516.05 514.50 513.07 511.68 510.38 59.14 58.08 57.18 328.32 737-800 2006 22 CFM56-7826 515.19 517.61 516.05 514.55 513.12 511.72 510.29 59.17 58.10 57.20 511.64 513.00 511.64 510.38 59.14 58.08 57.18 310.32 737-800 2006 22 CFM56-7826 50.01 517.01 517.01 517.01 517.00 514.28 513.00 511.84 510.38 59.14 58.08 57.18 310.32 57.70 510.			2005	22									\$8.81		\$6.99
31460   727-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   33461   727-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   316.04   727-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.02   511.64   510.31   59.11   58.06   57.16   32834   727-800   2006   22   CFM56-7826   515.07   517.46   515.92   514.44   513.07   511.64   510.31   59.11   58.06   57.16   32834   727-800   2006   22   CFM56-7826   515.13   517.53   515.98   514.50   513.07   511.68   510.35   59.14   58.08   57.18   32832   737-800   2006   22   CFM56-7826   515.19   517.61   516.05   515.50   513.12   511.72   510.39   59.17   58.00   57.20   301.22   727-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   31662   737-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   31660   737-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   31660   737-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   31660   737-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   31660   737-800   2010   22   CFM56-7826/3   520.11   523.31   521.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   3160   737-800   2010   22   CFM56-7826/3   520.11   523.31   523.76   520.31   518.76   517.21   515.70   514.28   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511.84   513.00   511															57.01
33461 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.44 513.02 511.64 510.31 59.11 58.06 57.16 31604 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.45 513.02 511.64 510.31 59.11 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.07 517-46 515.92 514.69 513.07 511.68 510.35 59.14 58.06 57.16 32834 737-800 2006 22 CFM56-7826 515.13 517-3 515.98 514.50 513.07 511.68 510.35 59.14 58.08 57.16 32834 737-800 2006 22 CFM56-7826 515.99 517-61 516.06 513.57 511.27 510.39 59.17 58.10 57.20 30132 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 520.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 3160 737-800 2010 22 CFM56-7826/3 520.11 523.31 523.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 5															
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28284 737-800 2006 22 CFM56-7826 515.13 517.53 515.98 514.50 513.07 511.68 510.35 59.14 58.08 57.18 31832 737-800 2006 22 CFM56-7826/3 510.19 517.61 515.09 517.61 510.05 513.12 513.09 59.17 58.10 57.20 57.20 50.11 573.01 510.05 510.0				22			\$17.46		\$14.44						\$7.16
32832 737-800 2006 22 CFM56-7826 515.19 517.61 516.05 514.55 513.12 511.72 510.39 59.17 58.10 57.20 30132 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31658 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31652 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 31660 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 3160 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 317.01 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84															\$7.16
30122 727-800 2010 22 CFMSG-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$514.28 \$13.00 \$11.84 \$13658 727-800 2010 22 CFMSG-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$514.28 \$13.00 \$11.84 \$13662 737-800 2010 22 CFMSG-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$13660 737-800 2010 22 CFMSG-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$13.00 \$11.				22									59.14		
31658 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$70.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$1650 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$0.00.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$1650 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$10.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$1650 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$10.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84 \$11.84 \$11.00 \$11.00 \$11.84 \$11.00 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00 \$11.84 \$11.00															
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31662 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 3160 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 37101 737-800 2010 22 CFM56-7826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84	31658	737-800	2010	22	CFM56-7826/3	\$20.11	\$23.31	\$21.76	\$20.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	\$11.84
31660 737800 2010 22 CFM567826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84 37101 737800 2010 22 CFM567826/3 520.11 523.31 521.76 520.31 518.76 517.21 515.70 514.28 513.00 511.84	31662	737-800	2010	22	CFM56-7B26/3	\$20.11	\$23.31	\$21.76	\$20.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	
37101 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84	31660	737-800	2010												
31642 737-800 2010 22 CFM56-7826/3 \$20.11 \$23.31 \$21.76 \$20.31 \$18.76 \$17.21 \$15.70 \$14.28 \$13.00 \$11.84	37101	737-800	2010		CFM56-7826/3	\$20.11	\$23.31	\$21.76	\$20.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	
	31642	737-800			CFM56-7B26/3										



									100	Future Bas	se Values	1, 11		
MSN	Model	Year	Age	Engine	CMV	BV	2021	2022	2023	2024	2025	2026	2027	2028
31659	737-800	2010	22	CFM56-7B26/3	\$20.11	\$23.31	\$21.76	\$20.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	\$11.84
38700	737-800	2010	22	CFM56-7826/3	\$20.11	\$23.31	\$21.76	\$20.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	\$11.84
38701	737-800	2010	22	CFM56-7826/3	\$20.11	\$23.31	\$21.76	520.31	\$18.76	\$17.21	\$15.70	\$14.28	\$13.00	\$11.84
37094	737-900ER	2008	22	CFM56-7B26/3	\$17.78	\$23.13	\$21.45	\$19.91	\$18.36	\$16.75	\$15.14	\$13.70	\$12.43	\$11.34
31620	737-900ER	2008	22	CFM56-7826/3	\$17.78	\$23.13	\$21.53	\$19.99	\$18.44	\$16.82	\$15.20	\$13.75	\$12.47	\$11.37
33528	737-900ER	2009	22	CFM56-7826/3	\$18.90	\$24.58	\$22.77	521.11	\$19.50	\$17.83	\$16.15	\$14.52	\$13.12	\$11.89
33534	737-900ER	2009	22	CFM56-7B26/3	\$18.74	\$24.37	\$22.59	\$20.94	\$19.34	\$17.68	\$16.00	\$14.45	\$13.02	\$11.81
33535	737-900ER	2009	22	CFM56-7826/3	\$18.74	\$24.37	\$22.59	520.94	\$19.34	\$17.68	\$16.00	\$14.45	\$13.02	\$11.81
30131	737-900ER	2009	22	CFM56-7826/3	\$18.82	\$24.47	522.68	521.03	\$19.42	\$17.76	\$16.08	\$14.51	\$13.07	\$11.85
	737-900ER	2009	22	CFM56-7B26/3	\$18.82	\$24.47	\$22.68	\$21.03	\$19.42	\$17.76	\$16.08	\$14.51	\$13.07	\$11.85
27298 27299	757-200 757-200	1994	22	R8211-5358-4	\$5.11	\$7.02	\$6.28	\$5.71	\$5.26	\$4.86	\$4.49	\$4.14	\$3.83	\$3.54
27299	757-200	1994	22	R8211-5358-4	\$5.13	\$7.05	\$6.30	\$5.71	\$5.27	\$4.86	\$4.49	\$4.14	\$3.83	\$3.54 \$3.54
27300	757-200	1994 1994	22	R8211-5358-4 R8211-5358-4	\$5.13	\$7.05	\$6.30	\$5.71	\$5.27	\$4.86 \$4.86	\$4.49 \$4.49	\$4.14	\$3.83	\$3.54 \$3.54
27301	757-200	1994	22	R8211-5358-4 R8211-5358-4	\$5.13 \$5.10	\$7.05 \$7.01	\$6.30 \$6.27	\$5.71 \$5.71	\$5.27 \$5.27	54.86	\$4.49 \$4.49	\$4.14 \$4.15	\$3.83 \$3.83	53.54
27555	757-200	1995		R8211-5358-4						\$4.87				\$3.54
27556	757-200	1995	22	RB211-5358-4 RB211-5358-4	\$5.13 \$5.19	\$7.06 \$7.14	\$6.29 \$6.35	\$5.72 \$5.74	\$5.27 \$5.28	\$4.87	\$4.49 \$4.50	\$4.15 \$4.15	\$3.83 \$3.83	\$3.54
27558	757-200	1996	22	R8211-5358-4	\$5.27	57.14	\$6.43	\$5.78	55.29	54.88	\$4.50	\$4.15	\$3.84	\$3.55
27559	757-200	1996		R8211-5358-4		57.28	\$6.46	\$5.79	\$5.29	54.89	\$4.51		\$3.84	\$3.55
27560	757-200	1997	22	RB211-5358-4	\$5.29 \$5.48	\$7.53	\$6.64	\$5.89	\$5.33	\$4.90	\$4.53	\$4.16 \$4.18	\$3.86	\$3.56
27561	757-200	1997	22	R8211-5358-4	\$5.53	57.61	\$6.70	\$5.93	55.34	\$4.91	\$4.53	\$4.18	\$3.86	\$3.56
27562	757-200	1997	22	RB211-5358-4	\$5.59	\$7.69	\$6.73	\$5.95	\$5.35	\$4.91	\$4.53	\$4.18	\$3.86	\$3.56
27563	757-200	1997	22	R8211-5358-4	\$5.62	\$7.73	\$6.76	\$5.97	\$5.36	\$4.91	\$4.53	\$4.18	\$3.86	\$3.57
27564	757-200	1997	22	RB211-5358-4	\$5.65	\$7.77	\$6.79	\$6.01	\$5.37	54.91	\$4.53	\$4.18	\$3.86	\$3.57
27566	757-200	1998	22	RB211-5358-4	\$5.72	\$7.87	\$6.87	\$6.04	\$5.39	\$4.92	\$4.54	\$4.19	\$3.87	\$3.57
28968	757-200	1998	22	R8211-5358-4	\$5.72	\$7.87		\$6.04		\$4.92	\$4.54	\$4.19		
27567	757-200	1998	22	RB211-5358-4 RB211-5358-4	\$5.75	57.91	\$6.87 \$6.90	\$6.07	\$5.39 \$5.41	\$4.93	\$4.55	\$4.19	\$3.87 \$3.87	\$3.57 \$3.58
28969	757-200	1998	22	R8211-5358-4	\$5.75	57.91	\$6.90	\$6.07	55.41	\$4.93 \$4.93	\$4.55	\$4.20	53.87	\$3.58
28909	757-200	1998	22	RB211-5358-4	\$5.82	\$8.00	\$6.97	\$6.12	\$5.45	\$4.93	\$4.55	\$4.20	\$3.88	\$3.58
28970	757-200	1998	22	RB211-5358-4 RB211-5358-4	\$5.85	\$8.05	\$7.01	\$6.14	\$5.46	\$4.94	\$4.55	\$4.20	\$3.88	\$3.58
29281	757-200	1998	22	R8211-5358-4	\$5.85	\$8.05	\$7.01	\$6.14	\$5.46	\$4.94	\$4.55	\$4.20	\$3.88	\$3.58
29283	757-200	1999	22	R8211-5358-4	\$6.00	\$8.25	\$7.18	\$6.27	\$5.53	\$4.97	\$4.57	\$4.20	\$3.89	\$3.59
29284	757-200	1999	22	R8211-5358-4	\$6.00	58.25	\$7.18	56.27	\$5.53	\$4.97	\$4.57	\$4.21	\$3.89	\$3.59
29285		1999	22	R8211-5358-4	\$6.04	\$8.30	\$7.22	\$6.30	\$5.55	\$4.97	\$4.57	\$4.22	\$3.89	\$3.59
30229	757-200 757-200	1999	22	R8211-5358-4	\$6.39	\$8.79	\$7.61	\$6.60	\$5.76	\$5.09	\$4.59	\$4.23	\$3.90	\$3.60
30351	757-200	1999	22	R8211-5358-4	\$6.43	58.84	\$7.66	\$6.64	\$5.79	\$5.10	\$4.59	\$4.23	\$3.90	\$3.60
30352	757-200	2000	22	R8211-5358-4	\$6.36	\$8.74	\$7.58	\$6.58	\$5.72	\$5.07	\$4.59	\$4.24	\$3.91	\$3.61
30353	757-200	2000	22	R8211-5358-4	\$6.36	\$8.74	\$7.58	\$6.58	\$5.72	\$5.07	\$4.59	\$4.24	\$3.91	\$3.61
30354	757-200	2000	22	R8211-5358-4	\$6.53	58.98	\$7.77	56.73	55.86	\$5.15	\$4.62	\$4.24	53.92	\$3.61
32810	757-300	2001	22	RB211-5358-4	\$8.15	\$10.59	\$9.20	\$7.98	\$6.92	\$6.02	\$5.26	\$4.66	\$4.22	\$3.87
32811	757-300	2001	22	R8211-5358-4	\$8.15	\$10.59	\$9.20	\$7.98	\$6.92	\$6.02	\$5.26	\$4.66	\$4.22	\$3.87
32812	757-300	2002	22	R8211-5358-4	58.11	\$10.54	\$9.10	\$7.90	\$6.85	55.97	\$5.23	\$4.64	\$4.21	\$3.88
32813	757-300	2002	22	RB211-5358-4	\$8.11	\$10.54	\$9.10	\$7.90	\$6.85	\$5.97	\$5.23	\$4.64	\$4.21	53.88
32814	757-300	2004	22	R8211-5358-4	\$9.06	\$11.79	\$10.37	\$8.97	\$7.75	\$6.65	\$5.73		\$4.53	\$3.98
32815	757-300	2004	22	R8211-5358-4	\$9.06	\$11.79	\$10.37	58.97	\$7.75	\$6.65	\$5.73	\$5.00 \$5.00	\$4.53	\$3.98
32816	757-300	2004	22	RB211-5358-4	\$9.13	\$11.87	\$10.44	\$9.04	\$7.81	\$6.70	\$5.77	\$5.03	\$4.56	\$3.98
32817	757-300	2004	22	RB211-5358-4	\$9.19	\$11.95	\$10.52	\$9.11	\$7.87	\$6.75	\$5.84	\$5.06	\$4.59	\$3.99
32818	757-300	2004	22	R8211-5358-4	\$9.25	\$12.03	\$10.59	59.18	57.94	\$6.80	\$5.88	\$5.09	\$4.62	\$4.00
29236	767-300ER	1998	22	PW4060	\$7.45	\$8.93	\$7.71	\$6.65	\$5.82	\$5.22	\$4.80	\$4.44	\$4.11	\$4.04
29238	767-300FR	1998	22	PW4060	\$7.58	\$9.07	57.83	\$6.74	\$5.87	\$5.25	\$4.81	\$4.44	\$4.11	\$4.04
29239	767-300ER	1998	22	PW4060	\$7.58	\$9.07	\$7.83	\$6.74	55.87	\$5.25	\$4.81	\$4.44	\$4.11	\$4.04
30024	767-300ER	1999	22	PW4060	\$7.91	\$9.48	\$8.09	\$6.93	\$6.04	\$5.32	\$4.82	\$4.46	\$4.12	\$4.04
30025	767-300ER	1999	22	PW4060	\$8.12	\$9.73	\$8.29	\$7.09	\$6.11	\$5.38	\$4.84	\$4.47	\$4.13	\$4.04
29240	767-300ER	1999	22	PW4060	58.27	59.90	\$8.44	\$7.20	56.19	55.43	\$4.85	\$4.47	\$4.13	\$4.04
30026	767-300ER	1999	22	PW4060	\$8.42	\$10.08	\$8.58	\$7.32	56.28	\$5.49	\$4.88	\$4.47	\$4.14	\$4.04
29241	767-300ER	2000	22	PW4060	\$8.43	\$10.10	\$8.60	\$7.38	\$6.33	\$5.49	\$4.88	\$4.48	\$4.14	\$4.05
29242	767-300ER	2000	22	PW4060	\$8.67	\$10.38	\$8.83	\$7.57	\$6.47	\$5.59	\$4.93	\$4.49	\$4.15	\$4.05
29243	767-300ER	2000	22	PW4060	\$8.99	\$10.77	\$9.16	\$7.84	\$6.67	\$5.73	\$5.00	\$4.50	\$4.16	\$4.06
30028	767-300ER	2001	22	PW4060	\$9.53	\$11.41	\$9.70	\$8.22	\$6.97	\$5.94	\$5.14	\$4.56	\$4.18	\$4.07
33466	767-300ER	2002	22	PW4060	\$11.02	\$13.20	\$11.24	\$9.52	\$8.03	\$6.71	\$5.68	\$4.87	\$4.28	\$4.11
33467	767-300ER	2002	22	PW4060	\$11.24	\$13.46	\$11.47	\$9.72	\$8.19	\$6.83	\$5.77	\$4.93	\$4.31	\$4.11
33468	767-300ER	2003	22	PW4060	\$11.24	\$13.47	\$11.48	\$9.63	\$8.12	\$6.84	\$5.78	\$4.91	\$4.30	\$4.12
29446	767-400ER	2000	22	CF6-80C288F	\$7.41	\$11.86	\$10.30	\$8.97	\$7.87	\$7.00	\$6.36	\$5.87	\$5.42	\$5.01
29447	767-400ER	2000	22	CF6-80C2B8F	\$8.06	\$11.95	\$10.36	\$9.02	\$7.91	\$7.03	\$6.37	\$5.88	\$5.42	\$5.01
29448	767-400ER	2000	22	CF6-80C2B8F	\$8.12	\$12.03	\$10.43	\$9.07	\$7.95	\$7.05	\$6.38	\$5.88	\$5.43	\$5.01
29451	767-400ER	2001	22	CFG-80C2B8F	\$8.50	\$12.59	\$10.89	\$9.44	\$8.22	\$7.23	\$6.46	\$5.91	\$5.46	\$5.04
29452	767-400ER	2002	22	CF6-80C2B8F	\$8.83	\$13.09	\$11.31	\$9.78	\$8.48	\$7.41	\$6.57	\$5.94	\$5.48	\$5.06
29453	767-400ER	2002	22	CF6-80C2B8F	\$8.83	\$13.09	\$11.31	\$9.78	\$8.48	\$7.41	\$6.57	\$5.94	\$5.48	\$5.06
29454	767-400ER	2002	22	CF6-80C2B8F	\$8.90	\$13.19	\$11.40	\$9.85	\$8.54	\$7.45	\$6.59	\$5.95	\$5.49	\$5.06
29455	767-400ER	2002	22	CF6-80C2B8F	\$8.90	\$13.19	\$11.40	\$9.85	\$8.54	\$7.45	\$6.59	\$5.95	\$5.49	\$5.06
29456	767-400ER	2002	22	CF6-80C2B8F	\$8.97	\$13.29	\$11.49	\$9.92	\$8.59	\$7.49	\$6.62	\$5.96	\$5.49	\$5.07
29457	767-400ER	2002	22	CF6-80C288F	\$8.97	\$13.29	\$11.49	\$9.92	\$8.59	\$7.49	\$6.62	\$5.96	\$5.49	\$5.07
29458	767-400ER	2002	22	CF6-80C2B8F	\$9.04	\$13.39	\$11.57	\$9.99	\$8.65	\$7.53	\$6.64	\$5.97	\$5.49	\$5.07
29459	767-400ER	2002	22	CF6-80C2B8F	\$9.04	\$13.39	\$11.57	\$9.99	\$8.65	\$7.53	\$6.64	\$5.97	\$5.49	\$5.07
29460	767-400ER	2002	22	CF6-80C288F	\$9.11	\$13.50	\$11.66	\$10.07	\$8.71	\$7.58	\$6.67	\$5.98	\$5.50	\$5.07
29461	767-400ER	2002	22	CF6-80C2B8F	\$9.11	\$13.50	\$11.66	\$10.07	\$8.71	\$7.58	\$6.67	\$5.98	\$5.50	\$5.07
30216	777-200	2000	22	PW4077	\$6.83	\$10.93	\$10.28	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
30221	777-200	2000	22	PW4077	\$6.86	\$10.98	\$10.32	\$9.66	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26919	777-200	1995	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26921	777-200	1995	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26932	777-200	1995	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	57.38	\$6.90	\$6.43
26930	777-200	1995	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26929	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26936	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	57.38	\$6.90	\$6.43
26947	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26937	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26916	777-200	1995	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26940	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26941	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26944	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43
26945	777-200	1996	22	PW4077	\$6.74	\$10.78	\$10.21	\$9.63	\$9.04	\$8.46	\$7.90	\$7.38	\$6.90	\$6.43



										Future Ba	se Values			
MSN	Model	Year	Age	Engine	CMV	BV	2021	2022	2023	2024	2025	2026	2027	2028
27577	777-200ER	1998	22	GE90-90B	\$8.40	\$13.43	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
27578	777-200ER	1998	22	GE90-90B	\$8.40	\$13.43	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	57.85
27579	777-200ER	1998	22	GE90-90B	\$8.42	\$13.48	\$12.52	511.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
27580	777-200ER	1998	22	GE90-90B	\$8.42	\$13.48	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
27581	777-200ER	1998	22	GE90-90B	\$8.44	\$13.50	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
29476	777-200ER	1998	22	GE90-90B	\$8.44	\$13.50	\$12.52	511.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	57.85
29477	777-200ER	1999	22	GE90-90B	\$8.42	\$13.47	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
29478	777-200ER	1999	22	GE90-90B	\$8.44	\$13.50	\$12.52	\$11.71	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	\$7.85
29479	777-200ER	1999	22	GE90-90B	\$8.45	\$13.52	\$12.53	511.71	\$10.95	\$10.24	\$9.58	\$8.96	58.38	\$7.85
29480 29859	777-200ER 777-200ER	1999 1999	22	GE90-90B GE90-90B	\$8.47 \$8.49	\$13.55 \$13.58	\$12.53 \$12.54	\$11.71 \$11.71	\$10.95 \$10.95	\$10.24 \$10.24	\$9.58 \$9.58	\$8.96 \$8.96	\$8.38 \$8.38	\$7.85 \$7.85
29859	777-200ER	1999	22	GE90-908 GE90-908	\$8.49	\$13.65	\$12.54	\$11.71	\$10.95	\$10.24	\$9.58	58.96	58.38	57.85
29861	777-200ER	2000	22	GE90-908	\$8.61	\$13.78	\$12.57	511.72	\$10.95	\$10.24	\$9.58	\$8.96	\$8.38	57.85
28679	777-200ER	2000	22	GE90-90B	\$8.64	\$13.78	\$12.62	\$11.72	\$10.95	\$10.24	59.58	\$8.96	58.38	\$7.85
31679	777-200ER	2002	22	GE90-908	\$9.93	\$14.71	513.10	511.89	\$11.01	\$10.24	\$9.58	58.96	58.38	57.85
31680	777-200ER	2002	22	GE90-90B	\$9.98	\$14.78	\$13.15	\$11.91	\$11.01	\$10.25	\$9.58	\$8.96	\$8.38	\$7.85
35547	777-200ER	2007	22	GE90-90B	\$14.03	\$20.79	\$17.65	\$14.89	\$12.70	\$11.06	\$9.92	\$9.14	\$8.50	\$7.90
31687	777-200ER	2007	22	GE90-90B	\$14.29	\$21.17	517.81	\$15.01	\$12.79	\$11.15	59.94	59.15	58.50	57.90
39776	777-200ER	2010	22	GE90-90B	\$20.59	\$30.51	\$25.08	\$20.80	\$17.12	\$14.12	\$11.85	\$10.08	\$8.87	\$8.12
39777	777-200ER	2010	22	GE90-90B	\$20.59	\$30.51	\$25.08	\$20.80	\$17.12	\$14.12	\$11.85	\$10.08	\$8.87	\$8.12
28713	777-200ER	1999	22	PW4090	\$7.37	\$11.79	\$11.00	\$10.34	59.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30212	777-200ER	1999	22	PW4090	\$7.41	\$11.86	\$11.02	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30215	777-200ER	1999	22	PW4090	\$7.54	\$12.06	\$11.10	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30222	777-200ER	2001	22	PW4090	\$8.33	\$12.34	\$11.21	\$10.39	59.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30551	777-200ER	2001	22	PW4090	\$8.33	\$12.34	\$11.21	\$10.39	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30223	777-200ER	2001	22	PW4090	\$8.49	\$12.57	\$11.32	\$10.42	\$9.68	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30552	777-200ER	2001	22	PW4090	\$8.53	\$12.63	\$11.36	510.43	\$9.69	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30553	777-200ER	2001	22	PW4090	\$8.57	\$12.70	\$11.42	\$10.44	\$9.69	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30225	777-200ER	2001	22	PW4090	\$8.81	\$13.06	\$11.64	\$10.52	\$9.71	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30554	777-200ER	2001	22	PW4090	\$8.81	\$13.06	\$11.64	\$10.52	\$9.71	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30226	777-200ER	2002	22	PW4090	\$8.68	\$12.86	\$11.49	\$10.49	\$9.72	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
30555	777-200ER	2002	22	PW4090	\$8.68	\$12.86	\$11.49	\$10.49	\$9.72	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26948	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26950	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26951	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26954	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	\$10.34	59.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26938	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26939	777-200ER 777-200ER	1997	22	PW4090 PW4090	\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26942 26933	777-200ER	1997	22	PW4090	\$7.28	\$11.65	\$11.00	510.34	59.67	\$8.99	\$8.35	\$7.76	57.21	\$6.70
	777-200ER	1997	22		\$7.28	\$11.65	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26934 26946	777-200ER	1997 1997	22	PW4090	\$7.28	\$11.66 \$11.66	\$11.00 \$11.00	\$10.34 \$10.34	\$9.67	\$8.99 \$8.99	\$8.35 \$8.35	\$7.76	\$7.21	\$6.70 \$6.70
26953	777-200ER	1997	22	PW4090 PW4090	\$7.29 \$7.29	\$11.66	\$11.00	510.34 510.34	\$9.67 \$9.67	\$8.99 \$8.99	\$8.35	\$7.76 \$7.76	\$7.21 \$7.21	\$6.70
26933	777-200ER	1997			\$7.29	\$11.66	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35			
26931	777-200ER	1998	22	PW4090	\$7.29	\$11.66	\$11.00	\$10.34 \$10.34	59.67	\$8.99	58.35	\$7.76 \$7.76	\$7.21 \$7.21	\$6.70 \$6.70
26924	777-200ER	1998	22	PW4090	\$7.29	\$11.66	\$11.00	510.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26928	777-200ER	1998	22	PW4090	\$7.29	\$11.66	\$11.00	\$10.34	\$9.67	\$8.99	\$8.35	\$7.76	\$7.21	\$6.70
26926	777-200ER	1998	22	PW4090	\$7.30	\$11.69	\$11.00	\$10.34	59.67	\$8.99	\$8.35	\$7.76	57.21	\$6.70
686	A319-100	1997	22	V2522-A5	\$9.06	\$11.70	\$11.09	\$10.50	\$9.93	\$9.38	\$8.89	\$8.44	\$8.00	\$7.60
690	A319-100	1997	22	V2522-A5	\$9.06	\$11.70	\$11.09	\$10.50	59.93	\$9.38	\$8.89	58.44	\$8.00	\$7.60
748	A319-100	1997	22	V2522-A5	\$9.11	\$11.76	\$11.11	\$10.52	\$9.95	\$9.40	\$8.89	58.44	\$8.00	57.60
759	A319-100	1997	22	V2522-A5	\$9.12	\$11.78	\$11.12	\$10.53	\$9.96	\$9.40	\$8.89	\$8.44	\$8.00	\$7.60
783	A319-100	1998	22	V2522-A5	\$9.11	\$11.77	\$11.13	\$10.54	\$9.97	\$9.41	\$8.89	\$8.44	\$8.00	\$7.60
788	A319-100	1998	22	V2522-A5	\$9.11	\$11.77	\$11.13	\$10.54	59.97	\$9.41	\$8.89	\$8.44	\$8.00	57.60
798	A319-100	1998	22	V2522-A5	\$9.12	\$11.78	\$11.14	\$10.54	\$9.97	\$9.41	\$8.89	\$8.44	\$8.00	\$7.60
804	A319-100	1998	22	V2522-A5	\$9.12	\$11.78	\$11.14	\$10.54	\$9.97	\$9.41	\$8.89	\$8.44	\$8.00	\$7.60
825	A319-100	1998	22	V2522-A5	\$9.14	\$11.81	\$11.15	\$10.55	\$9.98	\$9.42	\$8.89	\$8.44	\$8.00	\$7.60
843	A319-100	1998	22	V2522-A5	\$9.16	\$11.83	\$11.16	\$10.56	\$9.99	\$9.43	\$8.89	\$8.44	\$8.00	\$7.60
847	A319-100	1998	22	V2522-A5	\$9.17	\$11.85	\$11.16	\$10.57	\$9.99	\$9.43	\$8.90	\$8.44	\$8.00	\$7.60
850	A319-100	1998	22		\$9.17	\$11.85	\$11.16	\$10.57	\$9.99	\$9.43	\$8.90	\$8.44	\$8.00	\$7.60
858	A319-100	1998	22		\$9.17	\$11.85	\$11.16	\$10.57	\$9.99	\$9.43	\$8.90	\$8.44	\$8.00	\$7.60
862	A319-100	1998	22	V2522-A5	\$9.19	\$11.87	\$11.17	\$10.57	\$10.00	\$9.43	\$8.90	\$8.44	\$8.00	\$7.60
867	A319-100	1998	22		\$9.19	\$11.87	\$11.17	\$10.57	\$10.00	\$9.43	\$8.90	\$8.44	\$8.00	\$7.60
871	A319-100	1998	22	V2522-A5	\$9.19	\$11.88	\$11.18	\$10.58	\$10.00	\$9.44	\$8.90	\$8.44	\$8.00	\$7.60
873	A319-100	1998	22	V2522-A5	\$9.19	\$11.88	\$11.18	\$10.58	\$10.00	\$9.44	\$8.90	\$8.44	\$8.00	\$7.60
882	A319-100	1998	22	V2522-A5	\$9.21	\$11.90	\$11.19	\$10.58	\$10.01	\$9.44	\$8.91	\$8.44	\$8.00	57.60
893 898	A319-100 A319-100	1998 1998	22	V2522-A5 V2522-A5	\$9.21 \$9.21	\$11.90 \$11.90	\$11.19 \$11.19	\$10.58 \$10.58	\$10.01 \$10.01	\$9.44 \$9.44	\$8.91 \$8.91	\$8.44 \$8.44	\$8.00 \$8.00	\$7.60 \$7.60
944	A319-100 A319-100	1998		V2522-A5 V2522-A5	\$9.21 \$9.21	\$11.90 \$11.90	\$11.19 \$11.20	\$10.58 \$10.60	\$10.01 \$10.02	\$9.44 \$9.46	\$8.91 \$8.92	\$8.44 \$8.44	\$8.00	\$7.60 \$7.60
948	A319-100	1999 1999	22		\$9.21 \$9.23	\$11.90 \$11.92	\$11.20 \$11.21	\$10.60 \$10.61	\$10.02 \$10.03	\$9.46 \$9.46	\$8.92	\$8.44 \$8.44	\$8.00 \$8.00	\$7.60 \$7.60
952	A319-100 A319-100	1999	22	V2522-AS	\$9.23	\$11.92	\$11.21	\$10.61	\$10.03	\$9.46	\$8.92	\$8.44	\$8.00	\$7.60
965	A319-100	1999	22	V2522-A5	\$9.23	\$11.92	\$11.21	\$10.61	\$10.03	\$9.46 \$9.46	\$8.92	58.44	\$8.00	\$7.60
980	A319-100	1999	22		\$9.25	\$11.92	\$11.21	\$10.61	\$10.03	\$9.46	\$8.92	\$8.44	\$8.00	\$7.60
989	A319-100	1999	22	V2522-A5	\$9.25	\$11.95	\$11.22	\$10.61	\$10.03	\$9.47	\$8.93	\$8.44	\$8.00	\$7.60
1022	A319-100	1999	22	V2522-A5	\$9.27	\$11.98	\$11.25	\$10.62	\$10.04	\$9.48	\$8.94	58.44	\$8.00	57.60
1031	A319-100	1999	22	V2522-A5	\$9.29	\$12.00	\$11.26	\$10.63	\$10.05	\$9.48	\$8.94	\$8.44	\$8.00	\$7.60
1211	A319-100	2000	22	V2522-A5	\$9.42	\$12.17	\$11.38	\$10.70	\$10.11	\$9.53	\$8.99	\$8.48	\$8.00	\$7.60
1243	A319-100	2000	22	V2522-A5	\$9.46	\$12.22	\$11.41	\$10.71	\$10.12	\$9.54	\$9.00	\$8.49	\$8.01	\$7.60
1291	A319-100	2000	22	V2522-A5	\$9.51	\$12.28	\$11.45	\$10.73	\$10.13	\$9.56	\$9.01	\$8.49	\$8.01	\$7.60
1321	A319-100	2000	22	V2522-A5	\$10.05	\$12.32	\$11.47	\$10.74	\$10.14	\$9.56	\$9.01	\$8.50	\$8.02	\$7.60
1401	A319-100	2001	22	V2522-A5	\$10.06	\$12.33	\$11.51	\$10.77	\$10.16	\$9.58	\$9.03	\$8.52	\$8.03	\$7.60
1420	A319-100	2001	22	V2522-A5	\$10.08	\$12.36	\$11.51	\$10.79	\$10.17	\$9.59	\$9.04	\$8.52	\$8.04	\$7.60
1426	A319-100	2001	22	V2522-A5	\$10.08	\$12.36	\$11.51	\$10.79	\$10.17	\$9.59	\$9.04	\$8.52	\$8.04	\$7.60
1460	A319-100	2001	22	V2522-A5	\$10.11	\$12.39	\$11.54	\$10.79	\$10.18	\$9.60	\$9.04	\$8.53	\$8.04	\$7.60
1474	A319-100	2001	22		\$10.14	\$12.42	\$11.56	\$10.81	\$10.18	\$9.60	\$9.05	\$8.53	\$8.05	\$7.60
1477	A319-100	2001	22	V2522-A5	\$10.14	\$12.42	\$11.56	\$10.81	\$10.18	\$9.60	\$9.05	\$8.53	\$8.05	\$7.60
1507	A319-100	2001	22	V2522-A5	\$10.16	\$12.46	\$11.59	\$10.82	\$10.19	\$9.61	\$9.05	\$8.54	\$8.05	\$7.60
1522	A319-100	2001	22	V2522-A5	\$10.19	\$12.49	\$11.61	\$10.84	\$10.20	\$9.61	\$9.06	\$8.54	\$8.05	\$7.60
1545	A319-100	2001	22	V2522-A5	\$10.22	\$12.53	\$11.64	\$10.86	\$10.20	\$9.62	\$9.06	\$8.54	\$8.06	\$7.60
1569	A319-100	2001	22	V2522-A5	\$10.28	\$12.60	\$11.70	\$10.90	\$10.22	\$9.63	\$9.08	\$8.55	\$8.07	\$7.61
1573	A319-100	2001	22	V2522-A5	\$10.25	\$12.56	\$11.67	\$10.88	\$10.21	\$9.63	\$9.07	\$8.55	\$8.06	\$7.61



										Future Ba	se Values			
MSN 1581	Model A319-100	Year 2001	Age 22	V2522-A5	\$10.34	\$12.67	\$11.75	2022 \$10.94	2023 \$10.24	2024 \$9.65	2025 \$9.09	2026 \$8.56	2027 \$8.08	2028 \$7.62
1585	A319-100	2001	22	V2522-A5	\$10.34	\$12.67	\$11.75	\$10.94	\$10.24	\$9.65	\$9.09	\$8.56	\$8.08	\$7.62
1600	A319-100	2001	22	V2522-A5	\$10.34	\$12.67	\$11.75	\$10.94	\$10.24	\$9.65	\$9.09	\$8.56	\$8.08	\$7.62
1627	A319-100	2001	22	V2522-A5	\$10.34	\$12.67	\$11.75	\$10.94	\$10.24	\$9.65	\$9.09	\$8.56	\$8.08	\$7.62
1647	A319-100	2002	22	V2522-A5	\$10.31	\$12.64	\$11.71	\$10.92	\$10.25	\$9.66	\$9.10	\$8.57	\$8.08	\$7.63
1649 1653	A319-100 A319-100	2002	22	V2522-A5 V2522-A5	\$10.34 \$10.34	\$12.67 \$12.67	\$11.74 \$11.74	\$10.94 \$10.94	\$10.26 \$10.26	\$9.66 \$9.66	\$9.10 \$9.10	\$8.58 \$8.58	\$8.09	\$7.63 \$7.63
1664	A319-100	2002	22	V2522-A5	\$10.35	\$12.67	\$11.74	\$10.94	\$10.26	\$9.67	59.10	\$8.58	\$8.09	\$7.63
1671	A319-100	2002	22	V2522-A5	\$10.35	\$12.68	\$11.77	\$10.96	\$10.26	\$9.67	59.11	\$8.58	\$8.09	\$7.63
2714	A320-200	2006	22	V2527-A5	\$12.90	\$15.81	\$14.62	\$13.56	\$12.63	\$11.84	\$11.15	\$10.51	\$9.91	\$9.34
504	A320-200	1995	22	V2527-A5	\$10.51	\$13.58	\$12.93	\$12.30	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
506	A320-200	1995	22	V2527-A5	\$10.51	\$13.58	\$12.93	\$12.30	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
508	A320-200	1995	22	V2527-A5	\$10.52	\$13.59	\$12.94	\$12.30	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
510 512	A320-200 A320-200	1995 1995	22 22	V2527-A5 V2527-A5	\$10.52 \$10.52	\$13.59 \$13.59	\$12.94 \$12.94	\$12.30 \$12.30	\$11.72 \$11.72	\$11.14 \$11.14	\$10.57 \$10.57	\$10.04 \$10.04	\$9.54 \$9.54	\$9.06 \$9.06
523	A320-200	1995	22	V2527-A5	\$10.52	\$13.60	\$12.94	\$12.30	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
539	A320-200	1995	22	V2527-A5	\$10.53	\$13.60	\$12.95	\$12.30	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
568	A320-200	1996	22	V2527-A5	\$10.56	\$13.64	\$12.99	\$12.34	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
571	A320-200	1996	22	V2527-A5	\$10.56	\$13.65	\$12.99	\$12.34	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
587	A320-200	1996	22	V2527-A5	\$10.57	\$13.66	\$13.00	\$12.35	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
589 592	A320-200 A320-200	1996	22	V2527-A5 V2527-A5	\$10.58	\$13.66	\$13.01	\$12.36	\$11.72	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
613	A320-200 A320-200	1996 1996	22	V2527-A5	\$10.58 \$10.59	\$13.66 \$13.68	\$13.01 \$13.02	\$12.36 \$12.37	\$11.72 \$11.73	\$11.14 \$11.14	\$10.57 \$10.57	\$10.04 \$10.04	\$9.54 \$9.54	\$9.06 \$9.06
638	A320-200	1996	22	V2527-A5	\$10.60	\$13.70	\$13.04	\$12.39	\$11.75	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
655	A320-200	1997	22	V2527-A5	\$10.61	\$13.71	\$13.05	\$12.40	\$11.76	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
678	A320-200	1997	22	V2527-A5	\$10.63	\$13.73	\$13.07	\$12.41	\$11.77	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
683	A320-200	1997	22	V2527-A5	\$10.63	\$13.74	\$13.07	\$12.42	\$11.77	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
702	A320-200	1997	22	V2527-A5	\$10.64	\$13.74	\$13.08	\$12.42	\$11.78	\$11.14	\$10.57	\$10.04	\$9.54	\$9.06
751 780	A320-200 A320-200	1997 1998	22	V2527-A5 V2527-A5	\$10.66 \$10.67	\$13.77 \$13.79	\$13.11 \$13.12	\$12.45 \$12.46	\$11.80 \$11.81	\$11.16 \$11.17	\$10.57 \$10.57	\$10.04 \$10.04	\$9.54 \$9.54	\$9.06 \$9.06
820	A320-200	1998	22	V2527-A5	\$10.69	\$13.79	\$13.14	\$12.48	\$11.83	\$11.17	\$10.57	\$10.04	\$9.54	\$9.06
824	A320-200	1998	22	V2527-A5	\$10.69	\$13.81	\$13.14	\$12.48	\$11.83	\$11.19	\$10.57	\$10.04	\$9.54	\$9.06
826	A320-200	1998	22	V2527-A5	\$10.69	\$13.81	\$13.15	\$12.48	\$11.83	\$11.19	\$10.57	\$10.04	\$9.54	\$9.06
834	A320-200	1998	22	V2527-A5	\$10.69	\$13.81	\$13.15	\$12.48	\$11.83	\$11.19	\$10.57	\$10.04	\$9.54	\$9.06
836	A320-200	1998	22	V2527-A5	\$10.70	\$13.82	\$13.15	\$12.49	\$11.84	\$11.19	\$10.58	\$10.04	\$9.54	\$9.06
842 851	A320-200 A320-200	1998 1998	22	V2527-A5 V2527-A5	\$10.70 \$10.70	\$13.82 \$13.82	\$13.15 \$13.15	\$12.49 \$12.49	\$11.84 \$11.84	\$11.19 \$11.19	\$10.58 \$10.58	\$10.04 \$10.04	\$9.54 \$9.54	\$9.06 \$9.06
865	A320-200	1998	22	V2527-A5	\$10.70	\$13.82	\$13.15	\$12.50	\$11.84	\$11.19	\$10.58	\$10.04	\$9.54	\$9.06
0955	A320-200	1999	22	V2527-A5	\$10.74	\$13.88	\$13.20	\$12.54	\$11.88	\$11.23	\$10.61	\$10.04	\$9.54	\$9.06
1001	A320-200	1999	22	V2527-A5	\$10.75	\$13.89	\$13.21	\$12.54	\$11.89	\$11.24	\$10.62	\$10.04	\$9.54	\$9.06
1104	A320-200	1999	22	V2527-A5	\$10.79	\$13.94	\$13.26	\$12.59	\$11.93	\$11.27	\$10.65	\$10.06	\$9.54	\$9.06
1105	A320-200	1999	22	V2527-A5	\$10.79	\$13.94	\$13.26	\$12.59	\$11.93	\$11.27	\$10.65	\$10.06	\$9.54	\$9.06
1128	A320-200	1999	22	V2527-A5	\$10.80	\$13.95	\$13.27	\$12.60	\$11.93	\$11.28	\$10.65	\$10.07	\$9.54	\$9.06
1146 1163	A320-200 A320-200	2000	22	V2527-A5 V2527-A5	\$10.80 \$10.81	\$13.96 \$13.97	\$13.28 \$13.28	\$12.60 \$12.61	\$11.94 \$11.95	\$11.29 \$11.29	\$10.66 \$10.66	\$10.07 \$10.08	\$9.54 \$9.54	\$9.06 \$9.06
1192	A320-200	2000	22	V2527-A5	\$10.82	\$13.98	\$13.30	\$12.62	\$11.96	\$11.30	\$10.67	\$10.08	\$9.54	\$9.06
1248	A320-200	2000	22	V2527-A5	\$10.84	\$14.00	\$13.31	\$12.64	\$11.97	\$11.31	\$10.68	\$10.09	\$9.54	\$9.06
1266	A320-200	2000	22	V2527-A5	\$10.84	\$14.01	\$13.32	\$12.64	\$11.98	\$11.32	\$10.69	\$10.10	\$9.54	\$9.06
1272	A320-200	2000	22	V2527-A5	\$10.84	\$14.01	\$13.32	\$12.64	\$11.98	\$11.32	\$10.69	\$10.10	\$9.54	\$9.06
1282 1290	A320-200 A320-200	2000	22	V2527-A5 V2527-A5	\$10.85	\$14.02	\$13.33	\$12.65	\$11.98	\$11.32	\$10.69	\$10.10	\$9.55	\$9.06
1341	A320-200 A320-200	2000	22	V2527-A5	\$10.85 \$11.46	\$14.02 \$14.04	\$13.33 \$13.35	\$12.65 \$12.67	\$11.98 \$12.00	\$11.32 \$11.34	\$10.69 \$10.71	\$10.10 \$10.12	\$9.55 \$9.56	\$9.06 \$9.06
1343	A320-200	2000	22	V2527-A5	\$11.46	\$14.04	\$13.35	\$12.67	\$12.00	\$11.34	\$10.71	\$10.12	\$9.56	\$9.06
1359	A320-200	2000	22	V2527-A5	\$11.47	\$14.05	\$13.36	\$12.68	\$12.01	\$11.35	\$10.71	\$10.12	\$9.56	\$9.06
1363	A320-200	2000	22	V2527-A5	\$11.47	\$14.05	\$13.36	\$12.68	\$12.01	\$11.35	\$10.71	\$10.12	\$9.56	\$9.06
1409	A320-200	2001	22	V2527-A5	\$11.48	\$14.07	\$13.38	\$12.70	\$12.02	\$11.36	\$10.73	\$10.13	\$9.57	\$9.06
1427	A320-200 A320-200	2001	22	V2527-A5 V2527-A5	\$11.49	\$14.08	\$13.39	\$12.70	\$12.03	\$11.37	\$10.73	\$10.13	\$9.57	\$9.06
1432	A320-200 A320-200	2001 2001	22	V2527-A5 V2527-A5	\$11.49 \$11.50	\$14.08 \$14.09	\$13.39 \$13.40	\$12.70 \$12.71	\$12.03 \$12.04	\$11.37 \$11.37	\$10.73 \$10.74	\$10.13 \$10.14	\$9.57 \$9.58	\$9.06 \$9.06
1455	A320-200 A320-200	2001	22	V2527-A5 V2527-A5	\$11.50 \$11.51	\$14.09	\$13.40	\$12.71	\$12.04 \$12.05	\$11.37	\$10.74	\$10.14 \$10.14	\$9.58	\$9.06
1475	A320-200	2001	22	V2527-A5	\$11.51	\$14.10	\$13.40	\$12.72	\$12.05	\$11.38	\$10.74	\$10.14	\$9.58	\$9.06
1495	A320-200	2001	22	V2527-A5	\$11.52	\$14.12	\$13.41	\$12.73	\$12.05	\$11.38	\$10.75	\$10.15	\$9.59	\$9.06
1508	A320-200	2001	22	V2527-A5	\$11.53	\$14.13	\$13.42	\$12.74	\$12.06	\$11.39	\$10.75	\$10.15	\$9.59	\$9.07
1514	A320-200	2001	22	V2527-A5	\$11.53	\$14.13	\$13.42	\$12.74	\$12.06	\$11.39	\$10.75	\$10.15	\$9.59	\$9.07
1533 1538	A320-200 A320-200	2001	22	V2527-A5 V2527-A5	\$11.54 \$11.54	\$14.14 \$14.14	\$13.43 \$13.43	\$12.74 \$12.74	\$12.07 \$12.07	\$11.40 \$11.40	\$10.76 \$10.76	\$10.16 \$10.16	\$9.60 \$9.60	\$9.07
1555	A320-200 A320-200	2001	22	V2527-A5 V2527-A5	\$11.54	\$14.14 \$14.16	\$13.43 \$13.44	\$12.74	\$12.07 \$12.07	\$11.40	\$10.76	\$10.16 \$10.16	\$9.60	\$9.07 \$9.07
1620	A320-200	2001	22	V2527-A5	\$11.59	\$14.21	\$13.47	\$12.78	\$12.10	\$11.40	\$10.78	\$10.18	\$9.61	\$9.09
1669	A320-200	2002	22	V2527-A5	\$11.60	\$14.21	\$13.48	\$12.78	\$12.10	\$11.43	\$10.79	\$10.18	\$9.62	\$9.09
1680	A320-200	2002	22	V2527-A5	\$11.61	\$14.23	\$13.49	\$12.79	\$12.11	\$11.44	\$10.79	\$10.19	\$9.62	\$9.09
2680	A320-200	2006	22	V2527-A5	\$12.90	\$15.81	\$14.62	\$13.56	\$12.63	\$11.84	\$11.15	\$10.51	\$9.91	\$9.34
1728	A320-200	2002	22	V2527-A5	\$11.64	\$14.27	\$13.50	\$12.81	\$12.13	\$11.45	\$10.81	\$10.20	\$9.63	\$9.10
1741 1755	A320-200 A320-200	2002	22	V2527-A5 V2527-A5	\$11.64 \$11.64	\$14.27 \$14.27	\$13.50 \$13.50	\$12.81 \$12.81	\$12.13 \$12.13	\$11.45 \$11.45	\$10.81 \$10.81	\$10.20 \$10.20	\$9.63 \$9.63	\$9.10 \$9.10
1821	A320-200 A320-200	2002	22	V2527-A5	\$11.64	\$14.27	\$13.54	\$12.81	\$12.13	\$11.45	\$10.81	\$10.20	\$9.65	\$9.10
1840	A320-200	2002	22	V2527-A5	\$11.73	\$14.38	\$13.56	\$12.85	\$12.17	\$11.47	\$10.84	\$10.23	\$9.66	\$9.12
1842	A320-200	2002	22	V2527-A5	\$11.71	\$14.36	\$13.55	\$12.85	\$12.16	\$11.48	\$10.83	\$10.22	\$9.65	\$9.12
1845	A320-200	2002	22	V2527-A5	\$11.73	\$14.38	\$13.56	\$12.85	\$12.17	\$11.49	\$10.84	\$10.23	\$9.66	\$9.12
1847	A320-200	2002	22	V2527-A5	\$11.73	\$14.38	\$13.56	\$12.85	\$12.17	\$11.49	\$10.84	\$10.23	\$9.66	\$9.12
1865	A320-200	2002	22	V2527-A5	\$11.75	\$14.40	\$13.58	\$12.86	\$12.17	\$11.49	\$10.84	\$10.23	\$9.66	\$9.13
					\$3,582.08	\$4,641.29	\$4,278.48	\$3,949.24	\$3,646.26	\$3,363.34	\$3,105.25	\$2,875.29	\$2,670.54	\$2,487.94



								Future Ba	se Values			
ESN	TYPE	Model	CMV	BV	2021	2022	2023	2024	2025	2026	2027	2028
706368	CF6-80C2B8F	CF6-80C2B8F	\$2.86	\$2.93	\$2.71	\$2.50	\$2.31	\$2.14	\$1.97	\$1.82	\$1.68	\$1.55
706439	CF6-80C2B8F	CF6-80C2B8F	\$2.86	\$2.93	\$2.71	\$2.50	\$2.31	\$2.14	\$1.97	\$1.82	\$1.68	\$1.55
706323	CF6-80C2B8F	CF6-80C2B8F	\$2.86	\$2.93	\$2.71	\$2.50	\$2.31	\$2.14	\$1.97	\$1.82	\$1.68	\$1.55
890202	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890307	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890418	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890436	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
874219	CFM56-7B24	CFM56-7B24	\$3.54	\$4.03	\$3.88	\$3.70	\$3.49	\$3.26	\$3.03	\$2.81	\$2.61	\$2.42
874792	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
876266	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
876563	CFM56-7B24	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
889320	CFM56-7B24	CFM56-7B24	\$3.54	\$4.03	\$3.88	\$3.70	\$3.49	\$3.26	\$3.03	\$2.81	\$2.61	\$2.42
890452	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890516	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890612	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890652	CFM56-7B26	CFM56-7B24	\$3.54	\$4.03	\$3.88	\$3.70	\$3.49	\$3.26	\$3.03	\$2.81	\$2.61	\$2.42
890684	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
890775	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
874336	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
876213	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
876633	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
888436	CFM56-7826	CFM56-7B24	\$3.42	\$4.03	\$3.88	\$3.70	\$3.49	\$3.26	\$3.03	\$2.81	\$2.61	\$2.42
888868	CFM56-7B26	CFM56-7B24	\$3.42	\$4.03	\$3.88	\$3.70	\$3.49	\$3.26	\$3.03	\$2.81	\$2.61	\$2.42
890339	CFM56-7B26	CFM56-7B26	\$3.93	\$4.47	\$4.31	\$4.11	\$3.88	\$3.62	\$3.36	\$3.12	\$2.90	\$2.69
660372	CFM56-7B26E	CFM56-7B26E	\$6.76	\$7.51	\$7.43	\$7.28	\$7.07	\$6.81	\$6.48	\$6.15	\$5.84	\$5.54
862250	CFM56-7B26E	CFM56-7B26E	\$6.76	\$7.51	\$7.43	\$7.28	\$7.07	\$6.81	\$6.48	\$6.15	\$5.84	\$5.54
862937	CFM56-7B26E	CFM56-7B26/3	\$5.50	\$6.12	\$6.00	\$5.85	\$5.65	\$5.40	\$5.16	\$4.92	\$4.69	\$4.48
660119	CFM56-7B26E	CFM56-7B26E	\$6.76	\$7.51	\$7.43	\$7.28	\$7.07	\$6.81	\$6.48	\$6.15	\$5.84	\$5.54
660170	CFM56-7B26E	CFM56-7B27E/F	\$6.98	\$7.75	\$7.67	\$7.52	\$7.30	\$7.02	\$6.69	\$6.35	\$6.02	\$5.72
901480	GE90-1158	GE90-115BL	\$15.54	\$18.28	\$17.44	\$16.64	\$15.88	\$15.15	\$14.45	\$13.79	\$13.16	\$12.55
901096	GE90-1158	GE90-115BL	\$15.54	\$18.28	\$17.44	\$16.64	\$15.88	\$15.15	\$14.45	\$13.79	\$13.16	\$12.55
901281	GE90-1158	GE90-115BL	\$15.54	\$18.28	\$17.44	\$16.64	\$15.88	\$15.15	\$14.45	\$13.79	\$13.16	\$12.55
900272	GE90-90B	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
900352	GE90-908	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
900361	GE90-908	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
900392	GE90-908	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
900242	GE90-908	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
900325	GE90-908	GE90-908	\$3.93	\$4.92	\$4.61	\$4.31	\$4.02	\$3.76	\$3.51	\$3.28	\$3.06	\$2.86
956883	GEnx-1B70	Genx-1B74/75/P2	\$16.34	\$17.20	\$17.54	\$17.89	\$18.25	\$18.54	\$18.73	\$18.80	\$18.76	\$18.61
956912	GEnx-1B70	Genx-1B70/P2	\$14.50	\$15.27	\$15.57	\$15.88	\$16.20	\$16.46	\$16.62	\$16.69	\$16.65	\$16.52
958090	GEnx-1B70	Genx-1B74/75/P2	\$16.34	\$17.20	\$17.54	\$17.89	\$18.25	\$18.54	\$18.73	\$18.80	\$18.76	\$18.61
958338	GEnx-1B70	Genx-1B76/P2	\$17.33	\$18.24	\$18.61	\$18.98	\$19.36	\$19.67	\$19.87	\$19.94	\$19.90	\$19.74
958576	GEnx-1B70	Genx-1B70/P2	\$14.50	\$15.27	\$15.57	\$15.88	\$16.20	\$16.46	\$16.62	\$16.69	\$16.65	\$16.52
956295	GEnx-1B70	Genx-1870/P2	\$14.50	\$15.27	\$15.57	\$15.88	\$16.20	\$16.46	\$16.62	\$16.69	\$16.65	\$16.52
956322	GEnx-1B70	Genx-1B74/75/P2	\$16.34	\$17.20	\$17.54	\$17.89	\$18.25	\$18.54	\$18.73	\$18.80	\$18.76	\$18.61
956515	GEnx-1B70	Genx-1B74/75/P2	\$16.34	\$17.20	\$17.54	\$17.89	\$18.25	\$18.54	\$18.73	\$18.80	\$18.76	\$18.61
956679	GEnx-1B70	Genx-1B70/P2	\$14.50	\$15.27	\$15.57	\$15.88	\$16.20	\$16.46	\$16.62	\$16.69	\$16.65	\$16.52
603331	LEAP-1B26/28	LEAP-1B26/28	\$9.13	\$10.15	\$10.20	\$10.25	\$10.30	\$10.35	\$10.36	\$10.33	\$10.24	\$10.10
602853	LEAP-1B26/28	LEAP-1826/28	\$9.13	\$10.15	\$10.20	\$10.25	\$10.30	\$10.35	\$10.36	\$10.33	\$10.24	\$10.10

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					Future Base Values							
ESN	TYPE	Model	CMV	BV	2021	2022	2023	2024	2025	2026	2027	2028
602518	LEAP-1B26/28	LEAP-1B26/28	\$9.13	\$10.15	\$10.20	\$10.25	\$10.30	\$10.35	\$10.36	\$10.33	\$10.24	\$10.10
727787	PW4056	PW4056	\$1.97	\$2.08	\$1.92	\$1.77	\$1.64	\$1.51	\$1.40	\$1.29	\$1.19	\$1.10
727948	PW4056	PW4056	\$1.97	\$2.08	\$1.92	\$1.77	\$1.64	\$1.51	\$1.40	\$1.29	\$1.19	\$1.10
727569	PW4056	PW4056	\$1.97	\$2.08	\$1.92	\$1.77	\$1.64	\$1.51	\$1.40	\$1.29	\$1.19	\$1.10
P222309	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
P222310	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
P222311	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
222258	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
777067	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
P222308	PW4077	PW4077	\$2.99	\$3.51	\$3.32	\$3.12	\$2.91	\$2.69	\$2.49	\$2.30	\$2.12	\$1.96
222067	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222068	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222099	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222108	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222182	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222215	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222225	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222254	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222022	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222025	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222035	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222036	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222037	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222043	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222048	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
222056	PW4090	PW4090	\$3.83	\$4.25	\$4.02	\$3.78	\$3.52	\$3.26	\$3.01	\$2.78	\$2.57	\$2.37
31572	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31620	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31655	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31849	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31884	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31900	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31378	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31379	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31412	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
31515	RB211-535E4B	RB211-535E4-B	\$2.41	\$2.54	\$2.36	\$2.19	\$2.03	\$1.89	\$1.75	\$1.63	\$1.51	\$1.41
V10327	V2522-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V10327 V10824	V2522-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V10024 V11050	V2522-A5	V2522-A5	\$3.27	\$3.71	\$3.61	\$3.49	\$3.35	\$3.20	\$3.06	\$2.92	\$2.78	\$2.65
V11030	V2522-A5	V2522-A5	\$3.27	\$3.71	\$3.61	\$3,49	\$3.35	\$3.20	\$3.06	\$2.92	\$2.78	\$2.65
V10232	V2522-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V10316 V12173	V2522-A5	V2527-A5	\$3.65	\$4.72	\$4.03	\$3.89	\$3.74	\$3.58	\$3.41	\$3.26	\$3.54	\$2.97
V12173 V11807	V2524-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4,44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V11807 V11395	V2524-A5 V2527-A5	V2527-A5 V2524-A5	\$3.65	\$4.72	\$4.59	\$3.89	\$3.74	\$3.58	\$3.89	\$3.71	\$3.54	\$3.38
V11395 V12083	V2527-A5 V2527-A5	V2524-A5 V2527-A5	\$4.16	\$4.72	\$4.03	\$4.44	\$4.27	\$4.08	\$3.41	\$3.26	\$3.11	\$3.38
			\$4.16			-						
V12169 V12521	V2527-A5 V2527-A5	V2527-A5	-	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
		V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V10167	V2527-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V10372	V2527-A5	V2527-A5	\$4.16	\$4.72	\$4.59	\$4.44	\$4.27	\$4.08	\$3.89	\$3.71	\$3.54	\$3.38
V11394	V2527-A5	V2524-A5	\$3.65	\$4.15	\$4.03	\$3.89	\$3.74	\$3.58	\$3.41	\$3.26	\$3.11	\$2.97
			\$524.16	\$582.87	\$568.23	\$552.47	\$535.82	\$517.73	\$499.07	\$480.53	\$462.11	\$443.69



Desktop Appraisal of: Three Hundred and Fifty-Two (352) Aircraft and Ninety-nine (99) Engines

> Client: United Airlines, Inc.

> > Date: October 13, 2020

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## I. Introduction and Executive Summary

mba Aviation ("mba") has been retained by United Airlines, Inc. (the "Client") to provide a Desktop Appraisal to determine the Half-Time Current Base and Market Values, as well as Future Half-Time Base Values for the next eight years, assuming an annual inflation rate of 2.0%, of 352 various aircraft and 99 various spare engines (collectively, the "Subject Assets") as of September 1, 2020. In addition, mba's Maintenance Forecasting Team has provided the Current and Future Maintenance Adjusted Values for the next eight years, assuming an annual inflation rate of 2.0%, as of September 1, 2020. The Subject Assets are fully identified in Section IV of this Report.

In performing this Appraisal, mba relied on industry knowledge and intelligence, confidentially obtained data points, its market expertise and current analysis of market trends and conditions, along with value information from its quarterly publication **REDBOOK – 3Q 2020**.

Based on the information set forth in this Report, it is mba's opinion that the total Half-Time and Maintenance Adjusted Current Base and Market Values of the Subject Assets are as follows and the Half-Time Current Base and Market Values, the Future Half-Time Base Values for the next eight years, and the Current and Future Maintenance Adjusted Values for the next eight years with respect to each of the Subject Assets are as set forth in Section IV.

			Maintenance	Maintenance
	Half-Time	Half Time Current	Adjusted Current	Adjusted Current
	Current Base Value (US\$)	Market Value (US\$)	Base Value (US\$)	Market Value (US\$)
(451) Various Assets	\$5,057,010,000	\$4,508,200,000	\$4,388,470,000	\$3,956,410,000

Section II of this report presents definitions of various terms, such as Current Base Value and Current Market Value as promulgated by the Appraisal Program of the International Society of Transport Aircraft Trading (ISTAT). ISTAT is a non-profit association of management personnel from banks, leasing companies, airlines, manufacturers, brokers, and others who have a vested interest in the commercial aviation industry and who have established a technical and ethical certification program for expert appraisers.



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#### II. Definitions

## Desktop Appraisal

A desktop appraisal is one which does not include any inspection of the aircraft or review of its maintenance records. It is based upon assumed aircraft condition and maintenance status or information provided to the appraiser or from the appraiser's own database. A desktop appraisal would normally provide a value for a mid-time, mid-life aircraft (ISTAT Handbook).

#### Base Value

ISTAT defines Base Value as the Appraiser's opinion of the underlying economic value of an aircraft, engine, or inventory of aircraft parts/equipment (hereinafter referred to as "the asset"), in an open, unrestricted, stable market environment with a reasonable balance of supply and demand. Full consideration is assumed of its "highest and best use". An asset's Base Value is founded in the historical trend of values and in the projection of value trends and presumes an arm's-length, cash transaction between willing, able, and knowledgeable parties, acting prudently, with an absence of duress and with a reasonable period of time available for marketing. In most cases, the Base Value of an asset assumes the physical condition is average for an asset of its type and age. It further assumes the maintenance time/life status is at mid-time, mid-life (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be). Since Base Value pertains to a somewhat idealized asset and market combination it may not necessarily reflect the actual current value of the asset in question, but is a nominal starting value to which adjustments may be applied to determine an actual value. Because it is related to long-term market trends, the Base Value definition is commonly applied to analyses of historical values and projections of residual values.

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## Market Value

ISTAT defines Market Value (or Current Market Value if the value pertains to the time of the analysis) as the appraiser's opinion of the most likely trading price that may be generated for an asset under market circumstances that are perceived to exist at the time in question. Current Market Value assumes that the asset is valued for its highest, best use, and the parties to the hypothetical sale transaction are willing, able, prudent and knowledgeable and under no unusual pressure for a prompt transaction. It also assumes that the transaction would be negotiated in an open and unrestricted market on an arm's-length basis, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers.

Market Value of a specific asset will tend to be consistent with its Base Value in a stable market environment. In situations where a reasonable equilibrium between supply and demand does not exist, trading prices, and therefore Market Values, are likely to be at variance with the Base Value of the asset. Market Value may be based upon either the actual (or specified) physical condition or maintenance time or condition status of the asset, or alternatively upon an assumed average physical condition and mid-life, mid-time maintenance status.

## Qualifications

mba is a recognized provider of aircraft and aviation-related asset appraisals and inspections. mba and its principals have been providing appraisal services to the aviation industry for over 25 years; and its employees adhere to the rules and ethics set forth by the International Society of Transport Aircraft Trading (ISTAT). mba employs three ISTAT Certified Appraisers and three Candidates. mba's clients include most of the world's major airlines, lessors, financial institutions, and manufacturers and suppliers. mba maintains offices in North America, Europe, and Asia.

mba publishes quarterly values updates on its online platform REDBOOK, which provides current and projected aircraft values for the next 20 years for over 150 types of jet, turboprop, and cargo aircraft in addition to engines and helicopters.

mba also provides consulting services to the industry relating to operations, marketing, and management with an emphasis on financial/operational analysis, airline safety audits and certification, utilizing hands-on solutions to current situations. mba also provides expert testimony and witness support on cases involving collateral/asset disputes, bankruptcies, financial operations, safety, regulatory and maintenance concerns.

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**III. Current Market Conditions** 

## **GENERAL MARKET OBSERVATION 3RD QUARTER 2020**

An essential consideration in any appraisal is the condition of the market at the time the valuation is rendered. Without question, 2020 has been a year unlike any other in recent memory, with macroeconomic, geopolitical and global health questions pushing the world economy in general and the aviation industry specifically down from the highs of recent years. This section defines market conditions, including general market commentary, highlighting major factors currently influencing aircraft values, as well as mba's view of the current market situation for each aircraft type examined in this valuation.

## **PASSENGER TRAFFIC**

There are a number of variables that have historically shown a strong correlation to aircraft values. These variables include but are not limited to: global Gross Domestic Product (GDP), Revenue Passenger Kilometer (RPK), and Available Seat Kilometer (ASK) rates of growth, as well as an aircraft's placement on the production line, ubiquity, technical obsolescence, active-to-parked ratio, production status, and order backlog, which all help predict long-term values prospects. Other factors, like oil prices and active-to-parked ratio, have traditionally offered insight into short-term value fluctuations. However, as of 3Q20, the aviation industry has firmly entered an inscrutable stage, when geopolitics and production, let alone air traffic, are all going through an unprecedented period of shock; how deeply these shocks will affect future outcomes still remains in question. As of late June 2020, the International Monetary Fund (IMF) has warned that the COVID-19 pandemic and consequent "Great Lockdown" is projected to shrink global growth dramatically, with world output decreasing by 4.9%, 1.9 percentage points below the April 2020 World Economic Outlook (WEO) forecast, leaving the 2020 GDP forecast nearly 6.5 percentage points lower than the pre-COVID-19 projections of January 2020. The fund notes that fiscal policy measures have been able to help affected industries, like aviation, but they will "need to be scaled up if the stoppages to economic activity are persistent, or the pickup in activity as restrictions are lifted is too weak."

Analyzed in conjunction, two of the best indicators of the health of the commercial aviation industry are the number of new aircraft orders placed and RPK growth, which the International Air Transport Association (IATA) defines as the number of paying passengers multiplied by total kilometers flown. Both of these data points and trends have been highly correlated to world GDP in the past. By looking at the forecasted world GDP, the potential RPK growth can typically be assumed, which in turn influences new aircraft orders if passenger demand increases.

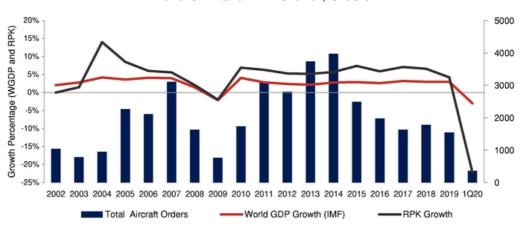
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However, entering into 3Q20, the COVID-19 pandemic and safety protocols around it have all but halted air traffic. In April 2020, IATA predicted that full-year passenger demand (domestic and international) will be down 48.0% compared to 2019. While May data shows a slight improvement over the unprecedented lows of April (-91.0% vs. -94.3%), IATA's Director General noted, "As predicted, the first improvements in passenger demand are occurring in domestic markets. International traffic remained virtually stopped in May. We are only at the very beginning of a long and difficult recovery."

As seen in the chart below, air passenger traffic has always been sensitive to global economics and geo-politics, and this will be no different, despite such unparalleled declines in air traffic. History has also shown that traffic has rebounded in the period following extraordinary circumstances.

## World GDP and RPK Growth, Orders



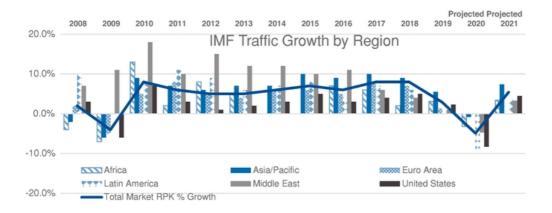
Source: STAR Fleet, OEMs, World Bank, IATA

Historical growth patterns may still prove useful when forecasting traffic post-COVID-19. Annual traffic growth had already slowed down dramatically as 2019 came to a close. Profound geopolitical and geo-economic uncertainties like Brexit, United States (U.S.)-China trade relations, and escalating tensions in the Commonwealth of Independent States (CIS) and the Middle East all weighed heavily on recent forecasts for the aviation industry. In addition, the grounding of the 737 MAX strained capacity, which in turn held back RPK growth. While 2018 marked the ninth consecutive year of above-trend growth in RPKs, rates retracted throughout 2019 and remained well below the 20-year average rate of approximately 5.5%.

In 2019, real Global RPK and economic growth were primarily driven by Emerging Market and Developing Economies, where GDPs are collectively estimated to have grown by 3.5% in 2019, down from 4.3% in 2018, compared to advanced economies' rates of 1.6% in 2019 and 2.2% in 2018, according to the World Bank. The IMF forecasts a 3.0% drop in market output in the Emerging and Developing Economies in 2020, and a rebound of 5.9% in 2021 (compared to Advanced economies' -8.0% in 2020 and +4.8% in 2021) but warns that if containment measures last longer than the projected recovery in 2021, they may be hit harder than advanced economies if tight financial conditions persist.

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Source: IATA.org: 2006-2020

Another important traditional metric of air travel health are ASKs. A measure of passenger capacity, it reveals real air traffic growth, visibly contracting in 2019 around the time of the 737 MAX groundings. Comparing domestic, international, and total ASK growth rates is another measure confirming slowing air travel growth.

2019 Non-Seasonally Adjusted ASK Growth (MoM)

8.0%

6.0%

4.0%

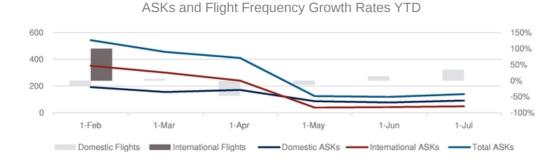
2.0%

Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jun-19 Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19

— Domestic (Worldwide) — Int'l Passenger (Worldwide) — Total Market

Source: OAG Analyzer

The first months of the year show the effects of the pandemic and shutdowns but do point to the beginnings of a period of stability, and perhaps a recovery:



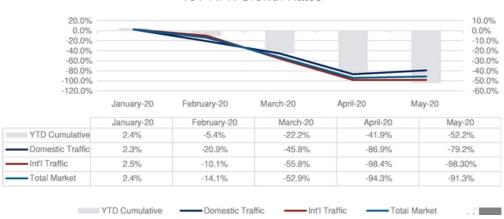
Source: OAG Analyzer

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Another look at 2020 RPK rates shows the depression in travel revenue throughout 2Q20, corresponding to the plummeting travel demand, as well as May's early, yet hopeful, indications of a rebound. Whether the rebound is temporary or the beginning of a trend remains to be seen.

## YoY RPK Growth Rates



Source: IATA

## **FREIGHTER TRAFFIC**

Due to cargo being the only sector of air traffic that has not plummeted more than 50.0%, airlines have become active in mounting cargo operations with their passenger fleet, helping to meet the global demand for general cargo as well as vital medical shipments. While traffic rights, landing permissions, and cargo crews being quarantined upon arrival have complicated these efforts, regulatory bodies are trying to minimize obstacles for essential cargo traffic. In March, the E.C. published guidance that will help clear the bottlenecks in Europe, providing comprehensive and practical guidelines to facilitate cargo transport, including ensuring that passenger aircraft holding only cargo are granted full landing permissions, exempting asymptomatic cargo crew from travel restrictions, and encouraging carriers to apply reasonable shipping rates for emergency supplies.

Operators and consumers of freight traffic have had to adapt quickly to the changing realities. As belly freight capacity has shrunken with cancelled passenger flights, cargo aircraft have been brought back into service. KLM has reactivated two recently retired 747 Combi aircraft to transport cargo on behalf of the Dutch government and the Royal Philips Dutch conglomerate. Atlas Air has also started putting stored 747s into service.

Passenger aircraft have been transformed into freighter fleet with numerous carriers, with Icelandair removing all its passenger seats to carry cargo, and Shandong Airlines, Lufthansa, SmartLynx, and Condro all removing more than half of their fleets' seats. According to CargoFacts' Passenger Freighter Database, passenger aircraft that have been utilized for cargo-only missions during the COVID-19 crisis, regardless of frequency, span the globe.

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Initially, the aircraft being used in this capacity were widebodies, but as of July 2020, the types of aircraft being used for cargo operations vary widely, showing how diverse types are of greatest utility in different regions and capacities. While a Supplemental Type Certificate (STC) is not required to carry cargo on the main deck of a passenger aircraft, cabin loading must be done in accordance with the guidance issued by the aircraft manufacturer. The most-converted aircraft types are shown below.

Aircraft Type	Intact	Seats removed
757-300	0.00%	100.00%
DHC-8 Q400	20.00%	80.00%
ATR 72-500	50.00%	50.00%
ATR 72-600	57.14%	42.86%
767-300ER	69.33%	30.67%
737-900ER	72.73%	27.27%
747-400	75.00%	25.00%
737-800	77.14%	22.86%
A330-200	85.22%	14.78%
A330-900	87.50%	12.50%
A340-300	87.50%	12.50%
A340-600	88.24%	11.76%
777-200ER	91.89%	8.11%

## **GLOBAL EVENTS' IMPACT ON AVIATION**

Pre-COVID era geopolitical and geoeconomic events of the past few years are still generating uncertainty and volatility in the aviation industry at the mid-point of 2020. China saw its lowest rate of economic growth since 1992 in 2019, after introducing tariffs on US\$60 billion of American goods and threatening to reduce Chinese orders of Boeing aircraft. In response, the Trump Administration proposed an escalation of tariffs on Chinese aircraft and jet engines, upping the duties to 25.0%; though both countries have since agreed upon a 'truce'.

Tensions with the Middle East continue, as well. Qatar still faces trade and travel bans from Saudi Arabia, Egypt, the United Arab Emirates (UAE), and Bahrain, impacting the routes Qatar Airlines is able to fly as well as passenger traffic on Qatar within the region. In January 2020, efforts to resolve the diplomatic crisis were unsuccessful.

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In October 2019, the World Trade Organization (WTO) cleared the way for the U.S. to impose tariffs on imports of US\$7.5 billion in European Union (EU) goods after finding Airbus had not done enough to prevent negative effects of EU subsidies for the A350 and A380 programs on U.S. commerce. On June 22, 2020, the U.S. Trade Representative filed paperwork that would allow companies to comment on a proposed increase to as high as 100.0% on all goods already tariffed and broaden the list to tariffs on new items, such as certain coffees and olives. The action would coincide with the EU and United Kingdom's (U.K.) expected win in their case against the U.S.'s subsidies of Boeing, which would allow the European countries to respond with tariffs of their own.

The U.K. vote to exit the EU in 2016 caused a considerable amount of uncertainty in the aviation market. With Brexit now a done deal as of January 31, 2020, the U.K.'s Civil Aviation Authority (CAA) has determined that the U.K. will not remain a member of EASA beginning January 1, 2021, after the Brexit transition period. In June, Prime Minister Boris Johnson and European Commission (E.C.) President Ursula von der Leyen agreed not to extend the transition deadline. By 2021, the U.K. CAA will need to fulfill regulatory functions, such as Aviation Safety Agreements and aviation licenses without having EASA as a technical agent and without having access to EASA and EU-level capabilities. All licenses issued by the CAA under EU legislation and all type approval certificates and third country approvals issued by EASA under EU legislation will continue to have validity under U.K. law, provided they were effective immediately before January 1, 2021. There remain concerns from large multinational companies with factories both in the EU and the U.K., like Airbus and Rolls-Royce, that there will be debilitating costs and procedures associated with new regulatory and border controls after Brexit.

## **GLOBAL PANDEMIC**

In 2002–2003, an outbreak of a coronavirus known as severe acute respiratory syndrome (SARS) became an epidemic and resulted in a slowdown of passenger air traffic of 5.1% due to contagion fears. With RPK growth cut in half, aircraft values took a brief hit due to oversupply in the market as airlines tried to cut capacity, with widebodies and regional aircraft taking the largest hit. Impact on values was minor and short-lived, recovering within a year. However, COVID-19 has far surpassed SARS in terms of number of people infected and the global spread of the virus and has had far greater impact on RPK growth and aircraft pricing than SARS.

As of early July 2020, 103 countries are completely closed to foreign travelers, 69 countries are partially open depending on traveler's citizenship or point of origin. Eleven countries are opening soon and 36 have no travel restrictions, including Mexico, the U.K. and Ukraine, though quarantine protocols are in place in most countries accepting foreign travelers. The U.S. continues to suspend entry to most foreign nationals travelling from China, Iran, Schengen countries, U.K, Ireland and Brazil. On July 1, 2020, after months of lockdown, European nations began to open their borders to nonessential travelers coming from a select list of countries in which the COVID-19 pandemic has been deemed sufficiently under control, which did not include the Unites States.

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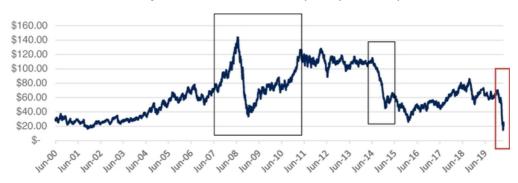


Airlines have had to introduce new cleaning and disinfecting protocols and cancelled a large share of international flights. Flight schedules remain uncertain with frequent and last-minute cancellations and changes in departure dates and times, though many airlines have dropped change fees to make it easier for travelers to make last minute decisions about whether or not to follow through on travel plans. Many smaller operators temporarily stopped flying altogether, but flights are resuming. In response to the reduced demand, most airlines are asking employees to take unpaid leave, with some laying off employees and furloughing pilots. In June 2020, IATA announced that airlines are expected to lose \$84.3 billion in 2020 for a net profit margin of -20.1%. Revenues are expected to fall 50.0% to \$419 billion from \$838 billion in 2019. Many airlines have received government bail outs to help avert bankruptcy but continue to have high daily cash burn rates. Considering most airlines are also reducing staff and slimming down their fleet, even if passenger traffic numbers begin to bounce back quickly, the gutted infrastructure of mainline, flag, and low cost carriers may ultimately limit the ability of aviation to recover as quickly as it did after SARS.

## **EFFECTS OF OIL PRICES ON AVIATION**

While air traffic growth and aircraft supply are reflections of current market strength or weakness, there are other factors that have the potential to affect growth or retraction in the industry. One such factor is the price of oil, a major driver of commercial aviation health and aircraft value volatility.

## Twenty Year Brent Crude Price (USD per Barrel)



Source: Energy Information Agency, www.eia.gov

After a period of volatility between 2007 and 2011, oil prices remained over US\$100.00 per barrel until the end of 2014 when prices began to fall. By January 2016, Brent Crude had fallen to a new 13-year low, dropping to US\$26.00 per barrel. During this period, larger, older, less-efficient widebody aircraft were utilized in larger numbers, keeping residual values for such aircraft higher than one would expect in higher fuel price environments. Though oil began to recover in 2016, 1Q 2020 saw oil prices fall to new 15-year lows.

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On March 8, 2020, a breakup in dialogue between Organization of Petroleum Exporting Countries' (OPEC) 14 member states and non-OPEC member Russia over proposed oil-production cut rates in preparation for the pandemic era led to Russia leaving the discussion, not wanting to lower its production. In response, Saudi Arabia slashed its oil prices by US\$6.00-\$8.00 per barrel, triggering a freefall in oil prices over the course of the following week. In early April, after a week of bilateral and group video conferences of ministers from the G20 nations and the OPEC+ alliance, which includes the 14 OPEC countries plus ten other oil producing countries, including Russia, an agreement seemed to have emerged. OPEC+ announced that it would cut 9.7 million barrels per day in early June, an announcement that prompted Brent futures to rise 8.0% in the opening moments of trading in Asia, only to be followed by a reversal. Saudi Ariabia also reduced production voluntarily by another one million barrels per day, which seems to have stabilized production supply vis-à-vis demand and shows signs of potential recovery in pricing.

## **EFFECTS OF ENVIRONMENTAL POLICIES ON AVIATION**

Another major factor impacting aircraft values are policies and regulations aimed at Environmental, Social, and Governance (ESG) practices. With an eye towards decreasing demand for oil and dependency of fossil fuels, many environmentalist policies around the globe had a direct impact on oil in the latter part of 2019, before the pandemic put a distinct freeze on demand.

In December 2019, IATA asked the EU to support sustainable aviation fuel research as part of the E.C.'s new Green Deal. IATA also published an analysis at the end of 2019 showing that carbon emissions had declined by over 50.0% per passenger since 1990, due to technological advancements in new aircraft. All of these factors are likely to put pressure on older, less fuel-efficient aircraft, and should the EC move forward with policy changes to how jet fuel is taxed, may strongly impact one of the largest segments of the global aviation industry.

Stemming from pressure from the industry to take the current pandemic's effect on airline economics, in June 2020, the 36-member Council of the International Civil Aviation Organization (ICAO) unilaterally voted to use 2019 emissions levels, rather than 2020 levels, as initially planned, as a baseline for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), in effect suspending airlines' obligations to offset a portion of their carbon pollution if emissions do not rise above those levels during that time. In 2022, the ICAO Assembly will consider if further amendments are necessary to address the impacts of COVID-19 to ensure the successful implementation of the scheme

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## **CURRENT STATUS OF COMMERCIAL AIRCRAFT MANUFACTURERS**

Due to the pandemic and social distancing measures, production of aircraft were all temporarily suspended in March and early April. Boeing restarted production in mid-April, after nearly four weeks of interruption, with current model production lines up and running as of July but at much lower rates than forecast in 2019. Boeing also has announced cutting over 26,000 workers from its sites over the next several months.

Airbus announced in April that it was temporarily halting commercial aircraft production and assembly activity at its German sites and at its A220/A320 manufacturing facility in Mobile, Alabama. Further announcements stated that Airbus would be looking to hold underlying jet output at 40.0% below pre-pandemic plans for two years and cut 15,000 jobs over the next year.

The world's third largest airplane manufacturer, Brazil's Embraer, appeared not to have suspended production, per se, but announced in February that it would need to lay off 20.0% of its workforce of 21,000 and required Brazilian government subsidies to furlough 94.0% of its workforce with up to 36.0% pay cuts for the months of May and June. Boeing cancelled its joint venture plans with Embraer in April, leaving the manufacturer with no solid plans for its commercial aircraft production lines. While both parties continue to be embroiled in countersuits in the fallout, Embraer's chief executive Francisco Gomes Neto told Reuters in June that he is open to potential partnerships smaller in scope and that the company's near-term focus would be on undoing the costly separation process the venture had started and bringing all of its employees all-aircraft lines back under the same corporate roof. The new turboprop it had hopes to develop as a replacement to the EMB-120 but no longer has the ability to finance could "potentially spawn one deal."

On March 19, ATR announced it was suspending operations for several weeks at its Saint-Martin and Franzacal assembly sites in order to deploy safety measures. In June, the company began plans to "rightsize" by cutting 204 positions, nearly 15.0% of its workforce. On March 20, 2020, De Havilland of Canada announced temporary suspension of production that lasted until May 4, when only 100 employees (out of 800) returned to work, though with recent Simplified Package Freighter conversion approvals by Transport Canada for the DHC 8-100, -200, and -300, more employees may be returning soon. Bombardier announced a suspension of its commercial aircraft production from March 24 until April 26 and re-emerged in June as MHI RJ Aviation upon the closing of its acquisition by Mitsubishi Heavy Industries. The company will only close out the existing production backlog of CRJ-900s and will not be manufacturing any new aircraft.

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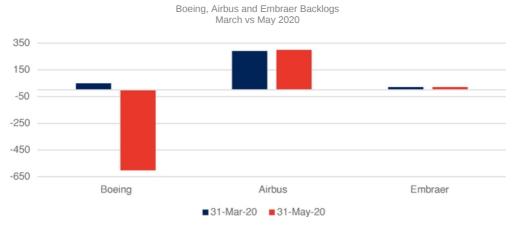
## **CURRENT STATE OF COMMERCIAL AIRCRAFT ORDERS**

After a slowdown in orders from 2017 to 2018 for both Airbus and Boeing, 2019 saw further decline, with both manufacturers experiencing more cancellations than in recent history. According to Boeing's 2019 'Orders & Deliveries' report, its net orders were in the negative, at -87 aircraft as of December 31, 2019. The 737 MAX accounted for -183 net orders. However, recent cancellations by major lessors have further impaired Boeing MAX backlog, which stood at 4,545 unfilled orders at the end of 2019, 4,079 at the end of March 2020, and only 3,776 at the end of May. In June, BOC Aviation cancelled 30 MAX orders, and Norwegian cancelled another 92.

On March 13, 2019, the Federal Aviation Administration (FAA) ordered the grounding of all Boeing 737 MAX aircraft following the Ethiopian Airlines and Lion Air crashes in October 2018, resulting in 346 fatalities. Dennis Mullenburg was fired as CEO in December 2019, and David Calhoun was brought in from the board to try to stabilize the company. After only eight weeks on the job, in March 2020, Calhoun gave a candid interview to the New York Times, stating things at the company were worse than he expected, criticizing his predecessor as having "turbocharged Boeing's production rates before the supply chain was ready," and making plans to restore Boeing's credibility with the FAA, its airline customers and its ultimate end- users, the passengers. In April 2020, Calhoun told shareholders that the industry may take years to recover from the pandemic.

After multiple production rate cuts throughout 2019, Boeing stopped production of the MAX in December 2019. The aircraft completed recertification test flights on July 1, 2020 and while it is still unknown how long it will take the FAA and other aviation authorities to recertify and unground the aircraft, Boeing restarted the production line on May 27, 2020

Airbus ended the year with 1,131 gross orders and 363 cancellations, netting 768 orders. Airbus recorded no new orders in 2Q20 but has maintained a backlog of nearly 300 aircraft. Embraer's order books have been static while working out its future without Boeing.



Source: mba STAR Fleet, Boeing, Airbus, Embraer

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In June, China's "big three" state-owned airlines—Air China, China Eastern Airlines, and China Southern Airlines—took delivery of Commercial Aircraft Corporation of China's (COMAC) first domestically developed regional jet, the ARJ21-700 in a 90-seat configuration. The aircraft can be configured to seat 70–95 passengers. According to COMAC, more than 100 ARJ21s will be delivered in the next five years. These deliveries were scheduled and completed on the fourth anniversary of when the aircraft first entered commercial service with its first operator, Chengdu Airlines, which currently operates 32 of the type. The manufacturer has stated that the aircraft is to compete directly with Embraer regional jets.

In May 2020, COMAC announced 800 orders for its other aircraft, the narrowbody C919, from 28 airlines. The launch customer is to be China Eastern Airline's subsidiary 123 Aviation, also known as OTT Airlines, which was introduced in February specifically to operate Chinese-made aircraft. COMAC intends for the aircraft to compete directly with the 737 and A320 familires. In January 2020, it was reported that COMAC engineers miscalculated the loads that would be placed on the plane's twin engines in flight and sent inaccurate data to the engine manufacturer, CFM International. That and other technical and structural glitches meant that after more than two and a half years of flight testing, COMAC had completed less than a fifth of the 4,200 hours in the air that it needs for final approval by the Civil Aviation Administration of China (CAAC). In June, Chinese media reported that the aircraft had begun a month of high-temperature testing in Turpan, China, and intends to complete all certification processes by 2021.

The other major newcomer to the aviation manufacturing scene, Mitsubishi Aircraft's SpaceJet program, decided to suspend studies related to the 70-seat SpaceJet M100 program and slash funding for the 88-seat M90 development. At an announcement following following the end of its fiscal year in March, MHI said it would more than halve funding for the SpaceJet as it reported program impairment losses from its acquisition of the Bombardier CRJ program and development costs for the 2019 fiscal year totaling 263.3 billion yen (US\$2.46 billion). This year it plans to pare SpaceJet development spending from 140.9 billion yen to 60 billion yen as it addresses COVID-19-related pressures throughout the wider enterprise, pushing first delivery of the M90 well into at least 2021.

## **AIRCRAFT VALUE IMPLICATIONS OF COVID-19**

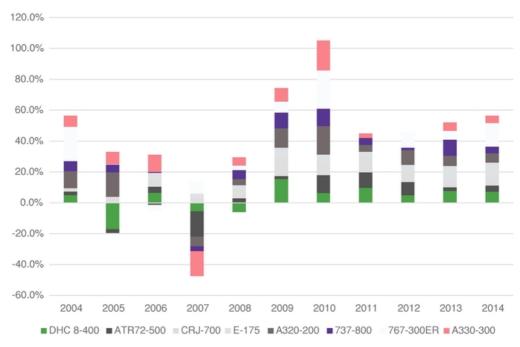
Given it has only been four months since the global impact of COVID-19, it is still too early to determine the long term impacts to base values at this time. However, in 3Q 2020, mba brought down market values to reflect the spike in availability for certain aircraft types due to bankruptcies or retirements and the decline in purchase prices for certain aircraft, engines, and airframes. Though the initial market value cuts were minimal for certain aircraft types and significant for others, it is important to note in past downturns, aircraft values took their steepest hits after the dust of the downturn had settled, usually 12–18 months after the recession began.

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To summarize effects of past shocks on commercial passenger aircraft, below is a comparison of depreciation in market values for two families in each body type from 2004–2014; one of each type was a program that was at least 20 years old during the period, and the other was a newer family, ranging from 11–15 years old in 2010. The chart below is not meant to define exact market value drops and recoveries, but rather to show how each type reacted to and recovered from the Great Recession of 2008–10. Focusing on 2009, the year after the beginning of the recession, aircraft values reflected the period of instability most accutely: the top two areas are the widebodies, with the older program, the Boeing 767-300ER taking the deepest hit, and continuing to depreciate at higher rates than any other type, whereas the newer program, the A330-300 took a big haircut as well, but recovered much more quickly and, in fact, had lower depreciation rates just after recovery than the other aicraft. The next areas show, in order, narrowbodies, regional jets and turboprops, newer, then older, respectively.

## Stacked YoY Market Value Depreciation



Source: mba Historical Values Data

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Based on this data, the following scenarios were determined for different aircraft types over the course of their value years, comparing 1Q values:

Annual Market Impact Rates									
Aircraft Value Impacts Following the Great Recession (2009-2011)	First Year of Recession	1 Year Later	2 Years Later						
Turboprops	7.0–11.0%	7.0–11.0%	8.0-12.0%						
Old-Gen Regional Jets	9.0-13.0%	6.0-10.0%	8.0-12.0%						
Next-Gen Regional Jets	5.0-9.0%	4.0-8.0%	2.0-6.0%						
Old-Gen Narrowbodies	11.0–15.0%	16.0–20.0%	2.0-6.0%						
Next-Gen Narrowbodies	8.0-12.0%	9.0-13.0%	2.0-6.0%						
Old-Gen Widebodies	5.0-9.0%	22.0-28.0%	-1.0–3.0% <sup>1</sup>						
Next-Gen Widebodies	7.0–11.0%	17.0–21.0%	1.0-5.0%						

These are impacts based on the previous downturn, and it is important to note that the economic fundamentals of this era are different, as are travel restrictions and likely behavioral economics of passengers moving forward. The above chart is meant only as a frame of reference and is not a forecast into the likely impact of this pandemic.

As seen historically, regional jets tend to be slower to recover than cost-efficient narrowbodies and see value changes differ greatly across different generations. Turboprops have taken significant and lasting hits in the past, but with no new technology turboprops coming in to replace the exisiting ATR 72-600 and Q400s, values may see faster recovery this time around. Older technology aircraft are typically the first to be retired when downsizing fleets, thus often taking their greatest value hits early in the period. Staple narrowbody aircraft like the 737-800 and A320-200 have performed well in the past, with Market Values taking a minimum hit and rebounding quicker than other types. Though the A320 and 737NGs have replacements in the form of the neo and MAX, many of these orders are being deferred, which will likely help buoy values in the near term. Widebodies have historically been known to have the slowest comebacks aftershocks, due to their higher operating costs but are necessary aircraft for any trans-oceanic travel and thus usually recover eventually. However, while new generation aircraft like the 787 and A350 are unlikely to have lasting value impacts, older types like the A330s, 767s, and 777s as well as large widebodies like the A380s and 747s, which both ceased production in 2020, are at the greatest risk for impacts to residual values. While mba continues to monitor the market and collect trade data points, considering it is still relatively early into this downturn, near term general market volatility is expected with recovery not anticipated for several quarters.

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<sup>&</sup>lt;sup>1</sup> Base Values dropped down to Market Values, as market value becomes unrecoverable.

## 737-700

## **OVERVIEW**

The 737-700 entered service in 1998 with Southwest Airlines ("Southwest"), who made the first order for the 737NG series five years earlier. The aircraft was developed as a direct replacement for the 737-300 and as a competitor to the Airbus A319, typically seating 126 passengers in a two-class configuration. The 737-700 is the most common platform for the Boeing Business Jet (BBJ), which has seen 121 deliveries for the -700 variant as of January 2020. The 737-700 is also available in a convertible cargo version, the 737-700C, where seats are removed to provide space for freight, of which 22 have been delivered.

#### **Positives**

- + Second most popular member of the highly-successful 737NG family.
- + Sole source engines ease remarketing to secondary operators.
- + High degree of parts commonality with other 737NG variants.

#### Neutra

The freighter conversion program is likely to gain orders in the long term, based on successful conversions of predecessors such as the 737-300 and 737-400 aircraft. However, current 737 Classic freighter operators will have other options in terms of converted narrowbody freighters, with the 737-800 program growing in affordability and popularity, and A320 and A321 freighter conversion programs having launched.

#### Negatives

- Backlog for the type has been exhausted with operators showing preference for larger 737NG variants or the 737 MAX.
- As of July, a fairly large portion 24.7% of in-service 737-700s have not flown in over 30 days due to the pandemic's effect on fleet utilization. By comparison, 18.1% of A319s and 18.3% of 737-800s have not flown in over 30 days.
- The number of stored and retired aircraft has increased recently, with 6.8% of the remaining fleet in long-term storage and 5.7% of all aircraft delivered retired or scrapped.
- Fleet concentration in the hands of the largest operator may have a negative impact in the future when Southwest Airlines decides to phase out its fleet of nearly 500 active aircraft.

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## **FLEET STATUS**

As of July 2020, there are 981 active and temporarily parked 737-700 passenger-configured aircraft in service with 71 operators. The fleet has grown steadily over the past ten years, with the number of active aircraft more than tripling during the period. However, the most recent 737NG orders favored its larger siblings, the 737-800 and 737-900ER. There has been no backlog for the 737-700 since January 2019. The 737-700 saw an increase in the number of aircraft parted out over the past year, as demand for spare parts has increased due to parts commonality with other members of the 737NG family.

Net Orders	1,128
Backlog	0
Delivered	1,128
Destroyed/Retired	64
Converted to Freighter	6
Not in Service/ Long-Term Storage	77
Temporarily Parked	242
Active Aircraft	739
Number of Operators	71
Average Fleet Age (Yrs)	15.6

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- In July 2020, Delta announced it would retire its 737-700 fleet by year's end 2020. (AIAA)
- → In July 2020, a judge granted Aeromexico the right return five of its 11 737-700, as well as five 737- 800s and all nine of its E170s as part of it bankruptcy reorganization. (Reuters)
- → In January 2020, Southwest announced that it deferred the retirement of seven 737-700s and is looking for additional second-hand 737NGs to mitigate the effects of the 737 MAX's absence. The carrier has plans to operate the seven aircraft for two more years. (ch-aviation)
- → In February 2019, Pemco launched the full-freighter conversion program for the 737-700, with the first 737-700F scheduled to enter service with Chisholm Enterprises. Pemco plans to amend its pending application with the FAA for the 737-700FC to accommodate the full-freighter conversion in effort to streamline the approval process. (ainonline)

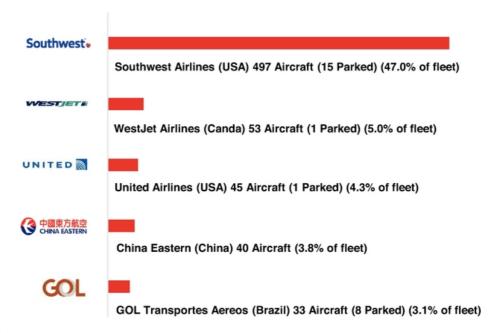
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## **FLEET DEMOGRAPHICS**

The largest operator of the 737-700 fleet, Southwest, currently operates a total of 497 aircraft, or 47.0% of the in-service fleet. The second largest operator, Canada based WestJet, has only 53 737-700 aircraft, representing only 5.0% of the in-service fleet. The 737-700 is a popular aircraft with both low-cost and network carriers, and can be used on domestic and short-haul international flights. However, with a large proportion of the fleet with one operator, the strength of the 737-700's values is closely tied to Southwest's success and fleet plans.

## Five Largest 737-700 Operators



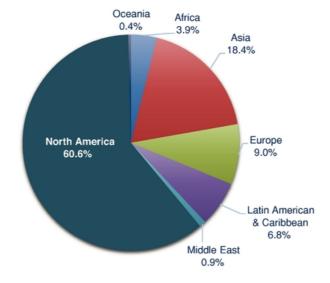
Source: mba STAR Fleet July 2020

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## **Current Fleet by Region**

Unsurprisingly, 60.6% of the current fleet of in-service 737-700 aircraft are located in North America due to Southwest's large fleet of the aircraft type. Asia and Europe follow far behind with 18.4% and 9.0% of the fleet, respectively.



Source: mba STAR Fleet, July 2020.

## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are five 737-700s available: one for sale only, one for lease only, one for sale or lease, and two as ACMI options. This number is better than the aircraft's main competitor, the A319, which has seen its availability grown from four to nine aircraft since March. However, as Southwest begins to retire examples of the aircraft, more 737-700s are expected to enter the market.

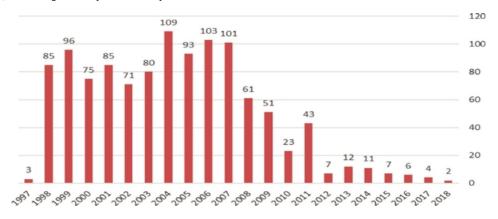


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## **DELIVERIES BY YEAR**

Over the last several years, the market preference has skewed toward larger narrowbodies, with orders for the smaller 737-700 and A319 diminishing. The last 737-700 on backlog was delivered in 2018, and Boeing is unlikely to receive any additional orders for the aircraft.

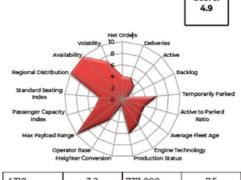


Source: mba STAR Fleet, July 2020

## **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

The 737-700 currently has a lower-than-average score for a narrowbody. Like other small narrowbody aircraft, the 737-700's score has decreased in recent years. The 737-700 has no backlog, in part due to the launch of the replacement 737 MAX, which entered the market with the MAX 8 in May 2017. Even though the number of parked aircraft has increased, Market Values have remained stable or even increased for earlier vintages as the aircraft is in high demand on the part-out market given its parts commonality with larger, more popular 737NG variants. Freighter conversion options exist, which will help extend the life of the aircraft and offer additional secondary market opportunities.



737-700

A318	3.2	737-800	7.5
A319	5.0	737 MAX 8	7.6

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#### **OUTLOOK**

Values of the 737-700 have softened since March 2020 and are likely to continue facing significant volatility risk due to the global pandemic causing passenger traffic levels to fall to historic lows. Though as of August 2020, there has been an uptick in traffic, many airlines are still operating fleets at a fraction of what they were in 2019, and the immediate future of passenger travel levels is still unknown. Given the age of the 737-700 family, the type is likely to see early retirements and an increase in parked aircraft as operators readdress their fleet structures.

However, the 737-700 has a few advantages that may benefit the aircraft type. First, due to its lower seating capacity, the aircraft is able to achieve higher load factors than the 737-800 and -900 in the current environment. Second, the MAX groundings and unknown re-entry to service, which continues to see delays and setbacks, should limit the additional capacity airlines are taking on in 2020. Finally, the freight market has seen an uptick in demand and the existence of a freighter conversion program for the 737-700 may help absorb some of the secondary market aircraft.

Though the 737-700 as a freighter is not as economical to operate as a 737-800, the aircraft does offer a boost in cargo capacity compared to the current 737 Classic freighters. Considering Boeing 737-300 and 737-400 aircraft have historically been successfully converted to freighters, the 737-700 has an opportunity to replace those type in the near to medium term. Currently, there are two conversion programs available: Israel Aerospace Industries launched the 737-700BDSF passenger-to-freighter conversion in 2015, with the first delivery to Alaska Air Cargo in 2017; and Pemco World Air Services created their Boeing 737-700F passenger-to-freighter FlexCombis conversion program in April 2017 and a full-freighter modification program in 2019.

The long-term outlook will be shaped by airlines fleet restructings through the pandemic-induced downturn and the presumed success of the 737 MAX. Though Southwest has not officially announced accelerating retirements, any major changes to their fleet plans could have a significant impact on 737-700 residual values. With regards to the MAX, while not a true clean-sheet replacement, the modified variant represents a break in production, and the last 737-700s manufactured will suffer the most from a value perspective. However, no technical obsolesence is expected in the near term as a result of the 737 MAX entering service. Considering, the type is the direct replacement for the most popular of the 737 Classics, the 737-300, the current operators may provide a replacement opportunity for the next stage of the value cycle for the 737-700.

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## 737-800

## **OVERVIEW**

The 737-800 is the best-selling version of the 737NG family of aircraft, which also includes the 737-600, 737-700, 737-900, and 737-900ER. The 737-800 was built as a replacement for the 737-400 and is a stretched version of the 737-700. The aircraft entered service with Hapag-Lloyd Flug (TUIfly) in 1998 and has been a commercial success for Boeing, selling nearly 5,000 units. Even with the launch of the 737-800's replacement, the 737 MAX 8, demand for the 737-800 remains strong. With the grounding of the MAX in March 2019, demand for the 737-800 has become even stronger as airlines are using the current generation aircraft to fill the capacity shortfall left by the MAX. After over 20 years in production, the backlog for the 737-800 has fallen to two as of July 2020. Many carriers in the U.S. purchased the aircraft to replace the Boeing 727-200, as well as the MD-80 and MD-90. The 737-800 operates with sole-source CFM56-7B engines and standard blended winglets, but customers also have the option of purchasing "Split-Scimitar" winglets, which further increase fuel efficiency.

## **Positives**

- + Most popular member of the highly-successful 737NG family.
- Large operator base is geographically diverse allowing for easier remarketing.
- + Well received by various operator types.
- + Sole-sourced engines ease remarketing to secondary operators.
- + Ongoing grounding of the 737 MAX alongside pick-up in conversion demand helped hold up values pre-COVID and may continue to aide values in the near term.
- + Since the COVID-19 initial groundings, a larger share of 737-800s have been put back into service than its competitor aircraft; 18.3% of 737-800s have not flown in the last 30 days compared to 26.2% of A320-200s.

#### Neutral

- o Based on demand for conversions of its predecessor, the 737-400, the 737-800 is likely to become a successful converted freighter.
- O The aircraft has become a popular choice for passenger aircraft used to fly cargo-only flights during the COVID-19 era, with multiple carriers opting to remove seats for this purpose.

#### Negatives

The 737 MAX recently completed its first round of re-certification flights. Upon its return to service, the 737 MAX will likely negatively impact 737-800 medium to long-term values.

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## **FLEET STATUS**

As of July 2020, there are currently 3,861 active 737-800 aircraft in service with 186 operators. Since the start of the 737-800's production run, Boeing has received 4,991 orders for the 737-800, making the type the most popular aircraft variant in the world. While the A320-200 comes close to matching the 737-800's popularity with 4,770 orders, the A320-200 started production a decade before the 737-800 was launched.

Net Orders	4,991
Backlog	2
Delivered	4,989
Destroyed/Retired	34
Not in Service/Long-Term Storage	154
Temporarily Parked	913
Converted to Freighter	27
Active Passenger Aircraft	3,861
Number of Active Operators	186
Average Fleet Age (Yrs)	9.13

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- On July 1, Boeing and the FAA completed three days' worth of certification test flights for the Boeing MAX and in the coming weeks will be reviewing the fixes that Boeing made, potentially concluding the 737-800's successors' grounding.
- As of July 2020, Brazil's GOL has returned 11 dry-leased 737-800s to their lessors, with plans to return seven more this year and a further 30 in 2021 and 2022 as part of its fleet reduction plan. Aeromexico also announced plans to return five of its 26 leased 737-800s. (ch-aviation)
- On April 2, 2020, the FAA awarded Israel Aerospace Industries (IAI) with a STC for its 737-800BDSF freighter conversion program. IAI has become the third company to certify a 737-800 conversion program, after Boeing (737-800BCF) and Aeronautical Engineers (AEI) (737-800SF), respectively. (Cargofacts)
- → In March 2020, in response to the drop in passenger demand due to the outbreak of COVID-19, American Airlines announced that it would be accelerating retirements of 76 737-800 aircraft that it acquired between 1999 and 2001. (Reuters)
- → In September 2019, the FAA required operators of 737NGs that have logged between 22,600 to 29,999 cycles to conduct inspections due to structural cracks found on a number of high utilization aircraft. (reuters.com)

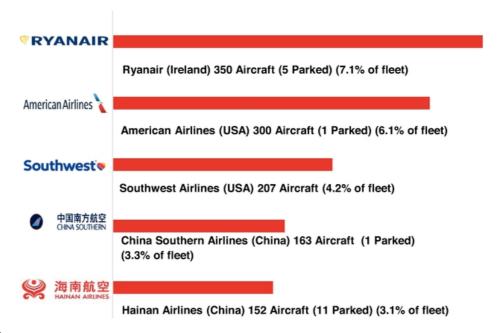
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## **FLEET DEMOGRAPHICS**

Ryanair is the largest operator of the 737-800 with 350 aircraft, or 7.1% of the in-service fleet. The fact that the largest operator holds such a small percentage of the total fleet is a good indication that the aircraft has a highly diverse operator base. The 737-800 is a popular aircraft with both low-cost and network carriers and can be used on domestic and short-haul international flights. The aircraft typically seats 162 passengers but can carry up to 189 passengers in a single-class configuration. The 737-800 is also approved for 180-minute ETOPS by the Federal Aviation Administration (FAA), allowing for flexibility on which routes operators can use the aircraft. North American carriers have taken advantage of the 737-800's ETOPS certification by flying the aircraft from the West Coast of the U.S. to Hawaii. These routes previously were served by large widebody aircraft, but the 737-800 has allowed operators to decrease capacity and boost load factors on the routes.

## Five Largest 737-800 Operators



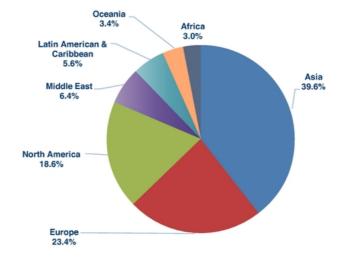
Source: mba STAR Fleet, July 2020

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#### **Current Fleet by Region**

With two of the top five carriers based in China, Asia is currently home to the largest fleet of 737-800s, with 39.6% of the total fleet. The aircraft is popular with low-cost carriers (LCCs) and legacy carriers in Asia as well as in the rest of the world. As airlines restructure their fleets and the MAX reenters service, the breakdown of aircraft by region is expected to change over the next few years.



Source: mba STAR Fleet, July 2020

## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are fifteen 737-800 aircraft currently available for sale or lease, representing approximately 0.31% of the current fleet. Three are available for long-term lease only, two are available for ACMI only, two are available for sale only, and eight are available for sale or lease. However, another 22 are listed as becoming available in the next year. Availability of the 737-800 will likely continue to trend upwards due to effects of COVID-19 as more operators are looking to reduce their fleet sizes or face bankruptcy.

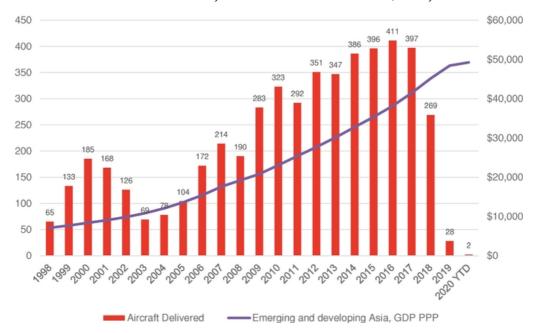


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## **DELIVERIES BY YEAR**

Like other comparable narrowbody aircraft, the 737-800 experienced a boom in demand during the first half of the 2010s as operators looked to increase load factors on routes previously served by twin-aisle aircraft. The emergence of LCCs in middle to low-income countries, such as Lion Air in Indonesia, and the steady development of regional airlines in China also contributed to the aircraft segment's rapid growth. Growth in the Purchasing Power Parity of GDP per Capita in developing and emerging Asian economies is strongly correlated to growth in the 737-800 order book. Despite the introduction of the 737 MAX, mba initially saw solid demand for the 737-800 in 2017, compared to how A320ceo deliveries fell off after the introduction of the A320neo. In 2018, the 737-800 deliveries dramatically declined to levels not seen since 2009, showing the overall impact of the introduction the 737 MAX. There have not been any additional orders since the start of 2020, and only two deliveries remain in the backlog.



Source: mba STAR Fleet, July 2020

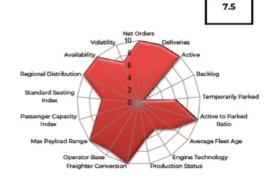
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#### **AIRCRAFT RANKING**

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The 737-800 previously held the highest score of all aircraft evaluated by mba; however, the A320neo score surpassed the –800's score in early 2019. The aircraft benefits from its popularity, as it scores high marks for net orders, deliveries, and total active aircraft. Boeing provides a freighter-conversion option, which will help extend the life of the aircraft and offer additional secondary market opportunities.



737-800

Score:

A320-200	6.7	A320neo	8.3
737 MAX 9	5.7	737 MAX 8	7.6

## OUTLOOK

The short to mid-term outlook for the 737-800 is neutral. The aircraft is well positioned in terms of passenger capacity vis-à-vis the recent demand in the narrowbody sector. Its successor, the 737 MAX 8, is not a true clean-sheet design but will offer a 15.0% fuel-burn improvement and lower emissions. However, the MAX grounding in March 2019 led to a significant increase in demand for the 737NG, especially the 737-800. While the length of the grounding still remains unknown, the tight market pushed the Market Values up even higher during the latter half of 2019 and into 2020 before COVID-19.

Now in the era of COVID-19, a number of aircraft remain in short-term storage until passenger traffic rebounds. mba anticipates most airlines will hold onto younger 737-800s, limiting the secondary market to mainly aircraft coming out of bankruptcy, mid-life aircraft coming off their leases, and end-of-life aircraft nearing retirement. Though the immediate outlook for Market Values is uncertain, in past down turns, staple aircraft like the 737-800 have performed well, with Market Values taking a minimum hit and rebounding quicker than other types. While it remains to be seen how values will be impacted over the next year, mba expects Market Value impacts across all vintages with little to no long-term value impacts for the type. The MAX timing for re-entry into service, which continues to be delayed, should in thoery help the 737-800 values remain more stable than the A320-200.

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Freighter-conversion programs from IAI, AEI, and Boeing may also help buoy 737-800 values in the medium to long term. Due to the effects of the COVID-19 pandemic, certain carriers have been speeding up the retirements of their 737NG aircraft, allowing for more feedstock to hit the market. Values for the 737NG have the potential to fall to a level where freighter conversion makes economic sense and the diminishing feedstock of 737-400 aircraft viable for freighter conversion may make the business case for converting the 737-800 stronger in the long run. The first 737-800BCF was delivered to GECAS in April 2018, ahead of the A321P2F, which is due be delivered in October 2020. The 737-800BCF currently accommodates 11 full-size pallets compared to ten on the A320P2F and 14 on the A321P2F. It remains to be seen whether the 737-800 will achieve the same success as previous Boeing Converted Freighters while facing new competition from Airbus products.

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## 737-900ER

## **OVERVIEW**

The Boeing 737-900 entered service in 2001 with Alaska Airlines and ended production four years later in 2005 due to a lack of orders. In 2007, the 737-900ER was introduced in place of the 737-900 and entered service with Indonesian Low Cost Carrier (LCC) Lion Air as the newest member of the 737NG family. The 737-900ER features an additional pair of exit doors as well as a flat, rear pressure bulkhead to increase interior accommodation to 180 passengers in a typical two-class configuration, or up to 215 passengers in a single class. The aircraft has the same external dimensions as the 737-900 but features an increased MTOW of 187,700 lbs, strengthened landing gear and wing structures, up to two optional auxiliary fuel tanks, and winglets. These improvements allow for a range of 3,265 NM, carrying 180 passengers with the installation of the two auxiliary fuel tanks and winglets. In 2013, Boeing further announced improvements to the aircraft with the introduction of optional split-scimitar winglets for new delivery aircraft, or as a retrofitable option for existing fleets. The split scimitars, which are standard on MAX aircraft, are able to provide around an additional 1.8% fuel-burn benefit to operators.

#### **Positives**

- + Sole-sourced engines ease remarketing to secondary operators.
- + Commonality with other 737NG variants may increase potential operator base when remarketing.
- + New aircraft delivery delays and cancellations as well as the ongoing 737 MAX fleet grounding has helped keep aircraft in service pre-COVID-19.
- + All aircraft that have come off initial leases, mainly from Lion Air, have been placed quickly in the secondary market.

#### Negatives

- Aircraft production completed in 2019 with no additional orders as operator's order books favor the 737 MAX and A321neo.
- Five operators fly over 87.0% of the 737-900ER fleet, which may cause market softness if one operator retires their fleet en masse.
- Program was not as popular as its competitor, the A321-200.
- Limited regional distribution due to niche purpose of the aircraft may limit secondary market if the aircraft comes to market en masse.

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## **FLEET STATUS**

As of July 2020, there are currently 321 active 737-900ER aircraft in service with 23 operators. An additional 179 aircraft are stored temporarily due to effects of COVID-19 on air traffic demand. Since the beginning of the 737-900ER's production run, Boeing has received 505 orders, though the aircraft has not proven as popular as its main competitor, the A321-200, which has received 1,790 orders since launch.

Net Orders	505
Backlog	0
Delivered	505
Destroyed/Retired	0
Not in Service/Long-term Storage	5
Temporarily Parked Aircraft	179
Active Aircraft	321
Number of Operators	23
Average Fleet Age (Yrs)	6.37

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- In February 2020, Ukrainian operator SkyUp Airlines took delivery of its third 737-900ER on lease from GECAS, bringing their total fleet to 11 Boeing 737NG aircraft. (SkyUp Airlines)
- On March 13, 2019, the FAA ordered the grounding of all Boeing 737 MAX planes following the deadly Ethiopian Airlines crash that killed 157 people and the Lion Air crash in October 2018, killing 189 people. The MAX aircraft are currently undergoing testing and the return to service date remains unknown as of October 2019. The grounding of the aircraft has placed additional demand pressure on the current 737NG fleet, bringing up Market Values for the types.

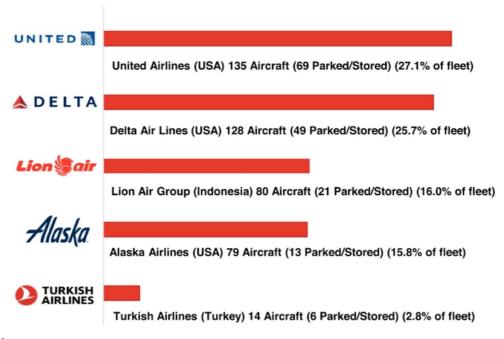
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## **FLEET DEMOGRAPHICS**

United Airlines is the largest operator of the 737-900ER with 135 total aircraft, or 27.1% of the active and temporarily stored fleet, though many of these aircraft were inherited from Continental Airlines after the merger. The second largest operator is Delta Air Lines with 128 total aircraft and 25.7% of the fleet. The top five operators of the 737-900ER command over 87.0% of all of the fleet, which may cause a problem when trying to place a 737-900ER in the secondary market. However, as the 737-900ER serves a niche purpose for operators, they are more likely to hold on to the aircraft for a long period of time. Aside from the Lion Air Group, the main operators of the type tend to utilize aircraft for the majority of their economic life, which may benefit residual values for the type. American operators use the 737-900ER on transcontinental routes that demand high frequency, which were previously served by larger widebody aircraft. The 737-900ER's range and MTOW capability allow operators to perform longer flights with increased load-factors.

#### Five Largest 737-900ER Operators



Source: mba STAR Fleet, July 2020

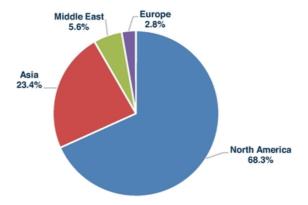
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#### **Current Fleet by Region**

North American carriers operate 68.3% of all 737-900ERs, as the aircraft is well suited for transcontinental routes and flights from the West Coast of the U.S. to Hawaii. Asia is home to 23.4% of 737-900ERs, mostly consisting of aircraft operated by Lion Air Group airlines. The aircraft is not popular in other regions of the world, with the Middle East being home to 5.5% of the fleet and Europe being home to only 3.0% of the fleet. There are no 737-900ER aircraft operating in Africa, Latin America, or Oceania, where the A321-200 is the preferred large narrowbody aircraft.



Source: mba STAR Fleet, July 2020

## AIRCRAFT AVAILABILITY

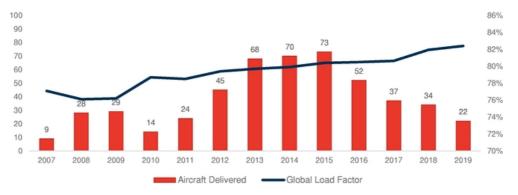
According to Airfax, as of August 2020, after a long period of no 737-900ERs available, two have recently entered the market for sale or lease immediately, and one more will become available in December 2020. All three are 2007 models, the oldest of the type. The main competitor to the 737-900ER, the A321-200, has seven aircraft currently available on the secondary market. The number of A321s available in the market is a result of having a larger in-service fleet, as well as global fleet restructuring due to effects of the ongoing global pandemic. The 737-900ER's lack of availability reflects the young average fleet age as well as operators keeping aircraft for a majority of their economic life. Though no airlines have yet publicized intentions to reduce their 737-900ER fleets, several major U.S. carriers who operate the 737-900ER are in the process of optimizing their fleets due to COVID-19; therefore, there is a possibility in the near to medium term that additional 737-900ERs will enter the secondary market.

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## **DELIVERIES BY YEAR**

Similar to the A321-200, the 737-900ER increased in popularity in the mid-2010s due to network carriers up-gauging their fleets as a reaction to increased competition on routes. Operators also looked to increase load factors on routes previously served by larger twin-aisle aircraft. The correlation between load factors and increased 737-900ER orders can be seen in the graph below, though the correlation diverted when the MAX aircraft began to enter service in 2017. The 737-900ER completed deliveries in 2019 and currently has no additional orders.

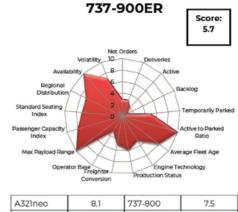


Source: mba STAR Fleet, July 2020

## **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

The 737-900ER's score currently lags behind its main competitors due to a low number of orders and deliveries, no backlog, and a very small operator base. The aircraft scores high marks for the fleet's young age, lack of parked aircraft, and its max payload range performance. Given the out-of-production status, the score of the 737-900ER is expected to decline in the medium to long term.



A321-200 737 MAX 9 5.7 6.8

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#### **OUTLOOK**

mba has a neutral short to mid-term outlook for the 737-900ER as the trend in upgauging narrowbody fleets has helped maintain demand for the type and the few aircraft that have entered the secondary market in the past have been placed quickly. However, the A321-200 is a more successful platform and the 737-900ER's backlog is currently non-existent. As the 757-200 is phased out of current operators' fleets, the 737-900ER could potentially fill the role of some of these aircraft, though the aircraft lacks the overall range, performance, and seating capabilities of the 757. The long-term outlook will be shaped by the future success of the 737 MAX 9, 737 MAX 10, and the A321neo programs. While not a true clean-sheet replacement, the modified variant represents a break in production and the last 737-900ER manufactured will suffer the most from a value perspective. In addition, due to the young age and incapability to carry LD3 containers in the belly hold, the 737-900ER is not as good a canditate for freighter conversions, unlike the A321ceo. However, the aircraft benefits from being held by stable U.S. carriers, who tend to hold onto fleets for the majority of their economic lives and should help keep a large number of aircraft out the secondary market.

As of July 2020, the ongoing global pandemic continues to cause distruptions to airlines globally and the aircraft trading market is just starting to come back to life, though most transactions are occurring to increase airline liquidity in the short-term. Historically, out-of-production narrowbody aircraft have experienced moderate Market Value volatility compared to new technology current production narrowbodies. However, narrowbody aircraft tend to recover more quickly than widebody, regional, or turboprop aircraft types. The immediate outlook for Market Values for the 737-900ER is uncertain; though due to the niche role the aircraft plays for its largest operators and the relative youth of the type, the 737-900ER could see relatively minimal Market Value impacts. The actual short-term market impact depends almost entirely on its major carriers, especially Lion Air, holding onto the type through fleet restructuring as airlines begin to recover from effects of the pandemic.

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## 757-200

## **OVERVIEW**

The 757-200 is a twin-engine narrowbody aircraft launched in 1978. The aircraft was envisioned to be the successor to the 727-200 on shorter routes and was delivered to launch customer Eastern Airlines in 1982. Early 757-200s were delivered with a MTOW of 220,000 lbs, which was later increased to 255,000 lbs, giving the aircraft greater capacity, range, and the ability to excel on thin, long-haul routes with no direct competing aircraft. The 757-200 was launched with the Rolls-Royce RB211-535, making it Boeing's first airliner to launch with non-U.S.-made engines. The Pratt & Whitney (PW) PW2037 and PW2040 engines were later offered as an option for the aircraft. Regulators granted approval to fly the aircraft for extended operations over water (ETOPS) in 1986, and it became a popular option for shorter intercontinental routes. As the 757-200 aged, the aircraft found a second chapter as a prime candidate for freighter conversion programs. Today, there are approximately 287 converted aircraft with three conversion shops: Singapore Technologies Aerospace Ltd., Precision Conversions, and Pemco.

#### **Positives**

- + Extremely capable aircraft, which has no direct successor.
- + Successful freighter conversion programs have extended the life of the airframe.

#### Neutral

o Ideally suited for shorter trans-Atlantic routes.

#### Negatives

- Aircraft is nearing the end of its life, with large number of retirements expected in the near future.
- The similarly-capable though smaller A321XLR seeks to replace the 757.
- A large number of aircraft are parked as the aircraft have reached the end of economic life.

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## **FLEET STATUS**

As of July 2020, there are only 84 active 757-200 aircraft in service, as 236 757-200s have been temporarily parked in response to the COVID-19 pandemic. Boeing received 913 757-200 orders for commercial/passenger operators during the aircraft's production run and out of the 320 active/temporarily parked fleet, there are currently 40 operators. Production of the 757-200 ended in 2005, and the fleet average age is around the usual retirement age. Popular freighter conversion programs helped extend the life of the aircraft with 287 passenger 757-200s converted to freighter or VIP configurations.

Net Orders	913
Backlog	0
Delivered	913
Destroyed/Retired	180
Temporarily Parked	236
Long-Term Storage	126
Converted to Freighter	287
Active Aircraft	84
Number of Operators	40
Average Fleet Age (Yrs)	25.7

Source: mba STAR Fleet, July 2020

# NOTABLE DEVELOPMENTS

- In the wake of the COVID-19 virus, in May 2020, American Airlines announced that it would be immediately retiring its fleet of 34 757-200 aircraft. The aircraft, which are at an average age of 27 years old, will be leaving the fleet a year earlier than planned and are now due to completely retire by September 2021. (Business Insider)
- → In December 2019, United Airlines placed an order for 50 Airbus A321neo XLR aircraft with deliveries anticipated to begin in 2024. The order is seen as a replacement aircraft for the operator's current 757 fleet. (Airline Economics)

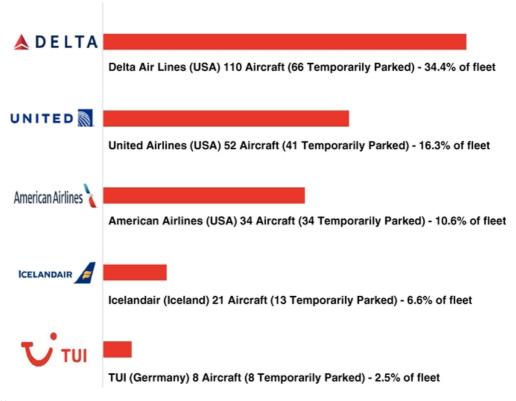
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# FLEET DEMOGRAPHICS

Delta Air Lines (Delta) is the largest operator of the 757-200 with 110 aircraft, including 66 temporarily parked aircraft, making up 34.4% of the total in-service fleet. The next four largest operators own a combined 35.9% of the in-service fleet, resulting in nearly two-thirds of the fleet being operated by only five carriers. Though a large percentage of aircraft are operated by a small operator base, most aircraft exiting these fleets will be well past their retirement age and likely will not be remarketed. Even so, with the majority of the top operators retiring their 757s this year or in the years to come, values for the 757 will continue to soften, even as some aircraft are able to find second lives as freighter candidates.

Five Largest 757-200 Operators (Active and Parked)



Source: mba STAR Fleet, July 2020

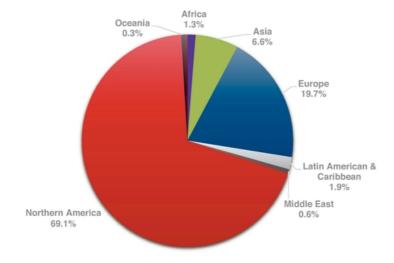
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## **Current Fleet by Region**

North America is home to the vast majority of 757-200s, with 69.1% of the fleet being on the continent. The 757-200 is popular with North American carriers as it is well suited for trans-Atlantic and trans-continental flights. With U.S. operators retiring their fleets in the near term, the geographic distribution of the fleet is expected to change dramatically.



Source: mba STAR Fleet, July 2020

## **Current Fleet by Engine Type**

There are two engine options offered with the 757-200: the RB211 and the PW2000. In previous years, there was an even split between the two engine types as they both offered relatively similar performance. However, as the aircraft ages, there has been a growing percentage of Rolls-Royce engines on the active fleet. Buyers in the secondary market are showing preference for the RB211 due to its longer intervals between performance restorations compared to the PW2000.



Source: mba STAR Fleet, July 2020

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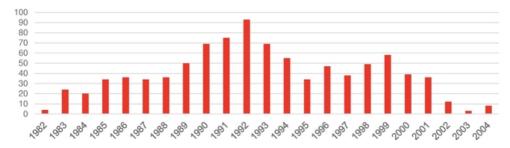
## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are five 757-200s publically marketed as available. Two are available for sale without Rolls-Royce engines, two are available for sale or lease in all-first-class configuration, and the fifth one for sale is a quick-change (QC) pax-freighter aircraft. Many of the passenger 757-200s that have come onto the market in recent years were purchased and converted to freighters. Demand for the 757 freighter had been high pre-COVID-19, and freighter conversion programs were operating at full capacity to meet the increased demand. Though a number of aircraft are parked, many are well beyond 25 years old, having exceeded the typical 24-year economic life of narrowbody aircraft.



## **DELIVERIES BY YEAR**

Although the 757-200 program was launched in the early 1980s, most 757-200 aircraft were delivered in the early 1990s. Deliveries declined through the end of the aircraft's production run, as operators moved towards newer technology aircraft. Though the 757 saw a brief resurgence in the late 1990s/early 2000s, after the events of 9/11, the aircraft fell out of favor as airlines looked to 'right size' fleets.



Source: mba STAR Fleet

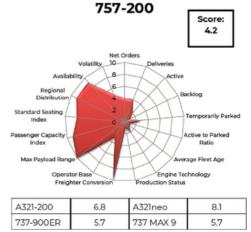
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#### **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

The 757-200 score has slowly decreased over the past several years due to an increased number of aircraft being parked and U.S. operators continuing to retire their 757-200 fleets. However, the aircraft benefits from its performance figures, which has kept the aircraft in service longer than originally anticipated. The successful freighter conversion program has also allowed owners of the 757-200 to increase the life of their airframes and engines.



## **OUTLOOK**

The 757-200 passenger variant has seen a decline in value in recent years partly due to the rapid retirements of some North American carriers. The freighter variants have been more stable as they are the mainstay of the large U.S. cargo carriers (i.e. FedEx, United Parcel Service, and DHL) and offer unique capacity and performance advantage to operators. Market availability for passenger aircraft decreased due to increased freighter conversion activity, which helped to steady the market value to an extent before COVID-19 led to a number of airlines retiring or parking their aircraft. mba expects that as further aircraft are phased out and more operators begin replacing the type with the A321XLR, the value will continue to decline as more aircraft enter the secondary market or reach their retirement age.

As of July 2020, the COVID-19 pandemic continues to cause significant uncertainty for the future of passenger traffic, with airlines reassessing their fleet strategy and future capacity According to mba's STAR Fleet, as of July 2020, in addition to the 28.3% of the 757-200 fleet in long-term storage, 53.0% of the 757-200 has been temporarily parked. According to OAG, these flights have been exclusively intra-continental. Historically during downturns, older aircraft tend to have the highest market value impacts and take the longest time to recover. Considering the age of the 757 fleets, values are likely to remain soft in the near term with part-out values providing some stabilization to support the inservice freighter aircraft.

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## 757-300

## **OVERVIEW**

The Boeing 757-300 is a stretched variant of the basic 757-200. The -300 program was launched by Boeing in September 1996 and the aircraft entered service in March 1999 with launch customer Condor Flugdienst ("Condor"). One of the largest single-aisle twinjet ever manufactured, the 757-300 has a fuselage measuring 54.43 m (178 ft. 7 in.), longer than the 757-200 by 7.11 m (23 ft. 4 in.). The stretched fuselage allows for a 20.0% increase in seating over the 757-200, up to a maximum of 295 passengers.

Overall, the 757-300 had disappointing sales figures with only 55 aircraft being produced. Due to poor sales, the aircraft was only in production for five years, from 1999-2004. All 55 aircraft manufactured are still in service and it is unlikely a 757-300 will enter the secondary market before reaching the age of retirement. The 757-300 is powered by both RB211 and PW2000 engines, the same engine types powering the 757-200. This combined with a high degree of parts commonality between the two aircraft should help values in the part-out market to help support the 757 freighter market.

#### **Positives**

- + Extremely capable aircraft, which has no direct successor.
- + High degree of parts commonality with the 757-200.

## Negatives

- Small number of current operators.
- No freighter conversion program to extend the life of the aircraft, like the 757-200.
- Earlier build aircraft are reaching the end of their economic lives.

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## **FLEET STATUS**

As of July 2020 2020, there are currently 39 active 757-300 aircraft in service plus 16 temporarily parked aircraft. The average age of the aircraft is just under 19 years old. Though the 757-300 fleet is younger than the -200 fleet, which has an average age of 26 years, the 757-300 entered service 17 years after the 757-200 and only achieved 6.0% of the orders the 757-200 was able to generate. There are only five operators that currently fly the 757-300.

Net Orders	55
Backlog	0
Delivered	55
Destroyed/Retired	0
Temporarily Parked	16
Not in Service/Long-Term Storage	0
Active Aircraft	39
Number of Operators	5
Average Fleet Age (Yrs)	18.69

Source: mba STAR Fleet , July 2020

## **NOTABLE DEVELOPMENTS**

- In May 2020, Delta Air Lines announced its plans to potentially remove 11 757-200s and 16 767- 400ERs from service, as the aircraft were moved into long-term storage. There has not yet been any announcement regarding plans for their fleet of 21 757-300 aircraft. (Aeronatics)
- → In January 2020, Azur Air Ukraine leased Arkia Israeli Airlines' last 757-300, a January 2000-build, which Arkia had retired in October 2019.
- In April 2019, United announced its plans to retire its aging 757 and 767 fleets starting in mid-2020, forecasting a need for 34 new mid-market aircraft. They also disclosed that the forthcoming A321XLR, slated to enter service in 2024, is on its list of potential replacements. (FlightGlobal)

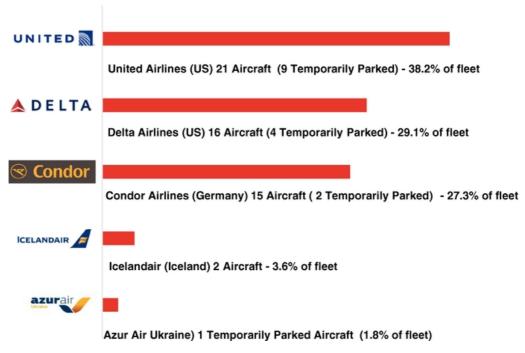
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## **FLEET DEMOGRAPHICS**

The largest operator of the 757-300 is United, which currently operates 38.2% of all 757-300s produced. United inherited its entire 757-300 fleet from Continental during the merger of the two airlines. The 757- 300 was originally marketed to charter and package holiday carriers, but it was full-service carriers in the U.S. that most widely adopted the aircraft. United and Delta Air Lines (Delta), the top two operators of the 757-300, use the aircraft for trans-Atlantic and trans-continental flights. Both operators value the aircraft for allowing them to fly to and between thin routes and smaller market destinations that would be unprofitable to service with widebody aircraft and which other narrowbodies do have the range capability. There is currently no direct replacement for the 757 family of aircraft, and with current 737 MAX issues, it may be some time before Boeing can revisit its Middle of Market (MoM)/Mid-Size Market (MMA) design plans. The newest variant of the A321 family, the A321neoXLR, seems to be the preferred replacement for the 757 family; although, it is unable seat as many passengers in a single-class configuration as the 757-300.

#### **Current 757-300 Operators**



Source: mba STAR Fleet, July 2020

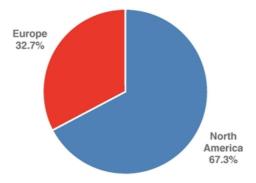
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## **Current Fleet by Region**

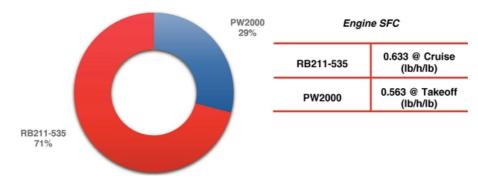
On account of United and Delta, 67.3% of all 757-300s are located in the U.S. while Icelandair, Condor, and Azur Air Ukraine make up Europe's 32.7% market share.



Source: mba STAR Fleet July 2020

#### **Current Fleet by Engine Type**

There were two engine options offered with the 757-300; the Rolls Royce RB211 and the Pratt & Whitney PW2000. Buyers for the 757-300 showed preference for the RB211, as it has a longer interval between performance restorations than the PW2000 and had the option of Rolls-Royce's Total Care program.



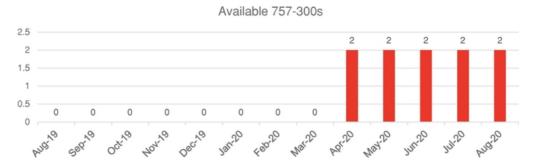
Source: mba STAR Fleet, July 2020

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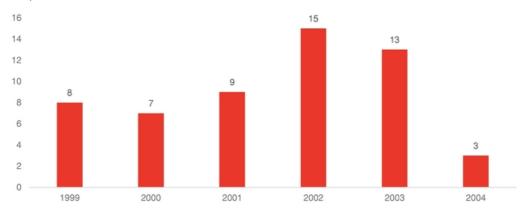
## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are two 757-300s available for sale or lease, both 2001-build sister ships from Condor Air. These aircraft became available in the secondary market shortly after the European Union (EU) granted a second government-backed loan of US\$600 million in order to help the airline stay afloat during the COVID-19 pandemic. Though no airlines have yet publicized intentions to reduce their 757-300 fleets, several major carriers who operate the 757-300 are in the process of optimizing their fleets due to COVID-19; therefore, there is a possibility in the near to medium term that additional 757- 300s will enter the secondary market.



## **DELIVERIES BY YEAR**

The 757-300 was only produced for six years. The highest number of deliveries were made in 2002, when 15 aircraft were delivered in total. Only three aircraft were delivered in 2004, the aircraft's last year of production.



Source: mba STAR Fleet, January 2020

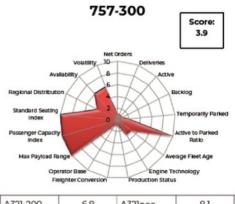
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## **AIRCRAFT RANKING**

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The 757-300 has a low score when compared to other similar aircraft. This is mainly due to the aircraft's small number of operators and total deliveries, as well as the fact that the aircraft does not have a freighter conversion program. The aircraft scores high points for its operational characteristics, making it highly valuable to its current operators, as well as the fact that all aircraft delivered are still in service. mba expects the ranking to gradually decline as the aircraft ages and more are retired.



A321-200	6.8	A321neo	8.1
737-900ER	5.7	757-200	4.2

## **OUTLOOK**

As the effects of the COVID-19 pandemic extend into September 2020, the aviation industry has continued to be impacted by depletion of international traffic. Historically, during downturns, older aircraft tend to have the highest Market Value impacts. Delta and United both announced in 1H 2020 that it would speed up the retirement of certain older aircraft during the pandemic, though there has been no mention of the 757s at this time. If these 757-300 aircraft come out the airline's fleets due to early retirements or bankruptcies, values will rapidly soften, as the aircraft would not be able to find new life as a converted freighter. The actual market impact depends almost entirely on its major carriers, especially United Airlines, holding onto the type through fleet restructuring as airlines begin to recover from effects of the pandemic.

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## 767-300ER

## **OVERVIEW**

The 767-300ER was launched in 1985 as an Extended Range (ER) and higher-gross-weight variant option of the 767-300 and was ready to enter service in 1986. It was another two years until the aircraft received its first order, when American Airlines ordered 15 767-300ERs, with deliveries starting the same year. Orders soon came in quickly, with the type proving popular with airlines around the world throughout the 1990s. The long-range aircraft was able to provide operators a twin-engine trans-Atlantic option, with the Federal Aviation Administration (FAA) certifying the aircraft as ETOPs capable up to 120 minutes. In 2008, Aviation Partners began retrofitting 767-300ERs with winglets approximately 11 feet in height, which offer a 6.5% fuel-burn benefit. At a time when fuel prices were rising dramatically, a large number of the younger 767-300ER fleet were retrofitted. After a 27-year production run, the last 767-300ER was delivered to Air Astana in 2014, though the production line remains open, as the 767-300F and the military tanker variant are still in production.

#### **Positives**

- + Freighter conversion options have provided a secondary market for the type after passenger operation.
- Retrofitted winglets provide better operating costs and higher residuals on the secondary market.

#### Neutral

O The dominance of two engine types, the General Electric (GE) CF6-80C2 and Pratt & Whitney (PW) PW4000 series, which powers the 767, raises concern for values over the few RB211- powered variants.

#### Negatives

- The type has reached the end of its production run, and continued deliveries of the 787 will put downward pressure on values.
- With multiple airlines downsizing their 767-300ER fleets or getting out of the type altogether, several aircraft are expected in enter the market in the short-term.

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#### **FLEET STATUS**

As of July 2020, there were 351 in service, including active and temporarily parked, 767-300ER passenger- configured aircraft with 64 operators. A total of 262 aircraft are currently parked, consisting of 72 aircraft in long-term storage as well as 190 aircraft temporarily parked due to the ongoing global pandemic. While a few of the parked aircraft are anticipated to undergo freighter conversion or are transitioning between operators, many may end up being retired or parted out. With the introduction of new technology twin- engine widebodies — the 787 and the A350 — the 767-300ER is being phased out of many mainline operator fleets. However, increased demand from e-commerce has led the charge for 767-sized freighters capable of operating economically on both long- and short-haul routes, aiding the values of freighter candidates and part-out values to support the freighter fleet. Currently 110 aircraft have been converted to freighters, or nearly 19.0% of the original fleet, showing the popularity of the type as a converted freighter.

Net Orders	583
Backlog	0
Delivered	583
Destroyed/Retired	50
Converted	110
Not in Service/Long-Term Storage	72
Temporarily Parked	190
Active Aircraft	161
Number of Active Operators	64
Average Fleet Age (Yrs) (Active + Stored)	21.72

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- 🕦 In June 2020, Air Canada retired its remaining five 767 aircraft from its fleet due to the ongoing coronavirus pandemic. (Air Canada)
- In May 2020, Air Canada Rouge announced the retirement of its 25 767-300ER aircraft. Rouge will halt all long-haul operations and focus on domestic narrowbody routes. (Airways Magazine)
- In April 2020, Austrian Airlines announced it would be halving its 767 fleet as part of its strategy to adjust to the current reduced demand. They will retain three 767-300ERs, which are all 1998-2000 builds, and dispose of the three built in 1991-92. (aviator.aero)
- → In March 2020, Delta Air Lines announced its plans to accelerate fleet retirement, including at least 34 of its 767s that have been parked since March and are 19-29 years of age. (Aviator.aero)

In March 2020, American Airlines announced that it would be speeding up the retirement of its fleet of 16 767-300ER aircraft. The aircraft will be retired by the end of May 2020, and 787 aircraft are scheduled to take their place. (Business Insider Singapore)

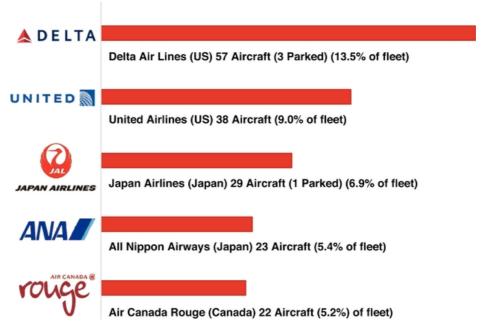
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## **FLEET DEMOGRAPHICS**

The top two operators of the 767-300ER are Delta Air Lines and United Airlines, operating 13.5% and 9.0% of the current active and parked fleet, respectfully. With no operator owning the majority of the fleet and with 64 total operators, the 767-300ER is well diversified among both major and secondary operators. Though the aircraft is not as fuel efficient as the new technology 787 or A350, in past times of low fuel prices, the low acquisition cost allowed the aircraft to maintain a place in mainline operator fleets. However, as the global pandemic continues, many carriers have chosen to retire the type. Notably, two of the largest operators of the type prior to COVID-19, American Airlines and Air Canada Rouge, with 25 and 22 aircraft, respectively, are exiting or have exited the type.

#### Five Largest 767-300ER Operators



Source: mba STAR Fleet, July 2020

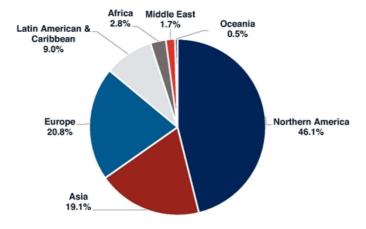
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## **Current Fleet by Region**

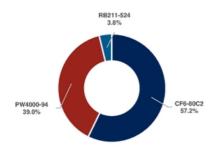
The 767-300ER is predominately found in North America, which hosts 46.1% of the fleet, and to a lesser extent in Europe, with nearly 20.8% of the fleet. During the height of the aircraft's popularity in the late 1990s and early 2000s, the 767-300ER was the predominant aircraft flying transatlantic flights. The aircraft was previously popular with North American airlines, though multiple airlines have been replacing the type with the 787 and A350. Though Asia is home to 19.1% of the 767-300ER fleet, carriers have shown a preference for the slightly younger competitor aircraft, the A330-300.



Source: mba STAR Fleet, July 2020

#### **Current Fleet by Engine Type**

The majority of the fleet is operated by the GE CF6-80C2, with 57.2% of the fleet. The CF6-80C2 offers longer intervals between shop visits than the PW4000-94"; however, it has a shorter time on wing than the Rolls-Royce RB211-524. Initial sales for the RB211-524 are said to have been negatively impacted by the weight of the engines compared to the GE-powered and PW-powered options.



Engine SFC		
CF6-80C2	0.344 (at takeoff (lb/h/lb)	
PW4000-94	0.329 (at takeoff) (lb/h/lb)	
RB211-524	0.633 (at cruise (lb/h/lb)	

Source: mba STAR Fleet, July 2020, Jane's Engines

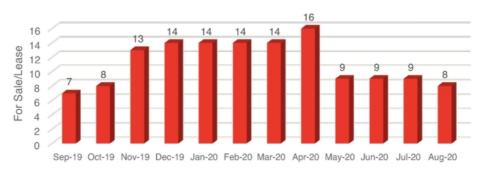
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## **AIRCRAFT AVAILABILITY**

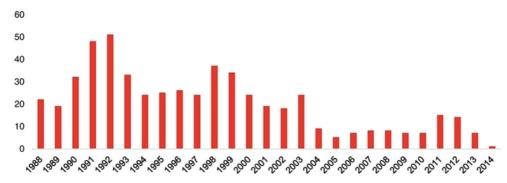
According to Airfax, as of August 2020, there are eight Boeing 767-300ER aircraft available for sale or lease. Three aircraft are available for sale or lease, four for sale only, and one for lease only. Prior to November 2019, availability for the type was in decline as more aircraft entered retirement or went straight into freighter conversion. The range in availability numbers throughout the year illustrates the ease of placing the aircraft in the secondary market whether on lease, for part out, or to freighter conversion prior to the global pandemic. Since the start of the global pandemic, availability has remained steady, though there is still demand for conversion candidates.

## 767-300ER Availability



## **DELIVERIES BY YEAR**

The 767-300ER boasts a long production run, though popularity for the type peaked in the early and late 1990s. Between 9/11 causing a downturn in aviation, the introduction of the 787, which is a clean-sheet replacement of the 767-300ER, and the performance improvements of the competitor aircraft, the Airbus A330, the aircraft order book slowly tapered off. While now out of production, the 767-300ER was a highly successful widebody aircraft for its time.



Source: mba STAR Fleet, July 2020

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#### **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web- based valuation service.

The 767-300ER has the lowest score compared to in-service competitors due to its out-of-production status, large number of parked aircraft, and aging fleet. However, the aircraft benefits from a large operator base and a successful freighter conversion program. The ranking for the type is likely to continue to decline as more aircraft are retired or converted to freighters and new-technology aircraft begin to phase out the older technology 767-300ER.



A330-200	6.3	787-8	7.0
A330-300	6.8	A330-900neo	5.9

## **OUTLOOK**

mba has a cautious outlook for the 767-300ER as several of its largest operators, including American Airlines, Air Canada, and Air Canada Rouge, exit the type all at once, even though demand for converted freighters has remained strong. mba anticipates for values to continue depreciating, though likely gradually in the short term. In recent years, values for the 767 family have softened as the aircraft ages and newer technology aircraft come to market, like the 787 and A350. Older 767-300ERs are prime candidates for freighter conversion; however, as the feedstock runs out and more aircraft come to the market, the values for the type will likely decline in the medium to long term, as is typical for older, out-of-production aircraft.

As travel bans have been put into place due to the COVID-19 pandemic, the aviation industry has experienced extreme disruptions, causing limited international traffic on several major routes. Though several 767s will be coming out of airlines' fleets in the immediate term due to early retirements, several aircraft will be able to find a new life as converted freighters and some will be able to achieve strong part out values to support the freighter fleet. mba anticipates values for the type will be soft in the short term and continue to soften in the medium and long term as more aircraft enter the secondary market.

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## 767-400ER

## **OVERVIEW**

The 767-400ER was launched in 1997 as an longer range and higher-gross-weight variant option of the 767-300ER, with the first example of the type delivered to Delta Air Lines ("Delta") in August 2000. The aircraft was Boeing's initial attempt to compete with Airbus' A330-200, which was first delivered in 1998. The 767-400ER stretched the fuselage of the 767-300 by 21 feet, came equipped with redesigned landing gear, gained an extended wing by way of raked wingtips, and designed with an updated 777 style interior. The aircraft was certified by the Federal Aviation Administration (FAA) as ETOPs capable up to 180 minutes, allowing operators to deploy the aircraft on trans-Atlantic routes. However, the 767-400ER did not fare well commercially and only two airlines ordered the aircraft: Delta (21 orders) and Continental Airlines ("Continental") (16 orders), which currently operates as United Airlines after the 2010 merger. Although there were two engine choices for the -400ER — the GE CF6-80 and the PW4000 — all aircraft delivered are powered by the CF6-80. After only a two-year production run, the last 767-400ER was delivered to Continental in May 2002.

## **Positives**

+ The aircraft's CF6-80 engines were in demand pre-COVID and will likely see demand pick up in the near to mid-term to support the current freighter fleet.

#### Negatives

- Out of production status and aging fleet with an average age of 19 years old.
- As there are only two operators of the type, the secondary market will be limited.
- Due to the COVID-19 pandemic, United moved all 16 of its 767-400ERs, or 43.0% of the total fleet, into long-term storage.

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## **FLEET STATUS**

As of July 2020, there were nine active 767-400ER aircraft flying with only one operator, Delta. An additional 12 aircraft have been temporarily parked in response to the COVID-19 pandemic, and the remaining 16 aircraft with United have been moved into long-term storage. The lack of active aircraft is a strong indicator values will likely soften in the near term as long haul traffic continues to see a slow recovery.

Net Orders	37
Backlog	0
Delivered	37
Destroyed/Retired	0
Temporarily Parked	12
Not in Service/Long-Term Storage	16
Active Aircraft	9
Number of Active Operators	1
Average Fleet Age (Yrs)	19.08

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- In March 2020, Delta Air Lines announced its plans to accelerate fleet retirement, including at least 34 of its 767s that have been parked since March and are 19-29 years of age. (Aviator.aero)
- In March 2020, United Airlines parked all 16 of their 767-400ERs in Roswell, New Mexico as air travel demand fell due to the COVID-19 pandemic. It is still unknown whether the airline will be permanently removing the aircraft from its fleet. (mba STAR Fleet)

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## **FLEET DEMOGRAPHICS**

The two operators of the 767-400ER are Delta and United, operating 56.8% and 43.2% of the fleet, respectfully. Though the aircraft is not as fuel efficient as new generation wide bodies such as the 787 or A350, in a time of low fuel prices, the low capital costs associated with the aircraft delayed the type's retirement. While both Delta and United invested in refurbishing the interiors of their 767-400ER fleets, initially indicating both operators would keep the aircraft in their fleets for the foreseeable future, due to COVID-19 most of the aircraft remain parked and may never return to service. With only Delta and United operating the type, the 767-400ER is solely found in North America.

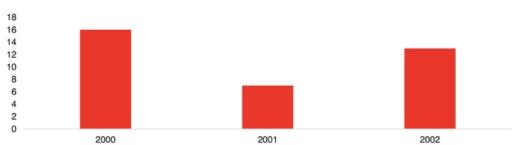
#### 767-400ER Operators



Source: mba STAR Fleet, January 2020

## **DELIVERIES BY YEAR**

The 767-400ER had a short production run. Between 9/11 causing a downturn in the aviation market, the introduction of the 787, which is a clean-sheet replacement of the 767-300ER, and with performance improvements to competitor aircraft, such as the Airbus A330-200, the aircraft's production quickly came to a halt.



Source: mba STAR Fleet

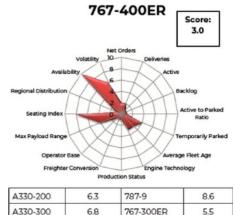
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#### **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

The 767-400ER has the lowest score compared to in-service competitors due to its out-of-production status, small operator base, aging fleet, and lack of a freighter conversion program. The ranking for the type is likely to continue to decline as the fleet continues to age.



## **OUTLOOK**

In recent years, values for the 767 family have softened as the aircraft ages and newer technology aircraft come to market, like the 787 and A350. Unlike older 767-300ERs, which are prime candidates for freighter conversion, the 767-400ER does not currently have a conversion program; therefore, values for the type are expected to see steeper depreciation in the medium to long term, as is typical for older, out-of- production aircraft.

In the near term, as travel bans have been put into place due to the COVID-19 pandemic, the aviation industry has experienced extreme disruptions, causing limited international traffic on several major routes. Historically, during downturns, older widebody aircraft tend to have the highest Market Value impacts as newer assets are typically preferred by operators due to their lower fuel and maintenance costs. United has recently cut certain routes flown by 767-400ER aircraft, and moved their entire fleet into long-term storage while Delta has announced early retirements for some of their 767s. Due to this, mba expects values for the 767-400ER to see increased value softness with the potential for long-term value impacts.

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## 777-200A

## **OVERVIEW**

The 777-200A was the first variant of the 777 family to enter service, with the first of the type delivered to United Airlines in May 1995. Subsequent models of the 777, including the 777-200ER, 777-200ER, 777-200ER, 777-200ER have improved upon the performance and operating economics of the original 777- 200A. The 777 family is a staple of trans-Atlantic crossings and longer trans-continental routes for many global operators who used to operate the DC-10 and 747 aircraft. Relaxed ETOPS restrictions have allowed the 777-200A to serve some Pacific routes as well, becoming popular among large Asian carriers.

Later variants of the 777 have become significantly more popular than the original 777-200A. With only 88 aircraft ever produced and just 24 aircraft still in service with six operators, the type has proven difficult to place in the secondary market.

## **Positives**

+ The 777-200A entering into the part-out market can help buoy values as demand for spare parts increases for the younger portion of the fleet.

#### Neutral

- With a small operator base of large network carriers on dense, medium-range routes, the aircraft's value is highly dependent on those carriers' plans to retire the aircraft.
- · Values have reached the point where freighter conversion of the type is a viable option, though no conversion programs are in the works at this time.

#### Negatives

- The 777-200A is the least capable variant of the 777 family.
- As of July 2020, only 27.3% of the fleet remains active, with 23 aircraft temporarily parked and the remaining 41 aircraft either retired or in long-term storage.
- As the 777-200A is a relatively unpopular variant of the 777 family and operators opted for more capable variants, values for the type are depreciating faster than that of newer variants.
- Due to the ongoing effects of the COVID pandemic, some airlines have accelerated the retirement of their 777-200 fleets.

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#### **FLEET STATUS**

As of July 2020, there were 24 active 777-200A passenger-configured aircraft and 23 passenger-configured aircraft temporarily stored due to the effects of COVID-19. Boeing received just 88 orders for the type, with the last aircraft delivered in 2007. A majority of the fleet was delivered before 2000, leading the fleet to have an average age over 23 years old. Only 27.3% of the fleet is still active, with 26.1% temporarily parked and 27.3% of the fleet currently in long-term storage.

Net Orders	88
Backlog	0
Delivered	88
Destroyed/Retired	17
Temporarily Parked	23
Not in Service/Long-term Storage	24
Active Aircraft	24
Number of Operators	6
Average Fleet Age (Yrs)	23.0

Source: mba STAR Fleet, July 2020

# NOTABLE DEVELOPMENTS

- In August 2020, Japan Airlines (JAL) announced that it would be accelerating the retirement of its fleet of 777-200 and 777-300 aircraft. There has not been a set date for these aircraft to be retired, but they were previously set to be retired by 2025. The 777-200/-300s will be replaced by the 18 A350-900s and 13 A350-1000s that the airline has on order as of August 2020. (ch-Aviation)
- As of May 2020, China Southern conducted the last scheduled flights of their 777-200 aircraft. The carrier's four 777-200 aircraft are set to be replaced by an incoming fleet of 787s. (ch-Aviation)
- In January 2020, British Airways retired the first of three 777-200As, with 100,311 hours and 20,663 cycles. The airline is planning on retiring its remaining 777-200As by year end 2020. (Simple Flying, ch-aviation).
- In June 2019, Boeing announced a new phase in its ecoDemonstrator program using a 777-200A aircraft as a test bed to test new technologies in communication, safety, passenger comfort, and environmental efficiency. (AIN Online)

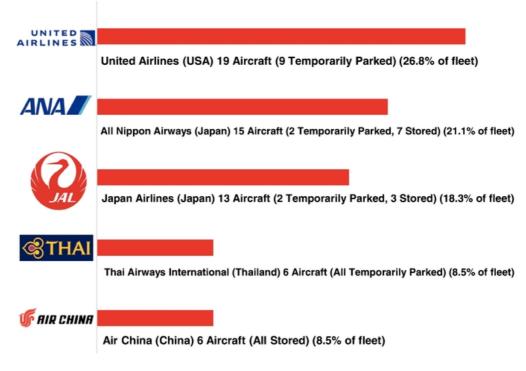
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## **FLEET DEMOGRAPHICS**

United Airlines is the largest operator of 777-200A aircraft with 26.8% of the fleet. The following largest operators are both Japanese operators, ANA with 21.1% of the fleet, and Japan Airlines with 18.3% of the fleet. It is important to note that 53.4% of the remaining fleet is either temporarily parked or in long-term storage, representing 47 aircraft. mba anticipates the majority of those aircraft will never fly again.

Five Largest 777-200A Operators



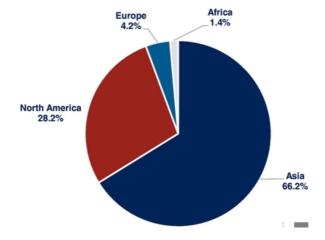
Source: mba STAR Fleet, July 2020

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## **Current Fleet by Region**

Currently, 66.2% of the active and stored 777-200A fleet is located in Asia, as three of the top five carriers are located in the region. North America makes up the second largest portion of the fleet, entirely represented by United Airlines, as well as one aircraft owned by The Boeing Company, which is used as a research test bed. Europe and Africa each have one operator with a few aircraft, representing 4.2% and 1.4% of the active and stored fleet, respectively.



Source: mba STAR Fleet, July 2020

## **AIRCRAFT AVAILABILITY**

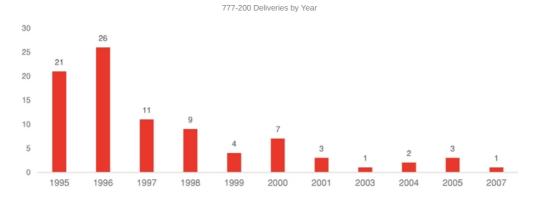
According to Airfax, as of September, there are no 777-200A aircraft available for sale or lease. There has only been one aircraft available for sale in the last year, and it was picked up by the next month. With many aircraft currently parked, more aircraft may start being publically advertised unless the airlines decide to ultimately retire the aircraft to the desert.

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## **DELIVERIES BY YEAR**

Deliveries of the 777-200A peaked in 1996, just one year after the start of production, with 26 aircraft. Approximately 66.0% of the fleet was delivered within the first three years of production, with approximately 80.7% of the fleet delivered by 2000. The 777-200A was quickly replaced by more capable variants beginning in 1997 with the 777-200ER and failed to generate many additional orders after the introduction of the more capable 777 variants. The last aircraft was delivered in May 2007 to Japan Airlines.

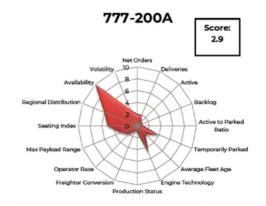


Source: mba STAR Fleet

## **AIRCRAFT RANKING**

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The 777-200A has one of the lowest scores for a twin- engine widebody as the aircraft is hurt by its narrow operator base, the very low number of aircraft delivered, and by its narrow geographical distribution. The aircraft is buoyed by the low number of aircraft available in the secondary market. mba expects the aircraft's score to decrease in the short to medium term as operators continue to accelerate the retirement of their fleets.



A330-200	6.3	787-9	8.6
A330-300	6.8	777-200ER	4.2

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## **OUTLOOK**

mba expects values for this type to soften as operators retire the type, due to both the impacts of the global pandemic and the fleet's average age of nearly 23 years already surpassing the normal 22-year economic life of a widebody aircraft. The 777-200A was not as popular as more capable and efficient variants that entered into service just two years after 777-200A production began. British Airways plans to retire the last of its three 777-200A aircraft by the end of 2020, so the operator base and geographical distribution for the type will shrink further as there will be no European operators of the type. However, as aircraft are retired and parted out, spare parts and used serviceable material will become more readily available to help support the younger aircraft in the fleet and keep them flying for several years more.

As of August 2020, with international air travel still extremely limited due to the ongoing effects of the COVID-19 pandemic, many airlines have reevaluated their fleet structure. While some carriers, like British Airways and JAL, have phased the aircraft out of their fleets, the top two operators have not announced retirements for the type, providing some minor stability to the already soft widebody market. However, historically, during economic downturns, older and out-of-production widebody aircraft tend to have the highest market value impacts as newer, more fuel efficient assets are typically preferred by operators due to their lower fuel and maintenance costs. Therefore, mba anticipates greater Market Value volatility across older widebody types, including the 777-200A.

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# 777-200ER

## **OVERVIEW**

Boeing's widebody 777-200ER is the Extended Range version of the 777-200 and is powered by higher thrust variants of the same engines available on the baseline model. The 777-200ER first flew in October 1996 and entered service with British Airways in February 1997. Though this variant has the same external dimensions and passenger capacity as its predecessor, it features an increased MTOW of 656,000 lbs and a corresponding increased maximum payload range of 5,900 NM. The 777-200ER is aimed at airlines operating long-range transatlantic routes and is the second most popular 777 family member after the 777-300ER.

#### **Positives**

Capable aircraft with proven performance history.

### Neutral

engine choice positive for initial sales campaigns but limits remarketing opportunities downstream.

## Negatives

- Large percentage of fleet available for sale or lease as operators are beginning to return leased aircraft in large numbers and retire their fleets.
- Operators now generally favor the A330-300 and the 777-300ER, as well as new-generation 787s, A330neos, and A350s.
- Trent-powered 777-200ERs have come under pressure in recent years because of concerns about liquidity due to OEM control of the secondary market.

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### **FLEET STATUS**

As of July 2020, there are 142 active 777-200ER passenger aircraft with 30 operators. There are 169 aircraft temporarily stored due to effects of COVID-19 and an additional 73 aircraft are in long-term storage, due mainly to a large number of aircraft coming off lease and the increasing number of operators taking delivery of the 787 and A350. This, coupled with more A330s being delivered, has caused an oversupply of widebody aircraft on the secondary market. As smaller aircraft tend to be easier to place, the larger 777- 200ER can often be overlooked in favor of the A330, which boasts a larger operator base.

Net Orders	422
Backlog	0
Delivered	422
Destroyed/Retired	38
Not in Service/Long-Term Storage	73
Temporarily Parked	169
Active Aircraft	142
Number of Operators	30
Average Fleet Age (Yrs)	18.4

Source: mba STAR Fleet, July 2020

### **NOTABLE DEVELOPMENTS**

- In June 2020, Florida-based Eastern airlines added its first 777-200ER to its fleet, an ex-flyGlobal charter aircraft. The aircraft appears to still be in storage. (chaviation)
- → In May 2020, due to decreased passenger demand, Air New Zealand announced that it will ground its entire fleet of 777s (eight -200ERs and seven -300ERs) through at least the end of 2020. (ch- aviation)
- In May 2020, British Airways reconfigured the interiors of two of its 777-200ERs to accommodate more transport of Personal Protective Equipment (PPEs) for the National Health Service. (British Airways)
- In May 2020, Delta Air Lines announced it would be retiring all of its 777s (eight -200ERs and ten -200LRs) by year end 2020 as part of its post-COVID-19 fleet readjustment strategy. (ch-aviation)
- In April 2020, as many airlines began retrofitting passenger aircraft for freight-only due to cargo needs from the COVID-19 pandemic, El Al Israel removed passenger cabins from two of its 777- 200ERs to prepare them for use as freighters. (CargoFacts)

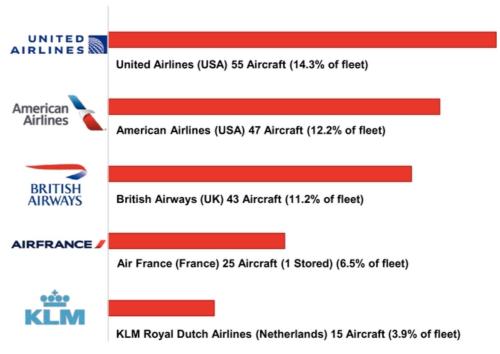
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# FLEET DEMOGRAPHICS

The 777-200ER has been widely accepted among legacy and flag carriers. The largest operator of the 777-200ER is United Airlines with 14.3% of the active and parked fleet. American Airlines and British Airways follow closely behind with 12.2% and 11.2%, respectively. While some carriers, like Singapore Airlines, have phased the aircraft out of their fleets, the top two operators have not announced retirements for the type, providing some minor stability to the already soft widebody market. British Airways, the third largest operator of the 777-200ER, has announced plans to start replacing its fleet of older generation 777s; however, the operator indicated that it will continue to retain some of their 777s until at least 2030. As new technology aircraft enter service, the aging 777-200ER has faced challenges in the secondary market due its size and engine liquidity concerns.

Five Largest 777-200ER Operators



Source: mba STAR Fleet, July 2020

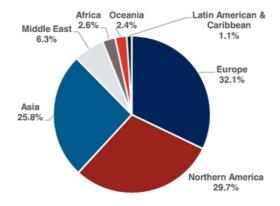
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### **Current Fleet by Region**

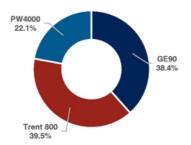
Europe is home to the largest percentage of the total fleet, with 32.1%; however, North America and Asia follow closely behind with 29.7% and 25.8%, respectively. The 777-200ER has performed reasonably well in these top three markets due to the ability to fly approximately 300 passengers in a three-class configuration on routes up to 5,900 NM, making the aircraft well suited for transoceanic routes.



Source: mba STAR Fleet, July 2020

### **Current Fleet by Engine Type**

The fleet is relatively evenly split between Rolls-Royce Trent and GE-90 engines. Aircraft powered by the engine types represent nearly 40.0% each of the active fleet. Prior to the influx of GE-90-powered 777s from Saudia into the secondary market, Trent-powered aircraft represented a large percentage of parked 777-200ERs. This is mainly due to Rolls-Royce's control of the secondary market and can be attributed to cash tied up in the engines, making it challenging to sell the aircraft, particularly for part out. However, numerous Rolls-Royce-powered 777-200ER aircraft have transitioned over the past year with green-time engines helping to move the aircraft.



Engine SFC		
Trent 800	0.560 (at cruise) (lb/h/lb)	
GE90-90B/94B	0.294 (at takeoff) (lb/h/lb)	
PW4000 Series	0.348 (at takeoff) (lb/h/lb)	

Source: mba STAR Fleet, July 2020

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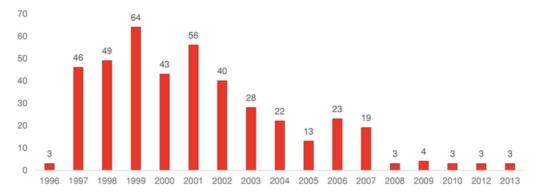
## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are 14 Boeing 777-200ERs available for sale or lease, amounting to approximately 3.6% of the total fleet. Of the aircraft available, seven are available for sale or lease, and seven are available for sale only. All aircraft on the market currently have Trent engines, except for one aircraft powered by GE engines.



## **DELIVERIES BY YEAR**

Deliveries for the 777-200ER were most prominent between 1997 and 2002, with demand weakening post- 9/11 as the aviation market experienced a downturn. After the market recovered, the entrance of the larger and more capable 777-300ER further suppressed demand for the 777-200ER, as legacy carriers opted for the larger variant. With deliveries dwindling in the last five years of production, the final aircraft was delivered in 2013.



Source: mba STAR Fleet, July 2020

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### **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

The 777-200ER benefits from its range capabilities and regional distribution, but its score is lower among widebody aircraft due to its out-of-production status and relatively high average fleet age. While there have been plans discussed for passenger-to-freighter conversion, the economic viability of the conversion, compared to the 777-300ER, makes it unlikely. mba anticipates the ranking of the 777-200ER will continue to gradually decline as more aircraft are retired.



A330-200	6.3	777-200LR	4.1
A330-300	6.8	777-200ER	4.2

## **OUTLOOK**

Over the last decade, the 777-200ER has fallen out of favor, with operators shifting towards the current- generation A330-300 and 777-300ER and to the new-technology A350-900 and 787-9. Due to the large size of the aircraft, placement into the secondary market has proven difficult. As such, an oversupply in the market has caused Market Values to trend downward, pulling Base Values down with them. This, in conjunction with liquidity problems on TotalCare Trent 800 engines, has led mba to believe the market for the aircraft is unlikely to recover. mba expects values for the type to continue to depreciate in the short to medium term; however, the rate of depreciation is likely to slow as the aircraft reaches part-out value.

As of August 2020, with travel still a fraction of pre-COVID-19 levels, airlines burning through tens of millions of dollars a day, and fears that the industry may not see robust international and trans-oceanic travel for several years, many airlines around the world are reassessing their fleet needs. The desire for more efficient aircraft and a preference for smaller, new generation widebodies has put the 777-200ER in a deeply stressed situation. Thus far in the pandemic, the 777-200ER has shown greater Market Value volatility than smaller, newer widebodies, and it is likely that Base Values could see further erosion by 2021.

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## A319

## **OVERVIEW**

The A319 entered into service in 1996 with Swissair. This A320 family member is a shortened version of the A320 and is powered by the same CFM56-5B or V2500-A5 engines and features roughly the same fuel capacity. The A319 has a typical seating of 124 passengers, in contrast to the A320-200, which has a typical seating capacity of 150. The A319 has been popular with network and low-cost carriers (LCCs), but demand for the aircraft has tapered off in recent years as the market has shifted towards larger narrowbody aircraft. With the introduction of new small narrowbodies, such as the E195-E2 and A220, demand for the A319 is expected to continue falling off as it becomes less efficient and technologically obsolete compared to its competitors.

#### **Positives**

- + Member of the highly-successful A320 family; shares significant commonality with other variants.
- + Operator base is geographically diverse.

#### Neutral

- o Engine choice is a positive factor during initial sales campaigns but can limit remarketing opportunities downstream; this effect has been mitigated by the large number of aircraft in the global fleet.
- o A relatively small share of A319s are still temporarily parked (18.1%), as airlines have started entering narrowbodies back into service. By comparison, 18.4% of 737-700s, 18.3% of 737-800s, and 26.2% of A320-200 have not flown in the last 30 days.

### Negatives

- Backlog is nearly depleted, and Airbus' order book has shifted in favor of the larger A320 family variants. However, the replacement A319neo has only 84 orders, compared to the A320neo's 3,923.
- Fleet of International Aero Engines (IAE)-powered A319 aircraft is roughly one-third of the size of the CFM-powered fleet, which may limit remarketing opportunities for IAE-powered A319s, unless used for part out.
- The integration of the A220 into Airbus' fleet may affect sales of the A319, as the clean-sheet design might become attractive to potential A319ceo operators.

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### **FLEET STATUS**

As of July 2020, there are currently 1,410 A319s in service (both parked and active), of which 1,009 are active passenger aircraft, flying for 129 operators. Since the start of the A319's production run, Airbus has received 1,486 total orders for the aircraft. The A319 has sold more units than its main competitor, the 737-700, which has 1,128 net orders. The aircraft was initially very successful, gaining most of the orders in the first ten years of the family's production but eventually lost out to both the A320-200 and A321-200 in the later stage of production, as customer preference shifted towards larger narrowbody aircraft. The unique hot/high and range capabilities of the A319 make it hard to replace, ensuring continued operation in some markets. As of July 2020, Airbus has secured 84 orders for the A319neo, with two aircraft delivered. The current orders for the A319neo account for roughly 1.0% of the A320neo family orders, far less than the 18.5% market share the A319ceo earned within the A320ceo family.

Net Orders (Excluding Government, Military, Corporate/VIP Config.)	1,486
Backlog	2
Delivered	1,484
Destroyed/Retired	74
Not in Service/Long-Term Storage	146
Temporarily Parked	255
Active Aircraft	1,009
Number of Active Operators	129
Average Fleet Age (Yrs)	14.72

Source: mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- As of July 2020, multiple airlines have decided to sell or retire their A319s earlier than planned due to fleet resizing: Air Mauritius put two of its A319s up for sale, TAP Air Portugal has retired three, Cambodia's Lanmei returned its only A319, Austrian will retire all seven of its A319s, and South African Airways returned seven from lease earlier this year. (ch-aviation, Aerotime, Avitrader)
- •> In March 2020, Nepalese carrier Himalaya Airlines took delivery of its first A319, which was originally delivered to Tibet Airlines in June 2019. The carrier plans to use the new aircraft on new destinations to China. (Simple Flying)
- In February 2020, CSA Czech Airlines deferred the phase-out of its fleet of six A319s to 2021; although, it will gradually reduce the number of A319s in 2020. (Ch-Aviation)

In January 2020, Alaska Airlines announced that it would not be extending the leases on its fleet of 62 A319 and A320 aircraft. The airline will be replacing the fleet with 737MAX, A320neo, and A321neo aircraft. (aeronauticsonline.com)

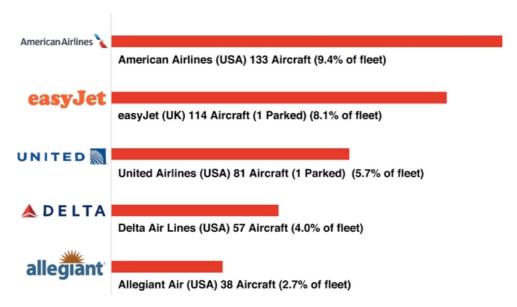
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## **FLEET DEMOGRAPHICS**

North American network carrier American Airlines and British LCC easyJet are the largest operators of the A319, with 133 and 114 aircraft in service, respectively, which is 17.5% of the total fleet between them. The fact that the largest operators hold a relatively small percentage of the total fleet is a positive indication of the aircraft's diverse operator base. The A319 was a popular aircraft with both low-cost and network carriers, as the aircraft is offered with a variety of cabin-configuration options and is more efficient on thinner routes than smaller regional aircraft when load factors are high. In recent years, the smaller size has led to the aircraft falling out of favor with many operators ordering the A320neo and A321neo to replace the type. However, with passenger traffic severely impacted, the A319 has been seen returning to service quickly as its smaller size offers slight advantages in the current market. While a short-term solution for airlines, the A319 is expected to enter the market in significant numbers over the next several years.

### Five Largest A319 Operators



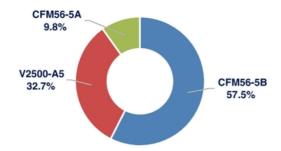
Source: mba STAR Fleet, July 2020

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### Current Fleet by Engine Type

The majority, nearly 68.0%, of A319 operators opt for the CFM56-5B engine over the V2500-A5. The CFM56-7B engine family is the sole engine for the 737NG series and operators of both aircraft families may opt for CFM56 engines due to some part commonality between the two engine types. Additionally, the CFM56 can cost less to maintain over the life of the engine due to longer average time between performance restorations and LLP intervals, in addition to offering better fuel-burn performance on shorter routes.

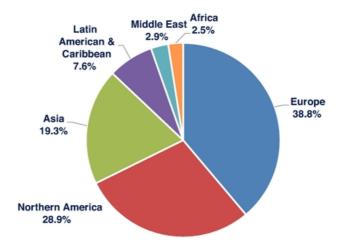


Engine SF	Engine SFC @ Cruise		
CFM56-5A	0.596 (lb/h/lb)		
CFM56-5B	0.603 (lb/h/lb)		
V2500-A5	0.575 (lb/h/lb)		

Source: mba STAR Fleet, July 2020

### **Current Fleet by Region**

The A319 has been well received in all corners of the world. The A319 understandably lags slightly behind the 737-700 in North America, but does very well in its home market of Europe with 38.8% of the active fleet. The A319 has been popular in all major aviation markets of the world, which typically bodes well for the type in the secondary market. However, as the aircraft begins to fall out of favor, there has been an increase in part-outs compared to re-leases over the last two years. mba expects the regional distribution to change in the near to medium term as operators continue to retire and replace their fleets.



Source: mba STAR Fleet, July 2020

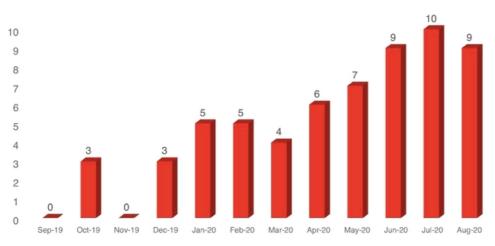
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## **AIRCRAFT AVAILABILITY**

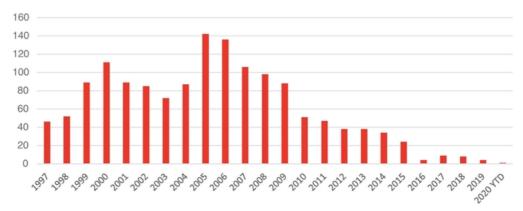
According to Airfax, as of August 2020, there are nine aircraft available, with six aircraft available for sale or lease, one aircraft for ACMI lease only, and two aircraft for sale only. With an average fleet age of nearly 15 years, the majority of aircraft will begin to come off their initial leases and lease extensions over the next few years, which could continue to increase A319 aircraft available in the secondary market.

## A319 Availability by Month



## **DELIVERIES BY YEAR**

Over the last several years, the market preference has skewed toward larger narrowbodies, with orders for the smaller 737-700 and A319 diminishing as the types fall out of favor. The peak of A319 deliveries was in 2005, after which orders declined as airlines focused on lowering seat costs per mile with larger narrowbody aircraft.



Source: mba STAR Fleet July 2020

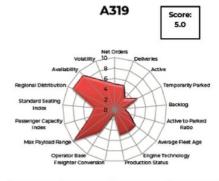
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### **AIRCRAFT RANKING**

mba's Aircraft Ranking model takes into account numerous factors that affect an aircraft's market standing on a scale specifically developed for each asset class. These ranking factors are individually weighted and compared against each other to develop mba's overall ranking score for each aircraft type, which is expressed on a scale of 1.00 to 10.00. The most prevalent aircraft configurations are used in the ranking analysis, which can be further identified in mba's REDBOOK publication or web-based valuation service.

Similar to the 737-700, the A319's score has decreased in recent years as demand shifted towards larger narrowbody aircraft. mba expects the ranking score to decline as the fleet ages and is replaced by the A320neo family and A220. The A319 is impacted by its small backlog and aging fleet but does benefit from its geographic ubiquity and percentage of fleet still active.



737-700	4.9	A220-300	6.4
A319neo	5.4	E195-E2	7.0

## **OUTLOOK**

The end of production for the A319 is imminent as the A320neo family production continues to ramp up. Though the aircraft has been popular with LCCs and mainline carriers alike, fleet replacement orders have shown that operators prefer to upgauge to larger narrowbody aircraft. The second largest A319 operator, easyJet, has opted against the A319neo in favor of the A320neo/A321neo. The market for the small narrowbody segment has been slow for both Airbus and Boeing, with the re-engined 737 MAX 7 and A319neo failing to gain nearly the same traction in the market as their predecessors. The integration of the A220 into the Airbus fleet may also futher cannibalize demand for the A319 and A319neo programs, and may be further exacerbated if the E2 program gains traction.

Many A319s are reaching the end of their first lease, which has led to Market Value softness. Market Values for older vintages had been boosted by part-out opportunities due to significant parts commonality among the entire A320 family, especially as freighter conversions become more popular options for older A320-200s and A321s. However, due to the increase in A319 market supply due to COVID-19 and limited placement opportunites, the airframe and engine market has seen considerable market value hits as more owners turn to the part out market. While the aircraft has fallen out of favor compared to its larger siblings, the A319 offers some unique operating characteristics, like hot and high performance, short runway/steep approach, and long-range capabilities. In the medium to long term, the values are very much tied to the retirement schedule of the major operators and the market's acceptance of the A220, E195-E2, and A319neo.

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In the near term, Market Values are expected to see considerable impacts as aircraft are returned off lease or are retired early. mba has not made any base value or residual value impairments; hoewver, considering the aircraft is nearly out of production, with replacements coming down the line, the A319 is at higher risk for long-term value impact.

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## A320-200

## **OVERVIEW**

The A320-200 is the most popular variant of the A320 family, with the first aircraft delivered in 1988. The first of the type produced was the A320-100; however, only 21 were delivered before the improved A320- 200 was introduced. The A320-200 varies minimally from the A320-100 apart from its wingtip fences and increased fuel capacity. Unlike its predecessor, the A320-200 was a rousing success for Airbus, with 4,730 aircraft delivered as of April 2020. Even with the launch of the A320-200's successor, the A320neo, demand for the A320-200, or A320ceo as it is now known, continues to be strong. However, as only 20 aircraft remain on backlog, the A320ceo is expected to end its production run at the end of 2020 or early 2021. The A320-200's launch was a significant event in aviation history as it was the world's first commercial passenger aircraft to be equipped with a fly-by-wire system and would become the cornerstone of Airbus' success. The aircraft was only sold with the CFM56-5A1 engine at launch, but starting in 1992, customers could choose between the CFM engine and the IAE V2500-A1 engine. A series of engine upgrades have occurred throughout the aircraft's life cycle, culminating in the CFM56-5B and the V2500-A5, both of which offer improved thrust and fuel consumption over their predecessors.

#### **Positives**

- + Most popular member of the highly successful A320 family.
- Large operator base that is geographically diverse.
- + Aircraft has been well received by all operator types.
- Potential for passenger-to-freighter conversion.

#### Neutral

Engine choice is a positive factor during initial sales campaigns, but can limit remarketing opportunities downstream; this effect has been mitigated by the large number of aircraft in the global fleet.

#### Negatives

- Older vintages are equipped with less-desirable engines (V2500-A1 and CFM56-5A1).
- The aircraft is near the end of its production run, which will likely accelerate depreciation, especially for last-off-the-line aircraft.
- A larger share of A320-200s have been temporarily parked as a result of the drop in demand due to the ongoing COVID-19 pandemic, compared to its competitor aircraft. Nearly 23.5% of the active A320-200s have not flown in the last 30 days, compared to 18.3% of 737-800s.

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### **FLEET STATUS**

As of July 2020, there are currently 3,071 active A320-200 aircraft in service with 198 operators. Since the start of the A320-200's production run, Airbus has received 4,750 total commercial orders for the aircraft. Both of these numbers fall slightly short of the A320-200's main competitor, the 737-800, which currently has 4,991 orders and 3,861 active aircraft. However, the A320-200 remains one of the most popular passenger aircraft in the world.

Net Orders	4,750
Backlog	20
Delivered	4,730
Destroyed/Retired	260
Not in Service/Long-Term Storage	455
Temporarily Parked	944
Active Aircraft	3,071
Number of Active Operators	198
Average Fleet Age (Yrs)	11.90

Source: Airbus, mba STAR Fleet, July 2020

## **NOTABLE DEVELOPMENTS**

- In July 2020, Delta Air Lines (Delta) announced that it would be retiring their entire MD-90, 777, and 737-700 fleets, as well as, a portion of its 767-300ER and A320 fleets by year-end 2020. Delta currently has 62 A320-200 aircraft in its fleet, and it is still unknown how many of these aircraft will be retired. (ch-Aviation)
- In July 2020, Singapore's Jetstar Airways announced that it will be permanently retiring five of its A320-200s. The airline owns eight of its A320-200s and leases the remaining ten, including four from BOC Aviation, one each from DAE Capital, AerCap, and Macquarie AirFinance, and three from unknown lessors. (ch-Aviation)
- In April 2020, Airbus announced it was cutting production for the A320neo/ceo family production line to 40 aircraft a month, down from the previous 60 per month. (AIN online)
- In January 2020, Alaska Airlines announced it would prioritize the replacement of Airbus narrowbodies inherited from Virgin America as part of its fleet strategy. Fifty-one A320s and ten A319s will be ousted by larger, more efficient aircraft like the 737 MAX 9, 737 MAX 10, or A321neos. (ch-aviation)

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### **FLEET DEMOGRAPHICS**

The AirAsia Group, including all of its subsidiaries and partner airlines, is the largest operator of the A320-200 with 195 total aircraft, approximately 4.4% of the fleet. The airline with the second largest fleet is China Eastern Airlines, with 181 total aircraft, or 4.0% of the fleet. The fact that the largest operators each hold a relatively small percentage of the total fleet is a strong indication that the aircraft has a highly-diverse operator base. This is further confirmed by the fact that the top five operators are based in five different countries. The A320-200 is a popular aircraft with both low-cost and network carriers, as the aircraft is offered with a variety of cabin-configuration options. The aircraft typically seats 150 passengers, but can seat up to 180 in a high-density configuration. Airbus has made a variety of cabin changes to increase seating capacity in order to make the aircraft more appealing to low-cost operators. This includes slim-line seats and Airbus' "Space-Flex" cabin, which offers a new rear galley configuration and a new lavatory design that takes up less space. The A320-200 is also approved for 180-minute ETOPS over-water operations by the Federal Aviation Administration (FAA), affording the aircraft's operators a great degree of flexibility and route variety.

### Five Largest A320-200 Operators



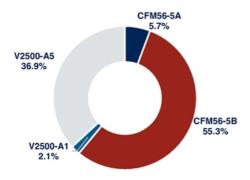
Source: mba STAR Fleet, July 2020

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### Current Fleet by Engine Type

Airbus currently offers two engine options for the A320ceo: the CFM56-5B and the V2500-A5. A majority of operators opt for the CFM56-5B, which powers 55.3% of the fleet. Operators have shown a preference for CFM-powered A320s due to lower maintenance costs and some part commonality with the CFM56-7B that powers the 737NG. In addition, due to the design of the engine, CFM-powered A320s have a fuel-burn advantage over V2500-A5-powered aircraft on flights with a shorter stage length due to its lower fuel burn at take-off. However, the V2500-A5 is capable of producing more thrust and has a fuel-burn advantage over the CFM56-5B on longer stage lengths making it the preferred engine on the larger A321.

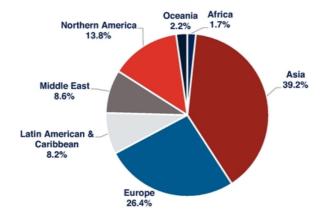


Engine SFC @ Cruise		
CFM56-5A	0.596 (lb/h/lb)	
V2500-A1	0.575 (lb/h/lb)	
CFM56-5B	0.603 (lb/h/lb)	
V2500-A5	0.575 (lb/h/lb)	

Source: mba STAR Fleet, July 2020

#### **Current Fleet by Region**

The A320-200 is well received in all corners of the world. While the aircraft understandably lags slightly behind the 737-800 in North America, it does very well in its home market of Europe. After a slow start in the region, operators in Asia eventually grew to embrace the A320-200 and the continent has become the largest market for the type, accounting for 39.2% of all in-service A320-200 aircraft.



Source: mba STAR Fleet, July 2020

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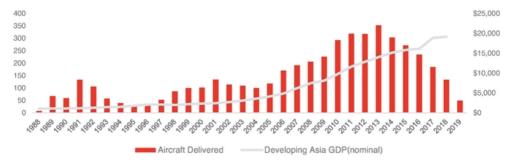
## **AIRCRAFT AVAILABILITY**

According to Airfax, as of August 2020, there are 29 A320-200 aircraft available for sale or lease within this quarter, representing approximately 0.72% of the in-service fleet. Ten aircraft are available for sale only, six aircraft are available for dry lease only, and three aircraft are available for sale or lease. Ten aircraft are available for ACMI lease starting in this quarter, one of which is available for sale, as well. The uptick in availability over the past few months can be attributed to the current global pandemic, as operators seek to restructure and reduce their current fleets.



## **DELIVERIES BY YEAR**

Like other comparable narrowbody aircraft, the A320-200 experienced a boom in demand during the first half of the 2010s as operators looked to increase load factors on routes previously served by larger twin- aisle aircraft. The emergence of the low-cost carriers in developing countries, such as AirAsia in Malaysia and IndiGo in India, has also contributed to the aircraft segment's rapid growth. Growth in GDP per Capita in developing Asian economies is strongly correlated to growth in the A320-200 order book. The falloff in orders is a result of the introduction of the A320neo, which has also seen the same rapid growth as its predecessor.



Source: mba STAR Fleet January 2020

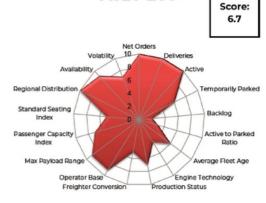
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### **AIRCRAFT RANKING**

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The A320-200 is among the highest-scoring Airbus narrowbody aircraft; although, it ranks lower than the A320neo and slightly lower than the 737-800. mba expects the ranking score to continue seeing a gradual decline as the fleet is replaced by the A320neo and the backlog for the type continues to dwindle. The current pandemic has led to a number of aircraft being temporarily stored and availability to increase causing the ranking to drop since 2Q 2020.



A320-200

737 MAX 8	7.6	A321-200	6.8
737-800	7.5	A320neo	8.3

## **OUTLOOK**

The A320-200 should retain its position as a dominant member of the A320 family during the period prior to the market saturation of the A320neo. The aircraft has been well positioned in terms of passenger capacity in the narrowbody sector as operators who were "upgauging" their fleet showed a preference for aircraft like the A320 and A321 over the smaller A319 and 737-700.

The replacement aircraft, the A320neo, saw several setbacks in its early production run which likely helped buoy A320 demand. Entry into Service (EIS) was promised by the end of 2015, but was pushed into 2016, and during the first two years of production, multiple issues with both the PW1100G and the CFM LEAP engines prevented customers from receiving their aircraft on time and/or having to ground the aircraft for engine repairs. This kept demand for current-generation aircraft stronger than expected and mba saw market values for mid-vintage, current-generation models higher than forecasted. While this disruption had kept residual values on the A320ceo values aloft, the medium to long-term outlook of the A320ceo will be shaped by the maturation and market acceptance of the A320neo, and the last A320-200 aircraft manufactured will suffer the most from a value perspective.

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As the COVID-19 pandemic continues into Q3 2020, the A320-200 market values have taken a slight hit, alongside the rest of the commercial aircraft market. Some operators have cancelled or deferred their A320neo deliveries, choosing to hold onto their existing fleet and trying to avoid additional capacity they cannot fill. Yet, with the COVID-19 pandemic continuing to cause significant disruption to the aviation industry, more A320-200s are likely to become available in the near term. mba has taken an initial value cut in the single digits, four months into the COVID-19 global crisis. However, as past downturns have shown, the full value impacts are usually not realized for around 12 to 18 months after a triggering event. Therefore, values for the aircraft are expected to continue seeing downward pressure in the near term. Long-term, residual value impacts are not currently expected, though as it is still early on, this may change.

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## CF6-80C2

## **OVERVIEW**

The General Electric (GE) CF6 high-bypass engine program began development in 1967 and was based on the successful development of the TF39 engine for military widebody aircraft. In 1977, engineers aimed to simplify the engine and improve performance, developing the first of the CF6-80 family engines. A major redesign of the -80A1, the CF6-80C2 features a larger fan, a four-stage low-pressure compressor (LPC), and a redesigned low-pressure turbine (LPT). It entered revenue service in October 1985 for the Airbus A310 and Boeing 767 but is now certified on 12 commercial and military widebody aircraft, including the 747-400 and the MD11. The engine is still in production to support the freighter fleets and is the most successful generation of the CF6 family. Its successor, the CF6-80E1 was designed specifically to power the Airbus A330 program and entered revenue service in 1994. The industrial and marine derivative of the CF6-80C2, the LM6000 Series, has found wide use with fast ferry and high-speed cargo ship applications, as well as in power generation.

## **Positives**

- + Lower fuel consumption compared to PW4000-100" and Trent 700.
- Parts commonality between different aircraft platforms the engine supports.

#### Neutral

O GE intends to continue manufacturing the engine until at least 2025.

### Negatives

- The aircraft types powered by the engine have all ended production, with the exception of the 767-300ER freighters, 20 of which were delivered in 2019.

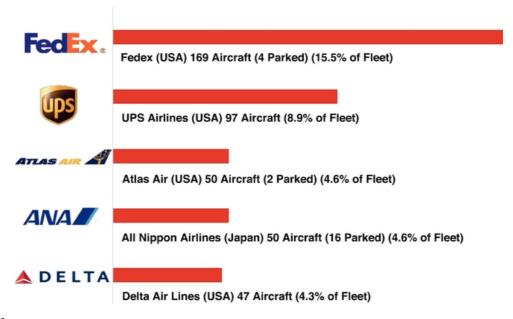
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## **FLEET STATUS**

As of July 2020, there are currently 1,090 CF6-80C2-powered aircraft, with 891 in service and temporarily stored with 114 operators and at least nine militaries. Due to the age, size, and utilization of the aircraft programs it powers, the engine is popular for both passenger and cargo operations. The top three operators are large cargo companies, as many of its passenger operators tend to own much smaller fleets powered by the CF6-80C2. Together, FedEx, UPS, and Atlas Air operate 29.0% of active CF6-80C2-powered aircraft, amounting to 632 engines, not including spare engines or parked aircraft.

Five Largest CF6-80C2 Operators of Active & Parked Aircraft



Source: mba REDBOOK July 2020

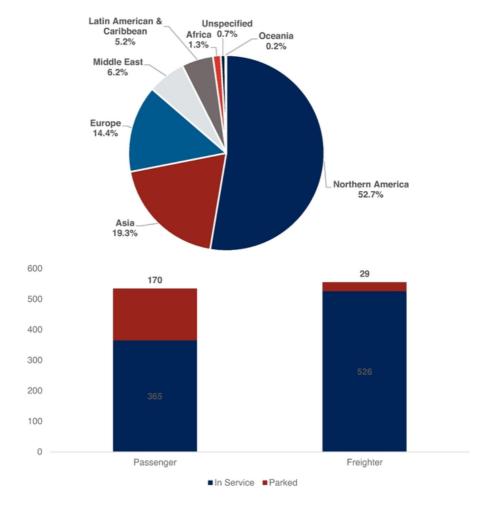
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## **Current Fleet by Region**

Four of the top five operators are based in the U.S., helping make North America home to over half of the CF6-80C2-powered active aircraft. Asia is home to 19.3% of the fleet, half of which are operated by Japanese carriers ANA and Japan Airlines. European carriers operate another 14.4%, and the remaining engines are found in relatively small numbers around the rest of the world. Currently, the majority of parked aircraft using these engines are passenger aircraft while cargo carriers are keeping these widebodies in active use.



Source: mba REDBOOK July 2020

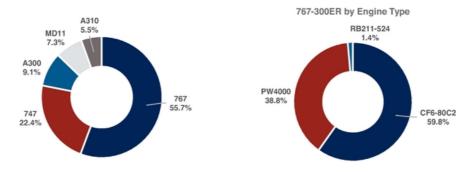
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## **Current Engine Fleet by Aircraft Type**

As of July 2020, over half of the current CF6-80C2 engines are found on Boeing 767s, with 55.7% of the fleet. The 747-400 operates nearly a quarter of the engine fleet, with the rest split up between older A300, A310, and MD11 aircraft. Of the 767 family, it is most popular on the 767-300ER, which currently operates 426 CF6-80C2 engines, 23.9% of the active fleet.



Source: mba REDBOOK July 2020

## **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are 12 engines currently available for sale or lease. Availability had been declining over the six months prior to start of the pandemic as operators used up spare green time in the market to avoid shop visits. However, as the pandemic took hold in March 2020, availability has increased dramatically as aircraft are retired en masse, increasing supply for the type.



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## **OUTLOOK**

mba has a neutral yet cautious outlook for the CF6-80C2 engine. The A300, MD11, 747-400, and 767-300ER programs have long since come to an end, and many operators are beginning to retire the aircraft due to the current pandemic's impact on passenger traffic. With so many of these aircraft reaching 20+ years of age, more aircraft are being retired, placing additional engines and spare parts in the secondary market.

As travel bans have been put into place due to the COVID-19 pandemic, the aviation industry continues to experience extreme disruptions, causing limited international traffic on several major routes. As the CF6- 80C2 powers older-generation widebody aircraft, it has experienced moderate Market Value volatility thus far due to the pandemic. Accelerated retirements have created a glut of spare engines entering in the market as older airframes go to part-out. However, as the demand for e-commerce grows, the freight market is likely to continue looking for green time engines. Due to increased aircraft retirements and engine availability, mba anticipates the CF6-80C2 will experience continued market softness in the near to medium term.

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## CFM56-7B

## **OVERVIEW**

The CFM56 is a family of high bypass turbofans produced by CFM International (CFM), a joint venture between Safran, formerly SNECMA, and General Electric (GE). Over the years, CFM has continually improved on the CFM56 family of engines, providing power to a wide variety of aircraft, starting with the CFM56-2C that powered the DC-8, the CFM56-3B/C family that powered the 737 Classics, the CFM56-5Bs that powers the A320 family of aircraft, and the CFM56-7Bs as the sole-source power plant for the 737NG family of aircraft. Since the first engine produced in 1971, CFM has produced over 30,000 CFM56 engines, making it the most successful commercial engine ever produced. The CFM56-7B is the only engine choice for all 737NG aircraft and offers thrust rates between 18,500 lbs to 27,300 lbs. The CFM56-7B shares the same improvements and tech insertions as the CFM56-5Bs, with the improved B/P core becoming standard on all CFM56-7Bs delivered after 2007. While next-generation engines, such as the LEAP and GTF, are already in service, current low fuel prices and the large number of engines requiring shop visits resulted in increased demand for the CFM56-7Bs in the secondary market prior to the COVID- 19 pandemic. While less fuel efficient than the LEAP, CFM56-7Bs have longer mean time between overhauls (MTBO) and lower shop visit costs, which is attractive for operators in a low-fuel-price environment.

#### **Positives**

- + Large operator base is geographically diverse.
- Engine has a long operational history and has been well received by all operator types globally.
- Sole Engine option for all 737NG aircraft.
- + Freighter conversion market opening up for the 737-800 will help extend the useful life of the engines.

#### Negatives

- The final 737NG family aircraft is expected to be delivered in 2020 with the CFM56-7B also completing production in 2020.
- Technological obsolesce compared to the CFM LEAP will result in the mid to long-term retirement of CFM56-7B-powered aircraft.
- Current environment has led to a temporary decrease in engine demand as airlines have parked aircraft and lowered utilization across their fleets.

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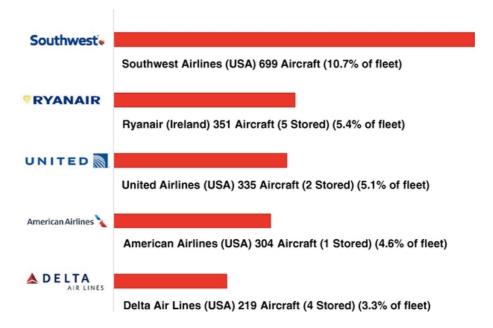


## **FLEET STATUS**

As of July 2020, there are currently 6,546 active CFM56-7B-powered aircraft in service or temporarily parked with 230 commercial passenger operators, accounting for 13,092 engines. This figure does not include the pool of spare engines, which typically adds another 10.0% to the in-service fleet total. There are also an additional 265 aircraft, or 530 engines in storage.

Southwest is the largest CFM56-7B operator with 699 aircraft powered by the engine, or 10.7% of the CFM56-7B fleet. Ryanair comes in a distant second with 351 total aircraft, or 5.4% of the fleet. The 737NG has a diverse operator base and is popular with low-cost carriers and flag carriers alike. The other major operators of the CFM56-7Bs are the American legacy carriers, United, American, and Delta, who operate 5.1%, 4.6%, and 3.3% of the fleet, respectively. While four of the top five operators are based in the United States, it is not reflective of a geographical preference for these engines but merely a reflection of the large fleet size that legacy carriers operate.

#### Five Largest CFM56-7B Operators



Source: mba REDBOOK July 2020

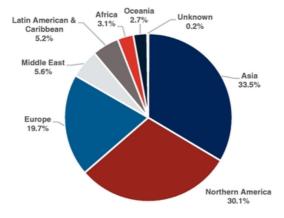
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## **Current Fleet by Region**

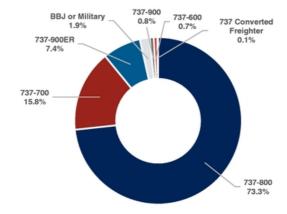
Asia is home to the largest percentage of the fleet at 33.5%, largely attributed to operators in China and Indonesia. North America has the second largest percentage of active CFM56-7B-powered aircraft with 30.1% based in the region. Europe comes in third at 19.7%, which is expected considering that the homegrown 737 is more popular in North America and the A320 family is more prevalent in Europe.



Source: mba REDBOOK July 2020

## **Current Fleet by Aircraft Type**

The majority of the CFM56-7B engines are fitted on 737-800 aircraft with 73.3% of the CFM56-7Bs found on the variant. As the 737-800 is the most popular variant of the 737NG family, it is understandable that it accounts for such a large percentage of the CFM56-7B engines. At the larger end of the narrowbody market, the 737-900 and 737-900ER have not generated a significant number of orders within the NG family, resulting in the relatively low percentage of CFM56-7B engines powering the variants.



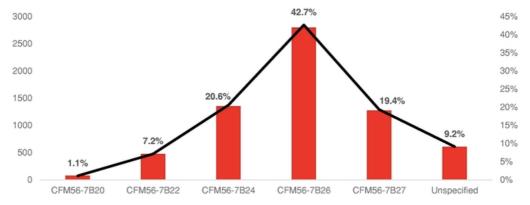
Source: mba REDBOOK July 2020

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### **Current Fleet by Thrust Rating**

The majority of the CFM56-7B family are operated at 26,000 lbs of thrust, with the CFM56-7B24 and CFM56-7B27 being the second and third most common thrust ratings, respectively. With the majority of the engines found on 737-800s the engine thrust rating follows suit with the standard operations for the type. Though there are various engine thrust ratings, all CFM56-7B engines have interchangeable thrust plugs, which allow the engines to have varying thrust ratings throughout their useful life as is required by the operator.



Source: mba REDBOOK July 2020

## **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are ten CFM56-7B engines available, with one available for sale, four available for lease only, and an additional five engines available for sale or lease. Despite effects of COVID-19 on utilization, availability for the engine have remained relatively steady. mba anticipates as traffic begins to recover, operators will seek green time engines to support the flying fleet in the near term in order to put off costly shop visits.



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### **OUTLOOK**

mba has a neutral to positive outlook on the CFM56-7B family of engines. Like the CFM56-5Bs and V2500s, the CFM56-7B engine saw an increase in demand that drove up lease rates and market values in recent years. Like the CFM56-5Bs, the large number of deliveries over the last decade has resulted in a large number of engines entering their first shop visit, increasing the lease demand for these engines. With a large in-service fleet, there are many opportunities to replace older CFM56-7B engines. Furthermore, despite it being early days for the conversion programs, the 737-800 may become a successful platform for passenger-to-freighter conversions, which will help create a continued demand for the CFM56-7Bs in the long term. Coupled with the relatively young age of the 737-800 fleet at 9.13 years as of July 2020, mba expects that demand will strengthen in the near to medium term, after recovery from the effects of the global pandemic. Additionally, as the 737NG and the CFM56-7B will be out of production this year, there will be an increased number of aircraft retiring in the mid to late 2020s, which may cause an increase in supply and start to bring down the long-term value of the engine.

In the immediate term, vast numbers of aircraft remain parked as airlines experience drastic cuts in passenger traffic due to the COVID-19 pandemic. With a reduction in aircraft utilization and groundings of entire airline fleets, the demand for engines has fallen in terms of secondary market movement; however, it seems operators and lessors continue to hold onto the engine knowing its value will recover once traffic recovers. There is a chance a large number of older 737NG family aircraft could enter the secondary market as operators restructure their fleets, leading to an oversupply the spare engine market. However, with the MAX still grounded until at least the end of 2020, the NG family of 737s are expected to remain in operators' fleets longer than expected, potentially buoying values for the CFM56-7B in the medium term. mba anticipates demand for the engine to increase in coming months as traffic begins to recover and operators look for spare engines and green time in the market to put off performing overhauls. Especially considering the relatively low maintenance costs of the CFM56-7B, mba foresees the engine recovering from the pandemic prior to 737NG recovery.

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## GE90-115B

## **OVERVIEW**

The General Electric GE90-115 is a turbofan engine based upon the architecture of the earlier GE90 engines built for the 777 program. Partnering with Safran, Fiat, and IHI, General Electric set out to produce an engine that provided thrust between 75,000 lbs and 100,000 lbs while offering a 10.0% fuel-burn reduction compared to previous generation engines. With the development of the 777-300ER, Boeing greatly increased the MTOW of the 777 resulting in the need for a more powerful engine. In July 1999, Boeing announced that the GE90-110/115B would be the exclusive power plant for 777-200X and 777-300X that later became the 777-200LR and 777-300ER. The upgraded engine increased thrust to 115,000 lbs through vastly improved fan blades and changes to the low pressure turbine (HPT) and high pressure compressor (HPC). During testing, the engine set the record as the most powerful commercial engine produced with a sustained thrust of 127,900 lbs. Though the aircraft it supports is nearing the end of its impressive production run, the GE90-115 has chalked up orders to power 835 777-300ERs, with the de- rated GE90-110Bs powering all 777-200LRs and most 777Fs, resulting in over 2,000 GE90-110/-115B engines delivered to date, not including spares.

### **Positives**

- + Sole engine option for the 777-300ER, 777-200LR, and 777F.
- + Large in-service fleet with 59 operators.
- + Young average fleet age of aircraft the engines support.

### Negatives

- Shrinking backlog of GE90-115B- and GE90-110B-powered aircraft.
- With Emirates, the 777-300ERs largest operator, retiring its 777 fleet and placing large orders for the 777X, the 777-300ER and the GE90-115 may face obsolescence should the aircraft have difficulty finding placement in the secondary market.

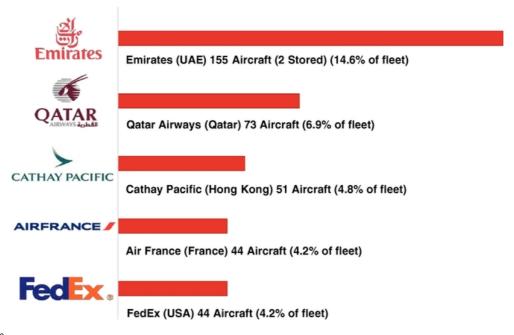
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## **FLEET STATUS**

As of July 2020, there are currently 1,059 GE90-110B- and GE90-115B-powered aircraft in service. Emirates is the largest operator of the GE90-110B/115B with 155 aircraft, or 14.6% of the total fleet. Qatar Airways comes in a distant second with a still sizeable fleet of 73 aircraft, or 6.9% of the total fleet. Cathay Pacific, Air France, and FedEx round out the top five with 4.8%, 4.2%, and 4.2% of the fleet, respectively. Due to the cost and size of the aircraft, the 777-300ER is most popular with flag carriers that have the network to fill the aircraft and liquidity required to maintain and finance a sizeable fleet of 777-300ERs. With Emirates retiring its 777 fleet in the next three to four years, it is possible that the 777-300ER and GE90-115B values may face downward pressure, as the fleet depends heavily on future fleet plans of the airline, though this will depend on where the aircraft end up in the secondary market.

## Five Largest GE90-115 Operators



Source: mba REDBOOK July 2020

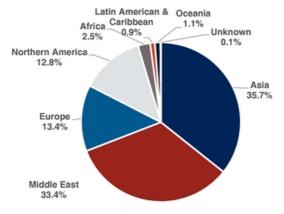
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### **Current Fleet by Region**

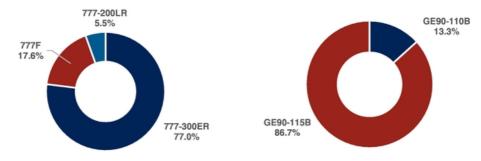
Though only one of the top five operators is based in the region, Asia is home to 35.7% of the GE90-115B- powered fleet. With two of the top five operators, the Middle East is a close second with 33.4% of the total fleet. The 777 aircraft is popular in Asia and the Middle East due to the long-range capability allowing airlines to offer direct flights to Europe and North America, which host 13.4% and 12.8%, respectively, of the fleet. Though popular in the fastest growing regions of the world, the desire for new, young aircraft in Asia and the Middle East may result in young 777s hitting the market in significant numbers in the short to medium term.



Source: mba REDBOOK July 2020

#### **Current Fleet by Aircraft Type**

With 796 active and temporarily parked 777-300ER aircraft as of July 2020, 86.7% of all GE90-115/110Bs are rated at 115,000 lbs of thrust. The 777F, which has been successful for a large factory freighter, hosts 17.6% of the engines, split 60/40 between -110Bs and -115Bs. Due to the limited success of the 777- 200LR, there are only 51 active and temporarily stored aircraft, nearly all powered by the GE90-110, which represent 5.5% of the global fleet.



Source: mba REDBOOK July 2020

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### **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are two engines available for sale or lease that have been available for the last 12 months. Over the last year, the same group of four engines and one propulsor have been available for sale or lease. The slight decrease in availability since the start of the global pandemic signals that operators are likely using green time in the market to put off expensive overhauls.



## **OUTLOOK**

mba has a cautious outlook for the GE90-110B/115B. The market has remained stable, but while there had been few changes to the in-service fleet over the last few years, Delta announced in May 2020 that it would be retiring its ten 777-200LRs by year's end. Additionally, the largest operator of the type, Emirates, announced in June 2020 it would retire its entire 777 fleet in the next three to four years. With a shrinking backlog and a growing number of orders for the 777 X, the GE90-110B/115B will likely face technical obsolescence in the medium to long term as airlines start replacing the older 777-300ERs with the 777X or even the A350-1000. An additional concern for the engine, as previously discussed, is the high concentration of engines with operators in regions where young fleets are preferred. As seen with other large aircraft, the secondary market is limited and a large number of aircraft hitting the secondary market en masse could cause oversupply of aircraft and engines, affecting values in the medium to long term.

As of August 2020, with the COVID-19 pandemic causing significant disruption to the aviation industry for over five months, the GE90-110B/115B have experienced significant market value volatility as engines have become difficult to place in the secondary market. However, as evidenced by slightly reduced availability, operators are looking for green time in the market to put off the GE90's expensive overhauls. mba anticipates that the 777-300ER and the GE90-110B/115B will experience further market softness as aircraft are retired earlier than anticipated. However, Cathay's -300ER lease extensions and sale-leasebacks in April are a good indicator that operators may keep the aircraft as a staple widebody in their fleets, thus keeping these engines in operation for some time more.

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## GE90-90B

### **OVERVIEW**

The General Electric GE90 family of engines are a clean-sheet design, high-bypass turbofan engines designed specifically for the 777 program. Partnering with SNECMA, Fiat, and IHI, General Electric set out to produce an engine that provided thrust between 75,000 lbs and 100,000 lbs while offering a 10.0% fuel- burn reduction compared to previous generation engines. The GE90-90 family included six variants: the GE90-76B, -77B, and -85B— all applicable on the 777-200A and -200IGW— and the GE90-90B, -92B, and -94B for the 777-200ER. The later iterations were the engine of choice for 38.4% of all 777-200ERs delivered, compared to 22.1% with Pratt & Whitney PW4090s, and 39.5% with Rolls Royce Trent 892s.

The last of the family, the GE90-94B, is rated at 94,000 lbs thrust and offers improved performance through a three-dimensional aerodynamic high pressure compressor (HPC) and other new technologies. The engine is the heaviest and longest 777 engine option, at over 16,500 lbs and 287 inches. GE offered a Performance Improvement Package (PIP), which could upgrade an operator's GE90-90B engine to a standard similar to that of the GE90-94B. The advantages consist of a 1.6% fuel burn improvement and about a 20°C increase in Exhaust Gas Temperature (EGT) margin, thereby providing an improvement in operating costs. The successor engines, the GE90-110B and -115B share only approximately 29.0% commonality with the -90B family, leaving the engine without application outside powering the 777 family of aircraft. The most recent successor engine, the GE9X for the forthcoming and delayed 777X, has emerged as an entirely new engine.

#### **Positives**

+ The 777-200A and -200ER aircraft are capable aircraft that have moved to new operators in the secondary market, maintaining the need for spares to offset costly overhauls.

#### Negatives

- Due to the ongoing global pandemic, multiple large operators of GE90-90B-powered aircraft have decided to retire their fleets early, including British Airways and Delta Air Lines.
- The engine has no practical application outside of powering the first and second generation 777s and does not benefit from any freighter conversion programs.

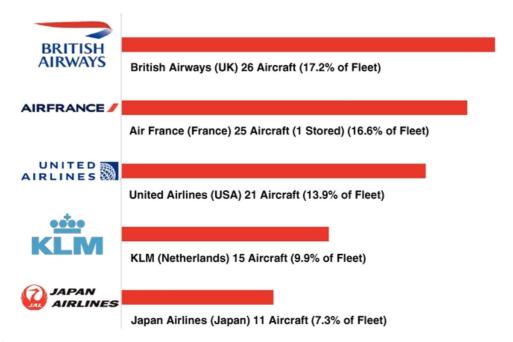
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## **FLEET STATUS**

As of July 2020, there are 126 active and temporarily stored GE90-90B-family-powered aircraft in service, with an additional 25 aircraft in long-term storage. British Airways operates the largest share of GE90-90B- powered aircraft with 17.2% of the fleet, followed closely by Air France and United Airlines, with 16.6% and 13.9% of the fleet, respectively. The type has poor operator diversification, as the top five operators hold nearly 65.0% of the total GE90-90B-powered fleet and approximately 77.8% of the current active and temporarily parked fleet.

#### Five Largest GE90-90B Operators



Source: mba REDBOOK July 2020

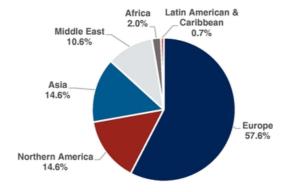
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# **Current Fleet by Region**

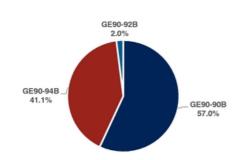
Most GE90-90B-powered 777-200ERs still operate with their original operator. As three of the top five operators are based in Europe, the region is home to 57.6% of the total fleet. North American and Asian operators, each with 14.6% of the fleet, help diversify the current regional distribution. The 777 aircraft have also started to find second homes in the Middle East and Africa, now comprising 10.6% and 2.0%, respectively, of the GE90-90B-powered fleet.

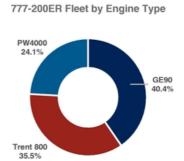


Source: mba REDBOOK July 2020

### **Current Fleet by Variant**

The 90,000 lbs thrust and 94,000 lbs thrust are the most popular variants with 57.0% and 41.1% of the fleet, respectively. All but six GE engines operate on 777-200ERs and are the preferred engine for those aircraft currently in service, followed closely by the Trent 800 family with 35.5% of the 777-200ER fleet.





Source: mba REDBOOK July 2020

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### **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are "several" engines available, with no specific number provided, for immediate sale or lease from two different parties. These same engines have been available since March 2020, prior to which no engines had been advertised as available since November 2019. As more airlines park and retire their 777-200/ER fleets, mba expects more GE90-90B engines to enter the market in the near to medium term.

### **OUTLOOK**

mba has a cautious outlook for the GE90-90B family of engines. The market has remained restrictive as there had not been significant changes to the in-service fleet until this year when several airlines, including British Airways and Delta Air Lines, announced their short-term retirement plans. As the production line for the early generation 777s closed nearly a decade ago, residual values have begun to reflect the engine's obsolescence. As seen with other large aircraft, the secondary market is limited and a large number of newer generation aircraft hitting the secondary market en masse could cause oversupply of aircraft and engines in the near to medium term.

As of August 2020, the COVID-19 pandemic continues to cause significant disruption to the aviation industry, particularly limiting international traffic on all major routes. The 777-200ER has been put in a more deeply stressed situation as airlines continue to park their fleets and multiple carriers have decided to retire their fleets early, with others in the process of making that decision as well. The 777-200ER have experienced further Market Value volatility due to the pandemic, and the GE90-90B family of engines is experiencing the same. Should even more 777-200ERs enter the secondary market, additional Market Value impacts would be expected on the GE90-90B engines as supply outpaces demand. However, some operators may turn to the secondary market for green time engines to avoid costly overhauls, which could potentially aide spare engine values.

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## GEnx-1B

### **OVERVIEW**

The GEnx family of engines was derived from the highly successful GE90-94 program, albeit with a significant amount of upgrades to the core and the fan. Compared to the GEnx-2B on the 747-8, the GEnx-1B has a larger fan and a new electric system instead of the conventional pneumatic systems on the smaller engine. The GEnx-1B was designed to produce between 53,000 lbs and 75,000 lbs of thrust and competes with the Trent 1000 to power the 787-8, 787-9, and 787-10. With the cancelation of a smaller 787-3 and the introduction of the larger 787-10, the thrust requirements for the GEnx-1B have grown since its first flight in 2007.

Prior to launch, GE claimed the GEnx would offer a 15.0% improvement in specific fuel consumption (SFC) and will have longer time on wing compared to existing engines. However, early-build GEnx-1Bs had problems meeting the advertised fuel-burn and durability improvements and required two Performance Improvement Packages (PIPs) to attain an additional 3.0% SFC improvement. Through the PIPs and marketing campaigns that brought aboard a few large carriers, the GEnx-1B has become the preferred engine for the 787 family with 58.8% of orders. As the competing Trent 1000 has had more severe teething issues, Rolls Royce had to introduce three new "packages" to address durability and fuel-burn issues with the engine. While the latest Trent 1000 TEN is still facing durability issues with its HPT, it represents a significant gap from the Package A engines as the TEN's core is derived from the Trent XWB. If Rolls Royce is able to get ahead of the issues facing the Trent 1000, the improved core of the Trent 1000 TEN may make it difficult for the GEnx-1B to win future marketing campaigns without the introduction of more PIPs.

#### **Positives**

- + Large order book with geographically diverse operator base.
- + Currently the preferred engine on the 787 family.
- + 787 program is relatively young and is likely to attain more orders in the future.
- + Despite the current slowdown in passenger traffic due to COVID-19, the 787 has been viewed as a core aircraft in airlines future long haul fleets.

#### Neutral

The improvements made to the Trent 1000 with a new core derived from the Trent XWB may reduce the competiveness of the GEnx on future marketing campaigns once EIS issues are ironed out.

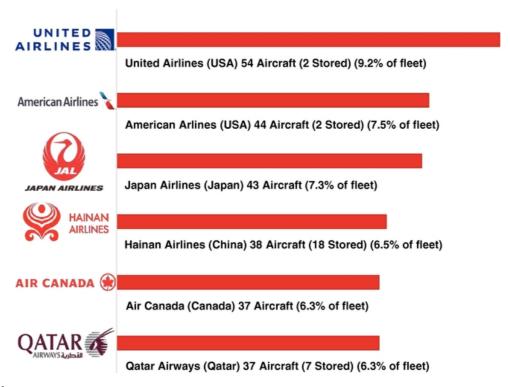
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### **FLEET STATUS**

As of July 2020, there are 589 active GEnx-powered civil aircraft in service and temporarily parked, due to effects of COVID-19. United Airlines is currently the largest operator with 54 aircraft in service and an additional ten aircraft still on order. American Airlines and Japan Airlines come in a close second and third with 44 and 43 aircraft, respectively. The 787 has a diverse operator base with flag carriers operating the largest fleet and low cost carriers (LCCs) also utilizing the aircraft on long-haul routes. With orders included, the top six operators account for 43.0% of the current fleet but only 16.6% of the current order book, with Japan Airlines having ordered the largest share, 95 aircraft in total, and Etihad eventually becoming the second largest operator, as it currently has orders for 71 aircraft.

#### Six Largest GEnx-1B Operators



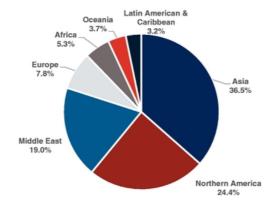
Source: mba REDBOOK July 2020

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#### **Current Fleet by Region**

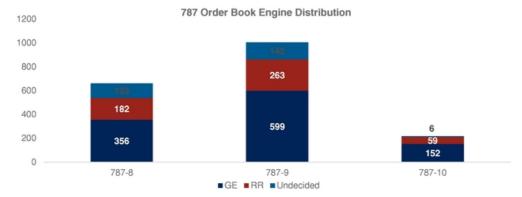
Despite only two of the top six operators in Asia, the region is home to the largest active fleet of GEnx-1B-powered aircraft with 36.5% of the fleet. JAL, Hainan, and Air India are using the 787 to replace older generation widebodies and open up new routes, materializing on Boeing's point-to-point model. North America comes in second with 24.4% of the active GEnx-1B-powered 787 fleet. The Middle East comes in third with 19.0% of the active fleet. However, should Etihad take delivery of all 71 GEnx-1B-powered aircraft, the region will account for a much larger percentage of the GEnx-1B-powered fleet.



Source: mba REDBOOK July 2020

### **Current Fleet by Aircraft and Engine Type**

The GEnx-1B has thus far been the preferred engine for the 787 family and is expected to power over half of all 787 orders, though 14.4% of the order book has not declared an engine choice yet. Due to the different operator base, there may be some minute differences in engine distribution within the 787 family. Looking at the orderbook, the GEnx has been selected to power 53.9% of the 787-8, 59.7% of the 787-9, and 70.0% of the 787-10. Not accounting for additional orders, even if Rolls Royce were to account for all the undecided orders, the GEnx would still account for nearly 60.0% of the engines in each 787 family.



Source: mba REDBOOK July 2020

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#### **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are no GEnx-1B engines available for sale or lease, and no engines have been available for the last 12 months. This is due to the young age of the fleet, and mba does not expect any GEnx-1B engines to enter the market for some time.

#### **OUTLOOK**

mba has a neutral to positive outlook on the GEnx-1B. As the preferred power plant for a very successful aircraft program, mba expects the 787 to continue picking up orders with the GEnx as a strong contender to power a majority of future orders. As the 787 program is relatively new, it is unlikely that the GEnx will become obsolete due to a clean-sheet aircraft or a redesigned engine that will compete in the same category in the short to medium term. While the GEnx had its fair share of teething issues during its EIS, its competitor, the Trent 1000, had more public and severe issues. Though this may have had a positive impact in early marketing campaigns, it should be noted that Rolls Royce has brought a completely new engine architecture to the program with the introduction of the Trent 1000 TEN. In response, GE will have to continue upgrading the GEnx-1B in order to remain competitive with the latest iterations of the Trent 1000.

With COVID-19 continuing to disrupt the aviation industry, there has yet to be consistently significant recovery in the international traffic space and engine trading has slowed. A majority of engine trading that is occurring is primarily for the purposes of increasing airline liquidity. As the GEnx-1B is a new technology engine on a young widebody fleet, mba has seen limited value impact for the type as availability has remained low, indicating operators intend to hold on to their aircraft in the short to medium term. Also due to the young age of the fleet, spare engines are not currently in high demand, though demand will likely increase as the fleet ages. mba anticipates that the GEnx-1B will recover quickly as traffic recovers and should not see any lasting value impacts due to the pandemic.

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# LEAP-1B

### **OVERVIEW**

The LEAP-1B program was launched in 2011 when Boeing selected the GE Aviation-Safran joint venture, CFM International, to be the sole engine provider for the technologically enhanced 737 MAX family. Shortly after, Southwest became the launch customer of the type with 150 orders. The 737 MAX 8 was certified in March 2017 by the FAA and is fitted with sole-sourced CFM LEAP-1B engines, certified by the FAA and European Aviation Safety Agency (EASA) in March 2016. Its competitor, the A320neo, offers a similar engine, the CFM LEAP-1A, but also provides customers with the option to select Pratt & Whitney PW1100G engines. Like the LEAP-1B, the LEAP-1B promised 15.0% lower fuel consumption and lower CO2 emissions compared to the CFM56-7B with comparable reliability and maintenance cost. The engine was manufactured with a maximum thrust of 28,000 lbs and a wide-chord blade design with a fan diameter of 69 inches. Supply chain issues with CFM contributed to aircraft delivery delays through the beginning of 2019. However, as the 737 MAX is still grounded as of August 2020, CFM has been able to work out some of the original teething issues with the LEAP-1B and catch up with deliveries to Boeing. The aircraft is currently expected to return to service late in 2H 2020 after the FAA approves aircraft software fixes and pilot training requirements; although, given past delays of the aircraft's return to service, this date may continue to be pushed out.

#### **Positives**

- + Large order book with geographically diverse operator base.
- Sole-source engines should ease remarketing to secondary operators.
- + The new engine technology provides better fuel economy over the previous generation of engines and aircraft.

#### Neutral

As the sole-engine for the MAX family, the LEAP-1B's future is highly dependent on the success of the 737MAX aircraft.

# Negatives

- Low fuel prices may cause airlines to delay deliveries of the type and hold onto the current generation 737-800 for longer than anticipated.
- Boeing has lost over 400 orders for the 737 MAX in 2020 due to the ongoing grounding, and multiple operators have pushed delivery dates by several years.
- As of August 2020, 737 MAX aircraft are currently still grounded.

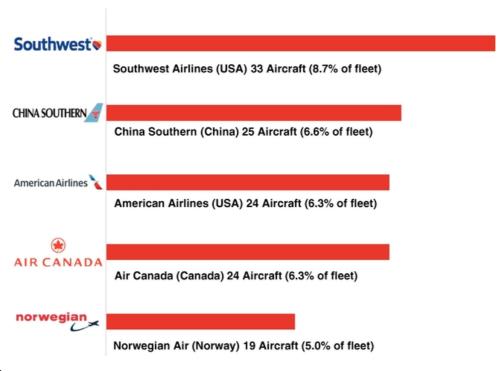
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### **FLEET STATUS**

As of July 2020, there are 379 LEAP-1B-powered aircraft delivered to operators, though not in service due to the ongoing 737 MAX grounding. Southwest is currently the largest operator of the type with 33 LEAP-1B-powered aircraft delivered and 280 MAXs on order. China Southern and American Airlines come in second and third with 25 and 24 aircraft, respectively. However, with 251 MAX aircraft on order each, UAE operator flydubai and Indonesian operator Lion Air Group will tie as the second largest operators. The MAX is a popular aircraft with both low-cost and network carriers, and has been used on domestic and short- haul international flights. Though these international routes were predominately served by widebody aircraft, the 737 MAX allows operators to decrease capacity and boost load factors on thinner routes.

#### Five Largest LEAP-1B Operators



Source: mba STAR Fleet, July 2020

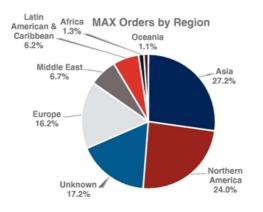
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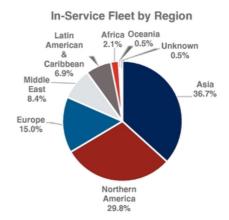


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### **Current Fleet by Region**

Similar to the LEAP-1A, the LEAP-1B finds its popularity in Asia, as the region is home to the largest percentage of MAX aircraft, both in terms of aircraft delivered and aircraft on order. Currently, the region accounts for 36.7% of aircraft, followed by North America at 29.8%. While only 8.3% of the orders have been filled thus far, Asia will account for 27.2% of the fleet, and closely behind will be North America with 24.0% of the MAX fleet based on the current order book. It should be noted that 17.2% of the 4,559 current orders are with Unidentified Customers, so the regional distribution of the total fleet may change. The regional diversity represented in the chart below is a positive indicator for the popularity of the type, as future deliveries will see the number of operators and geographic diversity increase, especially as lessors place aircraft in their order books.





Source: mba STAR Fleet, July 2020, Boeing Orders June 2020

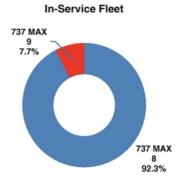
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#### **Current Fleet by Aircraft Type**

Currently, 92.3% of the LEAP-1B engines are designated to 737 MAX 8 aircraft. The MAX 9 was designed to compete against the A321neo, which has sold over 16 times the number of 737 MAX 9 aircraft. The popularity of the A321neo may also prove to be problematic on future MAX 8 orders as operators who value the operating economics of the A321neo may opt for an all-Airbus fleet. The success of the engine is highly correlated to the overall success of the MAX Family, specifically the MAX 8.

Net Orders*	4,559
Backlog	4,178
Delivered	381
Destroyed/Retired	2
Not in Service/Parked	379
Active Aircraft	0
Number of Delivered Operators	49
Average Fleet Age (Yrs)	2.02



Source: mba STAR Fleet, July 2020 Boeing Orders - June 2020

### **OUTLOOK**

mba's outlook for the LEAP-1B engine is neutral to positive, assuming the MAX grounding is lifted soon and the modifications to the aircraft are successful and retrofitable across the fleet without causing any deterioration to the operating profile. The current grounding of the fleet has caused far more serious complications for operators compared to the engine reliability issues Airbus faced with the teething of the A320neo. With a large and diverse order book, mba expects demand for the engine to remain high in the long-term. However, since the LEAP-1B is the sole engine option for the MAX family of aircraft, the health of the engine is dependent on the success of the aircraft. As the age of the MAX family is very young, mba expects more orders to come in for the aircraft over the long term, adding to the current large backlog. Like the LEAP-1A, the engine is a technological improvement in terms of power and efficiency and should prove a popular type in the long-term.

COVID-19 has caused air travel to slow considerably, though traffic in certain regions, particularly Asia, saw an increase at the end of 2Q 2020. With such a new engine program, the immediate outlook for Market Values is likely to be minimally impacted unless there are a significant number of aircraft that enter the secondary market due to bankruptcies or airlines refusing delivery of already built MAX aircraft. mba anticipates most airlines will hold onto younger 737-800s longer than expected, limiting any near-term new demand for the LEAP-1B engine once the MAX is able to reenter into service.

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<sup>\*</sup> Orders include models with unspecified variant

# PW4000-112"

### **OVERVIEW**

The Pratt & Whitney PW4000 engine is derived from the JT9D engine and ranges in thrust from 50,000 lbs to 98,000 lbs. There are three major variants of the PW4000 based on fan diameter and number of low pressure (LP) compressor and turbine stages: the PW4000-94", PW4000-100", and PW4000-112".

The PW4000-112" is the largest and most powerful variant in the family, ranging in thrust from 77,440 lbs to 98,000 lbs. The PW4000-112" engine received FAA certification in 1994, was cleared for 180-minute ETOPS in May 1995 and entered into service with United Airlines ("United") in June 1995. Deliveries of the type ended in 2015. The PW4000-112" engine benefits from improvements made to its smaller predecessors, including a rebuilt high pressure turbine (HPT), nozzle guide vanes, combustor fuel nozzle guides, and the introduction of the Talon combustor (Technically Advanced LO-NOx). The PW4074, PW4074, PW4084, and the PW4090 have six low-pressure compressor (LPC) stages, while the higher thrust PW4090D and PW4098 have seven LPC stages. The PW4000-112" is currently in the sunset phase of its life cycle, as the aircraft types powered by the engine have been out of production for a several years.

#### **Positives**

The PW4000-112" engine benefitted from design upgrades and technological improvements from the earlier-built -94" and -100" engines.

#### Neutral

+ Operators may hold on to the type for the majority of the engine's useful life.

#### Negatives

- Applicable aircraft types have ended production in the last few years.
- Few carriers operate the type, largely focused in Asia, potentially limiting the secondary market for the type should operators choose to retire their fleets.

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### **FLEET STATUS**

As of July 2020, there are currently 154 PW4000-112"-powered aircraft in service with seven operators, equating to 250 engines flying today, excluding spares. The 154 PW4000-112" aircraft include 61 aircraft that have been temporarily parked due to the effects of the COVID-19 pandemic. United is the largest PW4000-112" operator, with 52 aircraft, or 33.8% of the fleet. All Nippon Airways (ANA) and Japan Airlines are the next largest operators with 34 and 18 aircraft, 22.1% and 11.7% of the fleet, respectively. A few mainline carriers hold large portions of the fleet, making it potentially more difficult to place in the secondary market. Though these carriers may hold the type for the majority of its useful life, should these aircraft enter the market they may see further difficulty in placement as the PW4000 is the least popular engine on the 777 family and will likely be competing with the more capable 777-300ER in the medium term.

### **Top Five Current Fleet by Operator**



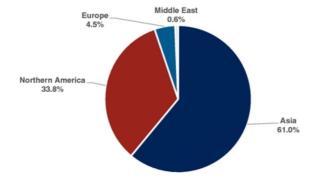
Source: mba STAR Fleet, July 2020

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### **Current Fleet by Region**

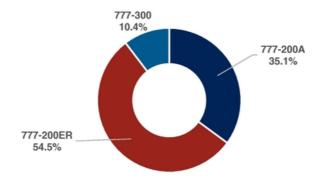
With four of the top five operators of the type, well over half of the active fleet of PW4000-112"-powered aircraft are operated in Asia. The next largest region is North America with 33.8% of the fleet, consisting entirely of United's fleet. Ukraine International Airlines, Privilege Style, and Transaero Airlines all operate in Europe, making up 4.5% of the fleet. The PW4000-112"-powered aircraft are not well-distributed regionally, making demand for the type dependent on a few operators.



Source: mba STAR Fleet, July 2020

#### **Current Fleet by Aircraft Type**

The PW4000-112" powers three aircraft types: the 777-200ER, and the 777-300. The most popular aircraft type is the 777-200ER, with 54.5% of the active and parked fleet. The 777-200A has 35.1% of the fleet, and the 777-300 has 10.4% of the fleet. The 777-200 and 777-300 were not popular, as more efficient and capable variants entered the market in the next few years after these types entered service. The 777-200ER saw more popularity with operators, so it is understandable that it makes up the largest portion of the PW4000-112" fleet.



Source: mba STAR Fleet, July 2020

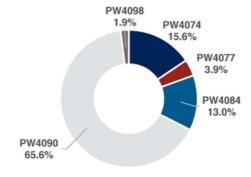
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#### **Current Fleet by Engine Type**

The PW4000-112" family has five active variants with thrust ratings from 74,000 lbs to 90,000 lbs. The most popular type is the PW4090 with 65.6% of the active fleet, which powers the 777-200ER and the 777-300. The remaining engine variants are significantly less popular, powering the 777-200 and 777-300.



Source: mba STAR Fleet, July 2020

### **ENGINE AVAILABILITY**

As of August 2020, there are currently no engines publically advertised for sale or lease and there have not been any made available within the last 12 months. Though the number is nonexistent, this is likely due to the high number of currently parked aircraft rather than a shortage in supply.

#### **OUTLOOK**

mba has a cautious to negative outlook on the PW4000-112" family of engines. Current demand, and thus values, for the engine are dependent on a few operators who still operate the type, creating a limited secondary market. Should these operators choose to rapidly retire their fleets, spare engines could flood the market and further increase value volatility. The PW4000-112" is also subject to technological obsolescence as newer, more efficient 777 variants and engines have since dominated the market. As the engine is in its sunset phase, Market Values in the medium to long term are expected to be volatile as older aircraft are retired.

As of August 2020, with travel still a fraction of pre-COVID-19 levels, many airlines around the world are reassessing their fleet needs. The desire for more efficient aircraft and a preference for smaller, new-generation widebodies has put the early generation 777s in a deeply stressed situation. Historically, past downturns have shown that out-of-production widebody aircraft experience the most value volatility as operators show preference for new types with more fuel efficiency and lower maintenance costs. Thus far in the pandemic, the PW4000-112"-powered aircraft have shown greater Market Value volatility than smaller, newer widebodies, and it is likely that Values will see further erosion into 2021.

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# PW4000-94"

### **OVERVIEW**

The Pratt & Whitney PW4000 engine is derived from the JT9D engine and ranges in thrust from 50,000 lbs to 98,000 lbs. There are three major variants of the PW4000 based on fan diameter and number of low pressure (LP) compressor and turbine stages: the PW4000-94", PW4000-100", and PW4000-112". The PW4000-94" ranges in thrust from 50,000 lbs to 62,000 lbs and received FAA certification in 1986, entering into service in 1987. The PW4000-94" engine powers several aircraft families, including the 747, 767, MD- 11, A300, and A310. The various engines in the 94-inch family have four-digit designations beginning with 40- for Boeing, 41- for Airbus, and 44- for the MD-11. Beginning in 1999, a series of Airworthiness Directives (AD) were issued on the 94-inch engines as stability issues began to appear in the high pressure compressor (HPC) on high time engines. PW redesigned the HPC stators and reprogrammed the FADEC, and after later ADs, redesigned the HPC case, which was then retrofitted onto the entire fleet beginning in 2003. The PW4000-94" is currently in the sunset phase of its life cycle, as many aircraft powered by the engine have been retired or converted into freighters.

### **Positives**

- + Wide range of applicability on several aircraft types that are popular freighter conversions.
- Engine has a long operational history and has been well received by all operator types.

#### Negatives

- Applicable aircraft types have been out of production for several years.
- Competes with the CF6-50, CF6-80, and RB211-524 on applicable fleet types.

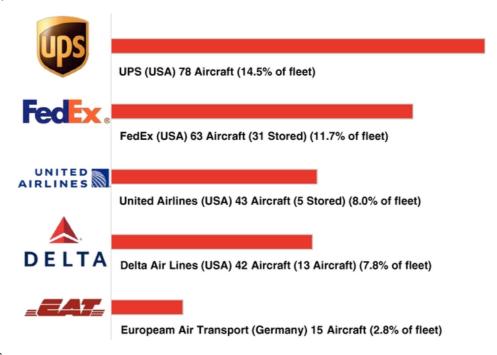
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### **FLEET STATUS**

As of July 2020, there are 539 total PW4000-94"-powered aircraft; however, only 365 of the aircraft are in service with 70 operators, equating to 786 engines flying today, excluding spares. UPS is the largest PW4000-94" operator, with 78 aircraft, or 14.5% of the fleet. FedEx and United Airlines are far behind with 63 and 43 aircraft, 11.7% and 8.0% of the fleet, respectively. Three of the top five operators are cargo carriers, which shows the popularity of the PW4000-94" with operators as an engine choice for converted freighters. While the fleet is not well distributed regionally, there is a large operator base so the limited geographic distribution of the engine is unlikely to hamper placement in the secondary market in the near term.

#### Top Five Current Fleet by Operator



Source: mba STAR Fleet, July 2020

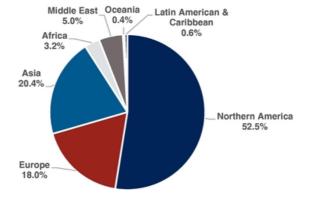
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#### **Current Fleet by Region**

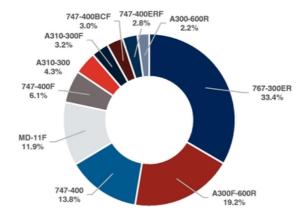
With four of the top five carriers, North America is the home to the largest fleet of PW4000-94"-powered aircraft, accounting for 52.5% of the total fleet. Europe and Asia are home to 18.0% and 20.4% of the total fleet, respectively. While the fleet is not well distributed geographically, it is distributed amongst a large number of carriers, particularly cargo carriers, who will likely hold onto their aircraft for the remainder of its useful life.



Source: mba STAR Fleet, July 2020

#### **Current Fleet by Aircraft Type**

The PW4000-94" has a wide range of fleet applicability and is currently used on 20 aircraft types in the 747, 767, MD-11, A300, and A310 families. The most popular application of the engine is the 767-300ER, with 33.4% of the total fleet. The A300F-600R is the next largest aircraft type with 19.2% of the total fleet. Ten of the 20 current fleet types have less than ten aircraft remaining in active service. The chart below shows aircraft types with ten active aircraft or more as a percentage of the entire fleet.



Source: mba STAR Fleet, July 2020

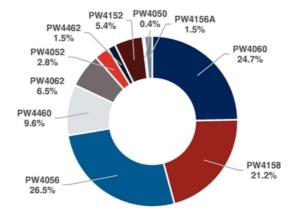
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#### **Current Fleet by Engine Type**

The PW4000-94" family has ten active variants with thrust ratings from 50,000 lbs to 62,000 lbs. The three most popular variants are the PW4056, PW4060, and the PW4158, with 26.5%, 24.7%, and 21.2% of the total fleet, respectively. The remaining engine variants are significantly less popular with approximately 10.0% or less of the active fleet.



Source: mba STAR Fleet, July 2020

## **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are two PW4000-94" engines available: one for lease and one for sale or lease. Over the past year, the type has had relatively low availability, as there is consistent demand to support the flying fleet. In May 2020, there was a spike in availability, likely due to aircraft retirements from COVID-19, and the additional availability was quickly absorbed by the market. It is likely that availability will remain low in the immediate term as operators seek market green time to put off expensive overhauls.



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### **OUTLOOK**

mba has a neutral, though cautious, outlook on the PW4000-94" family of engines. Current demand and values for the engine are mostly buoyed by freighter conversion programs, as all applicable aircraft types have been out of production for several years. However, as the most popular application of the type is on the 767-300ER fleet, which is mostly operated by only a few legacy carriers, spare engines may flood the market should any of those carriers choose to rapidly retire their fleets. As the engine is in its sunset phase, market values in the medium to long term are expected to be volatile as demand for the engine is highly dependent on continued freighter conversions in the coming years.

With the COVID-19 pandemic causing significant disruption to the aviation industry due to travel bans and limited international traffic on all major routes, air cargo has not taken the same drastic hit as passenger traffic, as limitations for air cargo are less severe. However, historically, past downturns have shown that out-of-production, older widebody aircraft experience the most value volatility as operators show preference for new types with more fuel efficiency and lower maintenance costs. mba anticipates both market and base value impacts on several aircraft types powered by the PW4000-94"; therefore, engine values are also likely to be affected. Thus far in the pandemic, the PW4000-94" has experienced moderate Market Value Volatility, though values are likely to be supported in the near term by low average availability and consistent demand to support the flying freighter fleet.

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## RB211-535

### **OVERVIEW**

The RB211 is a high bypass turbofan produced by Rolls-Royce plc and is used on a wide-range of aircraft including the 747, 757, and 767. All engines in the RB211 family are comprised of a triple-spool layout that consists of a single-stage, low-pressure (LP) fan driven by its own turbine. This spool is driven by a twin- spool gas generator, comprised of the intermediate pressure (IP) and high pressure (HP) spools. Named as the first non-U.S. engine to be selected for a major U.S. aircraft, the RB211-535 series was introduced in the mid-1970s and was designed for the 757, Boeing's replacement aircraft to the highly successful 727 aircraft. The RB211-535C was built with a reduced fan diameter and 37,400 lbs thrust in order to accommodate the increased size of 200 passengers, compared to the 150 passengers of the 727. The first model entered service in 1983 with a majority of the 757 customers opting for this type to power the aircraft. The Pratt & Whitney (PW) PW2037 and PW2040 engines were later offered as options for the aircraft.

Entering into service in 1984 with Eastern Air, the RB211-535E4 was an advanced version that was noted for its reduced fuel consumption and a completely new fan with wide-chord blades. The RB211-535E4 has an increased take-off thrust between 40,100 lbs and 43,100 lbs, which allowed the 757 to be cleared for 120-minute ETOPs in 1986 and extended to 180 minutes in 1990. Named as the "quietest in its class," the RB211-535E4B entered service in 1989 with American Airlines. The E4B was selected by 86.0% of customers for the 757-300, compared to the 14.0% powered by PW engines. As of July 2020, the RB211- 535 powers 62.4% of the 688 active 757 aircraft in service today. As the 757 family ages, the aircraft is finding a second life as a prime candidate for freighter conversion programs, in turn, boosting a resurgence in demand for the RB211 engines.

#### **Positives**

- + Popular in the secondary market, as there has been an increase in demand for 757 freighters.
- Preferred engine type for the 757 fleet when compared to the PW2037, PW2040, and PW4037 engines due to its longer on-wing performance.

#### Negatives

Rapidly aging fleet as many aircraft in the 757 passenger fleet are over 25 years old, exceeding the typical 24-year economic life of a narrowbody aircraft.

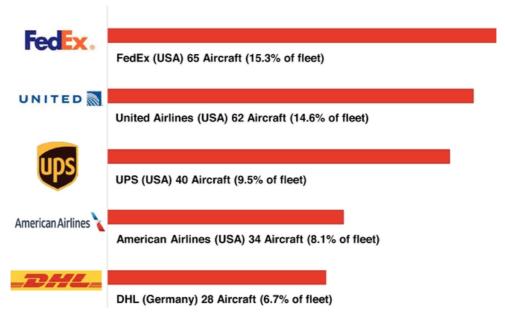
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### **FLEET STATUS**

As of July 2020, there are currently 424 active RB211-535-powered aircraft in service with 53 operators. This amounts to 848 engines before accounting for spares. FedEx is the largest RB211 operator with 65 aircraft powered by the engine, or 15.3% of the global RB211-535-powered 757 fleet. United Airlines comes in a close second with 62 aircraft, or 14.6% of the fleet. Most passenger-configured 757s are close to retirement or currently being retired due to a slowdown in passenger traffic despite Airbus' A321XLR not slated to enter service until 2023 and Boeing's New Mid-Market Aircraft (NMA) program development on indefinite hiatus. However, the market for the freighter variants has been stable, as these aircraft are the mainstay of the large U.S. cargo carriers (FedEx, United Parcel Service [UPS], and DHL) and offer unique capacity and performance advantages for their operators.

### Five Largest RB211-535 Operators



Source: mba STAR Fleet, July 2020

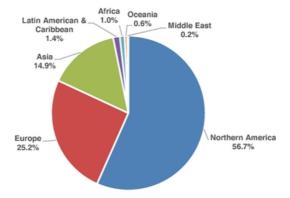
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#### **Current Fleet by Region**

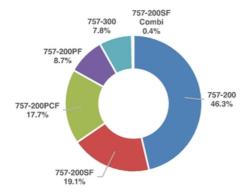
With four of the five largest RB211-535 operators based in the U.S., North America is home to 56.7% of the total fleet. The 757-200 is popular with North American carriers as it is well suited for trans-Atlantic and trans-continental flights, and the 757 freighters have become an integral part of American cargo operators' networks. Europe is home to the second largest portion of the fleet at 25.2%, which is largely attributed to Icelandair and DHL.

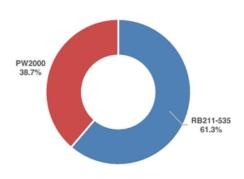


Source: mba REDBOOK July 2020

#### **Current Fleet by Aircraft Type**

Over half, 54.1%, of the RB211-535 engines are fitted on 757 passenger aircraft (both -200s and -300s), with converted freighters accounting for the remaining 45.9%. The percentage of freighters is likely to increase in the coming years as more passenger aircraft are retired or converted to freighters. In previous years, there was an even split between the RB211-535 and the PW2000, as they both offered relatively similar performance. However, as the aircraft ages, there is a growing percentage of Rolls-Royce engines on the active fleet, particularly on freighter aircraft.





Source: mba REDBOOK July 2020

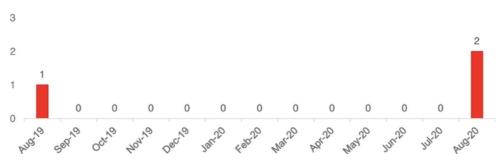
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#### **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are two RB211-535 engines available for sale or lease. For the year prior, there has only been one other engine listed as available. Low availability is likely due to high demand for the type to support the flying passenger and freighter fleets.

RB211-535 Availability



### **OUTLOOK**

Despite the recent decline in the 757-200 passenger variant due to retirements by some U.S. carriers, the freighter variants have been stable as they are the mainstay of the large U.S. cargo carriers and offer unique performance advantages to operators. The RB211-535 saw a surge in demand due to the strength of the converted freighter program, the increased demand for package freighters and the lack of available green time engines in the secondary market. Prior to COVID-19, RB211-535s were entering shops to undergo performance restorations previously avoided, due to limited availability of green time engines and the type saw an increase in lease rates and Market Values. However, due to the currently pandemic, many operators have started to retire their 757 fleets, which should help provide the market with green-time engines in the immediate term. In the medium term, a lack of used serviceable material in the market and high cost of overhauls may drive operators to look to new generation freighters, like the A321P2F, resulting in a medium- to long-term decline in values. As the RB211-535 is currently in its sunset phase, continued Market Value volatility is expected in the coming years as the fleet phases out of service.

With COVID-19 causing significant disruption to the aviation industry, the passenger market has seen large numbers of aircraft being parked across every continent. However, the global package freighter market has not been impacted to the same extent as many people resort to ordering online to adhere to government recommended social distancing, causing an uptick in demand for freighter aircraft like the 757-200. This is likely to increase utilization, leading to increased demand for spare engines to keep the fleet flying. However, as COVID-19 restrictions begin to lessen, it is unclear how the cargo market will be affected and how operator preferences will change. Though many aircraft and engines will see short-term value impacts, engines like the RB211-535 may have the opportunity to see stable values as the 757 is a staple in its operators' fleets and is likely to remain flying in the near term.

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## IAE V2500

### **OVERVIEW**

The International Aero Engines (IAE) V2500 is a family of twin-spool, wide-chord high-bypass turbofan engines. The first engine in the family, the V2500-A1, began testing in 1985 and entered service in 1989. Early generations of the V2500-A1 were not well received as they did not meet the marketed performance and reliability standards, resulting in the launch of performance packages aimed to improve the engine's shortfalls. Despite the shaky start, subsequent variants of the V2500 engines proved to be extremely successful, powering all variants of the Airbus A320 family of aircraft, the MD90-30, and most recently, the Embraer KC-390 tanker transport. The first improved V2500-A5 engine was tested in 1992 and later delivered to United Airlines in 1993. Despite the age of the program, the V2500 family has continually grown its market share through improvements, such as the SelectOne and SelectTwo packages, resulting in the V2500 family currently powering 38.8% of A320-200s, 59.7% of A321-200s, and 32.7% of the A319s of the in-service fleet. With supplier and teething problems surrounding the next generation of engines, such the LEAP and GTF, demand for the V2500-A5 saw a noticeable uptick as operators wanted to keep their existing fleet of V2500-powered aircraft flying. This was exacerbated by the ramp up in production seen over the last decade, resulting in a large number of aircraft reaching their first shop visit and driving up spare engine demand. Though the current global pandemic led to an almost instantaneous halt in demand, engines tend to recover first in order to support the flying fleet and help operators push overhaul costs further to the right.

#### **Positives**

- + Large operator base is geographically diverse.
- + Engine has a long operational history and has been well received by all operator types.

#### Neutra

Fuel-burn characteristics make the engine advantageous on longer routes operated by A321-200 but less so on shorter routes operated by A320-200s and A319s.

## Negatives

- Shrinking backlog of V2500-powered aircraft.
- Engine is facing long-term obsolescence, with newer more efficient engines, such as the PW GTF and CFM LEAP, having entered service on the A320neo nearly five years ago.

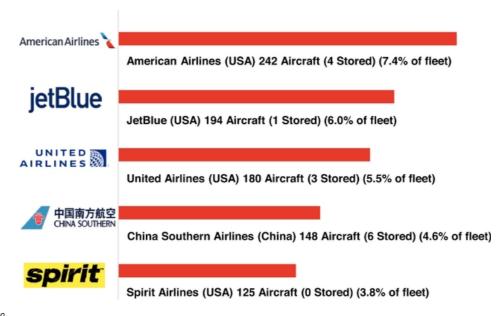
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### **FLEET STATUS**

As of July 2020, there are currently 3,250 active and stored V2500-powered aircraft in service, with 162 operators equating to 6,500 V2500 engines. These numbers do not account for any spares. American Airlines is the largest V2500 operator, with 242 aircraft powered by the engine, or 7.4% of the V2500 fleet. JetBlue comes in a close second, with 194 V2500-powered aircraft, or 6.0% of the fleet. United Airlines, China Southern, and Spirit Airlines round out the top five with 5.5%, 4.6% and 3.8% of the fleet, respectively.

#### Top Five Current Fleet by Operator



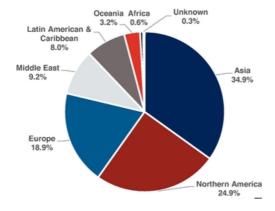
Source: mba STAR Fleet, July 2020

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### **Current Fleet by Region**

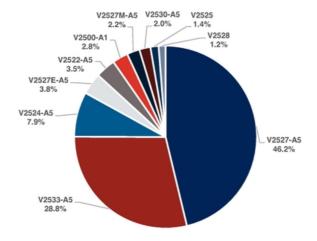
Despite four of the five largest V2500 operators being based in North America, Asia is home to the largest percentage of active V2500 engines. The region accounts for 34.9% of all V2500 engines today. North America and Europe follow closely behind accounting for 24.9% and 18.9% of the fleet, respectively. Overall, the V2500 is well distributed geographically with a presence in all regions, which is beneficial in secondary marketing efforts.



Source: mba STAR Fleet, July 2020

#### **Current Fleet by Engine Type**

Nearly half (46.2%) of the V2500 fleet is the V2527-A5 variant, fitted on A320-200 aircraft, while 28.8% of V2533-A5s are fitted on the A321. These percentages are reflective of the relative size of the active A320 fleet compared to the A321-200 fleet. However, within the A321 fleet, the V2533-A5 holds a much stronger market share, powering 59.7% of all active A321-200s compared to 38.8% market share of the A320s powered by V2500s.



Source: mba STAR Fleet, July 2020

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#### **ENGINE AVAILABILITY**

According to Airfax, as of August 2020, there are six engines available, with three available for sale or lease and three available for lease only. Availability has been relatively consistent, though decreasing since the start of the global pandemic, and is expected to decrease as utilization increases and operators look for green time in the market to support the flying fleet.



## **OUTLOOK**

mba has a positive to neutral outlook on the V2500 family of engines. Over the last few years, the market has seen a strong demand for the engine, which has driven up its Market Values and lease rates. Due to the ramp up of A321 orders and deliveries seen in the last decade, a large number of A321s are due for their first shop visit, which increases the demand for spares and used serviceable materials. With a large number of V2500-powered aircraft still in service, mba anticipates there will continue to be a market for the engine. In the long run, the V2500-A5 family of engines may become obsolete in the face of more efficient engines like the Pratt & Whitney Geared Turbofan (GTF) and CFM LEAP. As the new generation of engines become ubiquitous in the fleet, demand for the V2500-A5 will be highly dependent on fuel prices and the availability of spares in the market. Should oil prices increase in the future and airlines retire the A321 en masse, it might result in a glut of V2500-A5 engines entering the market, driving down values.

As the global pandemic continues, vast numbers of aircraft remain parked as airlines maintain drastic cuts in passenger traffic due to the COVID-19 pandemic. With a reduction in aircraft utilization and groundings of entire airline fleets, the demand for engines has remained low. However, with many operators pushing back deliveries of the A320neo and A321neo, it seems many will be looking to continue operating their existing A320ceo family aircraft in the near term. While there is a chance for a large number of older A320 family aircraft to enter the secondary market, which could oversupply the spare engine market, during downturns, operators tend to use spare engines to supplement performing costly overhauls on engines. Market Values for the V2500 have taken a hit in the pandemic, though relatively consistent demand has served to minimize value impacts. mba expects V2500 values to recover and stabilize from COVID-19-related value impacts as traffic demand recovers.

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#### IV. Valuation

In developing the values of the Subject Assets, mba did not inspect the Subject Assets or the records and documentation associated with the Subject Assets, but relied on partial information supplied by the Client. This information was not independently verified by mba. Therefore, mba used certain assumptions that are generally accepted industry practice to calculate the value of aircraft when more detailed information is not available.

The principal assumptions for the Subject Assets are as follows:

- 1. The aircraft is in good overall condition.
- 2. The overhaul status of the airframe, engines, landing gear, and other major components are the equivalent of mid-time/mid-life, or new, unless otherwise stated.
- 3. The historical maintenance documentation has been maintained to acceptable international standards.
- 4. The specifications of the aircraft are those most common for an aircraft of its type and vintage.
- 5. The aircraft is in a standard airline configuration.
- 6. The aircraft is current as to all Airworthiness Directives and Service Bulletins.
- 7. Its modification status is comparable to that most common for an aircraft of its type and vintage.
- 8. Its utilization is comparable to industry averages.
- 9. There is no history of accident or incident damage.
- 10. No accounting is made for lease revenues, obligations, or terms of ownership unless otherwise specified.
- 11. Aircraft with Market Values above Base Value are indications of demand for the engines and spare parts and are not an indication of demand for the aircraft as passenger flyers.
- 12. No accounting was made for the installation of Parts Manufacturer Authorization (PMA) parts or any deviation in industry standards as a result of their use and all material cost associated within the analysis assume the use of OEM parts.
- 13. The data provided by the Client, including aircraft specifications, current utilization, and maintenance performance data, is accurate and up to date.

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### PORTFOLIO-SPECIFIC ASSUMPTIONS

- + Pratt and Whitney engines are assumed to have engine LLP cycles remaining on all LLPs equal to the cycles remaining on the limiter engine LLP.
- ESN 900272 LLP cycles accumulated confirmed to be equal to or less than cycles accumulated on the engine for all LLPs except the LPT Case. The Adjustment from Half-Life reflects the assumption that these LLPs have cycles accumulated equal to the total cycles on the engine.
- ESN 900283, 956883, and 956912 Adjustments from Half-Life reflects the assumption that the engine LLPs have cycles accumulated equal to the total cycles on each engine.
- ESN V11043, V10219, V10406, V10387, and V10895 Adjustments from Half-Life reflect the assumption that any engine LLPs not provided have limits of 20,000 cycles and cycles accumulated equal to the mode of the cycles accumulated on the provided LLPs for the respective engine.

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Aircraft Portfolio							
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator
1	737-700	28766	N25705	May-98	154,500	CFM56-7B24	United Airlines
2	737-700	28767	N24706	May-98	154,500	CFM56-7B24	United Airlines
3	737-700	28768	N23707	May-98	154,500	CFM56-7B24	United Airlines
4	737-700	28769	N23708	Jun-98	154,500	CFM56-7B24	United Airlines
5	737-700	28779	N16709	Aug-98	154,500	CFM56-7B24	United Airlines
6	737-700	28780	N15710	Aug-98	154,500	CFM56-7B24	United Airlines
7	737-700	28782	N54711	Sep-98	154,500	CFM56-7B24	United Airlines
8	737-700	28783	N15712	Sep-98	154,500	CFM56-7B24	United Airlines
9	737-700	28785	N33714	Sep-98	154,500	CFM56-7B24	United Airlines
10	737-700	28786	N24715	Oct-98	154,500	CFM56-7B24	United Airlines
11	737-700	28787	N13716	Dec-98	154,500	CFM56-7B24	United Airlines
12	737-700	28936	N29717	Jan-99	154,500	CFM56-7B24	United Airlines
13	737-700	28937	N13718	Jan-99	154,500	CFM56-7B24	United Airlines
14	737-700	28938	N17719	Feb-99	154,500	CFM56-7B24	United Airlines
15	737-700	28939	N13720	Feb-99	154,500	CFM56-7B24	United Airlines
16	737-700	28940	N23721	Mar-99	154,500	CFM56-7B24	United Airlines
17	737-700	28789	N27722	Apr-99	154,500	CFM56-7B24	United Airlines
18	737-700	28790	N21723	Apr-99	154,500	CFM56-7B24	United Airlines
19	737-700	28944	N39728	Jul-99	154,500	CFM56-7B24	United Airlines
20	737-700	28945	N24729	Jul-99	154,500	CFM56-7B24	United Airlines
21	737-700	28799	N14731	Aug-99	154,500	CFM56-7B24	United Airlines
22	737-700	28948	N16732	Aug-99	154,500	CFM56-7B24	United Airlines
23	737-700	28800	N27733	Sep-99	154,500	CFM56-7B24	United Airlines
24	737-700	28949	N27734	Sep-99	154,500	CFM56-7B24	United Airlines
25	737-700	28950	N14735	Sep-99	154,500	CFM56-7B24	United Airlines
26	737-700	28803	N24736	Sep-99	154,500	CFM56-7B24	United Airlines
27	737-700	29047	N15751	Mar-99	154,500	CFM56-7B24	United Airlines
28	737-700	29048	N17752	May-99	154,500	CFM56-7B24	United Airlines
29	737-700	32679	N7714B	May-04	154,500	CFM56-7B22	United Airlines
30	737-700	32653	N7703A	Sep-04	154,500	CFM56-7B22	United Airlines
31	737-800	28958	N25201	Dec-99	174,200	CFM56-7B26	United Airlines
32	737-800	30581	N33209	Aug-00	174,200	CFM56-7B26	United Airlines
33	737-800	28770	N26210	Jun-98	174,200	CFM56-7B26	United Airlines
34	737-800	28771	N24211	Jun-98	174,200	CFM56-7B26	United Airlines
35	737-800	28772	N24212	Jun-98	174,200	CFM56-7B26	United Airlines
36	737-800	28773	N27213	Jul-98	174,200	CFM56-7B26	United Airlines
37	737-800	28774	N14214	Jul-98	174,200	CFM56-7B26	United Airlines
38	737-800	28775	N26215	Aug-98	174,200	CFM56-7B26	United Airlines
39	737-800	28776	N12216	Aug-98	174,200	CFM56-7B26	United Airlines
40	737-800	28777	N16217	Jul-98	174,200	CFM56-7B26	United Airlines

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Aircraft Portfolio							
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator
41	737-800	28778	N12218	Aug-98	174,200	CFM56-7B26	United Airlines
42	737-800	28781	N14219	Aug-98	174,200	CFM56-7B26	United Airlines
43	737-800	28929	N18220	Nov-98	174,200	CFM56-7B26	United Airlines
44	737-800	28930	N12221	Dec-98	174,200	CFM56-7B26	United Airlines
45	737-800	28931	N34222	Dec-98	174,200	CFM56-7B26	United Airlines
46	737-800	28932	N18223	Dec-98	174,200	CFM56-7B26	United Airlines
47	737-800	28788	N13227	May-99	174,200	CFM56-7B26	United Airlines
48	737-800	28792	N14228	May-99	174,200	CFM56-7B26	United Airlines
49	737-800	28942	N26232	Jun-99	174,200	CFM56-7B26	United Airlines
50	737-800	28946	N16234	Aug-99	174,200	CFM56-7B26	United Airlines
51	737-800	28947	N14235	Aug-99	174,200	CFM56-7B26	United Airlines
52	737-800	28801	N35236	Sep-99	174,200	CFM56-7B26	United Airlines
53	737-800	28802	N14237	Sep-99	174,200	CFM56-7B26	United Airlines
54	737-800	28952	N14240	Oct-99	174,200	CFM56-7B26	United Airlines
55	737-800	28806	N18243	Oct-99	174,200	CFM56-7B26	United Airlines
56	737-800	28955	N17245	Nov-99	174,200	CFM56-7B26	United Airlines
57	737-800	28957	N14250	Dec-99	174,200	CFM56-7B26	United Airlines
58	737-800	30583	N37252	Sep-00	174,200	CFM56-7B26	United Airlines
59	737-800	30584	N37253	Sep-00	174,200	CFM56-7B26	United Airlines
60	737-800	30779	N76254	Sep-00	174,200	CFM56-7B26	United Airlines
61	737-800	30802	N77258	Nov-00	174,200	CFM56-7B26	United Airlines
62	737-800	30855	N35260	Jun-01	174,200	CFM56-7B26	United Airlines
63	737-800	32403	N33266	Aug-01	174,200	CFM56-7B26	United Airlines
64	737-800	31590	N36272	Nov-01	174,200	CFM56-7B26	United Airlines
65	737-800	31594	N73276	Feb-02	174,200	CFM56-7B26	United Airlines
66	737-800	31595	N37277	Mar-02	174,200	CFM56-7B26	United Airlines
67	737-800	31596	N73278	Oct-03	174,200	CFM56-7B26	United Airlines
68	737-800	31597	N79279	Nov-03	174,200	CFM56-7B26	United Airlines
69	737-800	31598	N36280	Dec-03	174,200	CFM56-7B26	United Airlines
70	737-800	31599	N37281	Dec-03	174,200	CFM56-7B26	United Airlines
71	737-800	31600	N33286	May-04	174,200	CFM56-7B26	United Airlines
72	737-800	31636	N37287	May-04	174,200	CFM56-7B26	United Airlines
73	737-800	33451	N76288	Jun-04	174,200	CFM56-7B26	United Airlines
74	737-800	31607	N33289	Jul-04	174,200	CFM56-7B26	United Airlines
75	737-800	31601	N37290	Sep-04	174,200	CFM56-7B26	United Airlines
76	737-800	33455	N33292	Dec-04	174,200	CFM56-7B26	United Airlines
77	737-800	34001	N77295	Aug-05	174,200	CFM56-7B26	United Airlines
78	737-800	34002	N77296	Sep-05	174,200	CFM56-7B26	United Airlines
79	737-800	31602	N78501	Jul-06	174,200	CFM56-7B26	United Airlines

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Aircraft Portfolio							
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator
80	737-800	31603	N76502	Aug-06	174,200	CFM56-7B26	United Airlines
81	737-800	33461	N76503	Aug-06	174,200	CFM56-7B26	United Airlines
82	737-800	31604	N76504	Aug-06	174,200	CFM56-7B26	United Airlines
83	737-800	32834	N76505	Sep-06	174,200	CFM56-7B26	United Airlines
84	737-800	32832	N78506	Oct-06	174,200	CFM56-7B26	United Airlines
85	737-800	30132	N76519	Aug-10	174,200	CFM56-7B26/3	United Airlines
86	737-800	31658	N77520	Aug-10	174,200	CFM56-7B26/3	United Airlines
87	737-800	31662	N79521	Aug-10	174,200	CFM56-7B26/3	United Airlines
88	737-800	31660	N76522	Aug-10	174,200	CFM56-7B26/3	United Airlines
89	737-800	37101	N76523	Aug-10	174,200	CFM56-7B26/3	United Airlines
90	737-800	31642	N78524	Aug-10	174,200	CFM56-7B26/3	United Airlines
91	737-800	31659	N77525	Aug-10	174,200	CFM56-7B26/3	United Airlines
92	737-800	38700	N76526	Aug-10	174,200	CFM56-7B26/3	United Airlines
93	737-800	38701	N87527	Aug-10	174,200	CFM56-7B26/3	United Airlines
94	737-900ER	37094	N27421	Apr-08	187,700	CFM56-7B26/3	United Airlines
95	737-900ER	31620	N37422	May-08	187,700	CFM56-7B26/3	United Airlines
96	737-900ER	33528	N37434	Oct-09	187,700	CFM56-7B26/3	United Airlines
97	737-900ER	33534	N57439	Aug-09	187,700	CFM56-7B26/3	United Airlines
98	737-900ER	33535	N45440	Aug-09	187,700	CFM56-7B26/3	United Airlines
99	737-900ER	30131	N53441	Sep-09	187,700	CFM56-7B26/3	United Airlines
100	737-900ER	33536	N53442	Sep-09	187,700	CFM56-7B26/3	United Airlines
101	757-200	27298	N21108	Nov-94	255,000	RB211-535E4	United Airlines
102	757-200	27299	N12109	Dec-94	255,000	RB211-535E4	United Airlines
103	757-200	27300	N13110	Dec-94	255,000	RB211-535E4	United Airlines
104	757-200	27301	N57111	Dec-94	255,000	RB211-535E4	United Airlines
105	757-200	27302	N18112	Feb-95	255,000	RB211-535E4	United Airlines
106	757-200	27555	N13113	Apr-95	255,000	RB211-535E4	United Airlines
107	757-200	27556	N12114	Jul-95	255,000	RB211-535E4	United Airlines
108	757-200	27558	N12116	Mar-96	255,000	RB211-535E4	United Airlines
109	757-200	27559	N19117	Apr-96	255,000	RB211-535E4	United Airlines
110	757-200	27560	N14118	Mar-97	255,000	RB211-535E4	United Airlines
111	757-200	27561	N18119	May-97	255,000	RB211-535E4	United Airlines
112	757-200	27562	N14120	Jun-97	255,000	RB211-535E4	United Airlines
113	757-200	27563	N14121	Jul-97	255,000	RB211-535E4	United Airlines
114	757-200	27564	N17122	Aug-97	255,000	RB211-535E4	United Airlines
115	757-200	27566	N17126	Feb-98	255,000	RB211-535E4	United Airlines
116	757-200	28968	N48127	Feb-98	255,000	RB211-535E4	United Airlines
117	757-200	27567	N17128	Mar-98	255,000	RB211-535E4	United Airlines
118	757-200	28969	N29129	Mar-98	255,000	RB211-535E4	United Airlines
119	757-200	28970	N19130	May-98	255,000	RB211-535E4	United Airlines

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Aircraft Portfolio								
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator	
120	757-200	28971	N34131	Jun-98	255,000	RB211-535E4	United Airlines	
121	757-200	29281	N33132	Jun-98	255,000	RB211-535E4	United Airlines	
122	757-200	29283	N67134	Feb-99	255,000	RB211-535E4	United Airlines	
123	757-200	29284	N41135	Feb-99	255,000	RB211-535E4	United Airlines	
124	757-200	29285	N19136	Mar-99	255,000	RB211-535E4	United Airlines	
125	757-200	30229	N34137	Nov-99	255,000	RB211-535E4	United Airlines	
126	757-200	30351	N13138	Dec-99	255,000	RB211-535E4	United Airlines	
127	757-200	30352	N17139	Feb-00	255,000	RB211-535E4	United Airlines	
128	757-200	30353	N41140	Feb-00	255,000	RB211-535E4	United Airlines	
129	757-200	30354	N19141	Jun-00	255,000	RB211-535E4	United Airlines	
130	757-300	32810	N75851	Dec-01	273,000	RB211-535E4B	United Airlines	
131	757-300	32811	N57852	Dec-01	273,000	RB211-535E4B	United Airlines	
132	757-300	32812	N75853	Feb-02	273,000	RB211-535E4B	United Airlines	
133	757-300	32813	N75854	Feb-02	273,000	RB211-535E4B	United Airlines	
134	757-300	32814	N57855	Jan-04	273,000	RB211-535E4B	United Airlines	
135	757-300	32815	N74856	Jan-04	273,000	RB211-535E4B	United Airlines	
136	757-300	32816	N57857	Feb-04	273,000	RB211-535E4B	United Airlines	
137	757-300	32817	N75858	Mar-04	273,000	RB211-535E4B	United Airlines	
138	757-300	32818	N56859	Apr-04	273,000	RB211-535E4B	United Airlines	
139	767-300ER	29236	N664UA	Jun-98	407,000	PW4056	United Airlines	
140	767-300ER	29238	N666UA	Aug-98	407,000	PW4052	United Airlines	
141	767-300ER	29239	N667UA	Aug-98	407,000	PW4056	United Airlines	
142	767-300ER	30024	N668UA	Mar-99	407,000	PW4056	United Airlines	
143	767-300ER	30025	N669UA	Jun-99	407,000	PW4056	United Airlines	
144	767-300ER	29240	N670UA	Aug-99	407,000	PW4056	United Airlines	
145	767-300ER	30026	N671UA	Oct-99	407,000	PW4056	United Airlines	
146	767-300ER	29241	N673UA	Jan-00	407,000	PW4052	United Airlines	
147	767-300ER	29242	N674UA	Apr-00	407,000	PW4052	United Airlines	
148	767-300ER	29243	N675UA	Aug-00	407,000	PW4056	United Airlines	
149	767-300ER	30028	N676UA	Apr-01	407,000	PW4056	United Airlines	
150	767-300ER	33466	N684UA	Sep-02	407,000	PW4060	United Airlines	
151	767-300ER	33467	N685UA	Nov-02	407,000	PW4060	United Airlines	
152	767-300ER	33468	N686UA	Jan-03	407,000	PW4060	United Airlines	
153	767-400ER	29446	N66051	Aug-00	450,000	CF6-80C2B	United Airlines	
154	767-400ER	29447	N67052	Sep-00	450,000	CF6-80C2B	United Airlines	
155	767-400ER	29448	N59053	Oct-00	450,000	CF6-80C2B	United Airlines	
156	767-400ER	29451	N66056	Jun-01	450,000	CF6-80C2B	United Airlines	
157	767-400ER	29452	N66057	Jan-02	450,000	CF6-80C2B	United Airlines	

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			Airc	raft Portfolio								
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator					
158	767-400ER	29453	N67058	Jan-02	450,000	CF6-80C2B	United Airlines					
159	767-400ER	29454	N69059	Feb-02	450,000	CF6-80C2B	United Airlines					
160	767-400ER	29455	N78060	Feb-02	450,000	CF6-80C2B	United Airlines					
161	767-400ER	29456	N68061	Mar-02	450,000	CF6-80C2B	United Airlines					
162	767-400ER	29457	N76062	Mar-02	450,000	CF6-80C2B	United Airlines					
163	767-400ER	29458	N69063	Apr-02	450,000	CF6-80C2B	United Airlines					
164	767-400ER	29459	N76064	Apr-02	450,000	CF6-80C2B	United Airlines					
165	767-400ER	29460	N76065	May-02	450,000	CF6-80C2B	United Airlines					
166	767-400ER	29461	N77066	May-02	450,000	CF6-80C2B	United Airlines					
167	777-200	30216	N210UA	Jan-00	545,000	PW4077	United Airlines					
168	777-200	30221	N215UA	Aug-00	545,000	PW4077	United Airlines					
169	777-200	26919	N768UA	Jun-95	545,000	PW4077	United Airlines					
170	777-200	26921	N769UA	Jun-95	545,000	PW4077	United Airlines					
171	777-200	26932	N771UA	Nov-95	545,000	PW4077	United Airlines					
172	777-200	26930	N772UA	Sep-95	545,000	PW4077	United Airlines					
173	777-200	26929	N773UA	Jan-96	545,000	PW4077	United Airlines					
174	777-200	26936	N774UA	Mar-96	545,000	PW4077	United Airlines					
175	777-200	26947	N775UA	Jan-96	545,000	PW4077	United Airlines					
176	777-200	26937	N776UA	Apr-96	545,000	PW4077	United Airlines					
177	777-200	26916	N777UA	May-95	545,000	PW4077	United Airlines					
178	777-200	26940	N778UA	Jul-96	545,000	PW4077	United Airlines					
179	777-200	26941	N779UA	Jul-96	545,000	PW4077	United Airlines					
180	777-200	26944	N780UA	Aug-96	545,000	PW4077	United Airlines					
181	777-200	26945	N781UA	Sep-96	545,000	PW4077	United Airlines					
182	777-200ER	27577	N78001	Sep-98	656,000	GE90-90B	United Airlines					
183	777-200ER	27578	N78002	Sep-98	656,000	GE90-90B	United Airlines					
184	777-200ER	27579	N78003	Nov-98	656,000	GE90-90B	United Airlines					
185	777-200ER	27580	N78004	Nov-98	656,000	GE90-90B	United Airlines					
186	777-200ER	27581	N78005	Dec-98	656,000	GE90-90B	United Airlines					
187	777-200ER	29476	N77006	Dec-98	656,000	GE90-90B	United Airlines					
188	777-200ER	29477	N74007	Feb-99	656,000	GE90-90B	United Airlines					
189	777-200ER	29478	N78008	Mar-99	656,000	GE90-90B	United Airlines					
190	777-200ER	29479	N78009	Apr-99	656,000	GE90-90B	United Airlines					
191	777-200ER	29480	N76010	May-99	656,000	GE90-90B	United Airlines					
192	777-200ER	29859	N79011	Jun-99	656,000	GE90-90B	United Airlines					
193	777-200ER	29861	N78013	Sep-99	656,000	GE90-90B	United Airlines					
194	777-200ER	28678	N27015	Apr-00	656,000	GE90-90B	United Airlines					
195	777-200ER	28679	N57016	May-00	656,000	GE90-90B	United Airlines					

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	Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator					
196	777-200ER	31679	N78017	Mar-02	656,000	GE90-90B	United Airlines					
197	777-200ER	31680	N37018	Apr-02	656,000	GE90-90B	United Airlines					
198	777-200ER	35547	N77019	Mar-07	656,000	GE90-90B	United Airlines					
199	777-200ER	31687	N69020	Apr-07	656,000	GE90-90B	United Airlines					
200	777-200ER	39776	N76021	Jul-10	656,000	GE90-90B	United Airlines					
201	777-200ER	39777	N77022	Jul-10	656,000	GE90-90B	United Airlines					
202	777-200ER	28713	N204UA	Feb-99	648,000	PW4090	United Airlines					
203	777-200ER	30212	N206UA	May-99	648,000	PW4090	United Airlines					
204	777-200ER	30215	N209UA	Dec-99	648,000	PW4090	United Airlines					
205	777-200ER	30222	N218UA	Jan-01	648,000	PW4090	United Airlines					
206	777-200ER	30551	N219UA	Jan-01	648,000	PW4090	United Airlines					
207	777-200ER	30223	N220UA	May-01	648,000	PW4090	United Airlines					
208	777-200ER	30552	N221UA	Jun-01	648,000	PW4090	United Airlines					
209	777-200ER	30553	N222UA	Jul-01	648,000	PW4090	United Airlines					
210	777-200ER	30225	N224UA	Dec-01	648,000	PW4090	United Airlines					
211	777-200ER	30554	N225UA	Dec-01	648,000	PW4090	United Airlines					
212	777-200ER	30226	N226UA	Jan-02	648,000	PW4090	United Airlines					
213	777-200ER	30555	N227UA	Jan-02	648,000	PW4090	United Airlines					
214	777-200ER	26948	N782UA	Mar-97	648,000	PW4090	United Airlines					
215	777-200ER	26950	N783UA	Mar-97	648,000	PW4090	United Airlines					
216	777-200ER	26951	N784UA	Apr-97	648,000	PW4090	United Airlines					
217	777-200ER	26954	N785UA	May-97	648,000	PW4090	United Airlines					
218	777-200ER	26938	N786UA	Apr-97	648,000	PW4090	United Airlines					
219	777-200ER	26939	N787UA	Jun-97	648,000	PW4090	United Airlines					
220	777-200ER	26942	N788UA	Jul-97	648,000	PW4090	United Airlines					
221	777-200ER	26933	N791UA	Aug-97	648,000	PW4090	United Airlines					
222	777-200ER	26934	N792UA	Sep-97	648,000	PW4090	United Airlines					
223	777-200ER	26946	N793UA	Oct-97	648,000	PW4090	United Airlines					
224	777-200ER	26953	N794UA	Nov-97	648,000	PW4090	United Airlines					
225	777-200ER	26927	N795UA	Dec-97	648,000	PW4090	United Airlines					
226	777-200ER	26931	N796UA	Jan-98	648,000	PW4090	United Airlines					
227	777-200ER	26924	N797UA	Feb-98	648,000	PW4090	United Airlines					
228	777-200ER	26928	N798UA	Feb-98	648,000	PW4090	United Airlines					
229	777-200ER	26926	N799UA	May-98	648,000	PW4090	United Airlines					
230	A319-100	686	N801UA	Jun-97	166,400	V2522-A5	United Airlines					
231	A319-100	690	N802UA	Jun-97	166,400	V2522-A5	United Airlines					
232	A319-100	0748	N803UA	Nov-97	166,400	V2522-A5	United Airlines					
233	A319-100	0759	N804UA	Dec-97	166,400	V2522-A5	United Airlines					

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	Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator					
234	A319-100	0783	N805UA	Feb-98	166,400	V2522-A5	United Airlines					
235	A319-100	0788	N806UA	Feb-98	166,400	V2522-A5	United Airlines					
236	A319-100	0798	N807UA	Mar-98	166,400	V2522-A5	United Airlines					
237	A319-100	0804	N808UA	Mar-98	166,400	V2522-A5	United Airlines					
238	A319-100	0825	N809UA	May-98	166,400	V2522-A5	United Airlines					
239	A319-100	0843	N810UA	Jun-98	166,400	V2522-A5	United Airlines					
240	A319-100	0847	N811UA	Jul-98	166,400	V2522-A5	United Airlines					
241	A319-100	0850	N812UA	Jul-98	166,400	V2522-A5	United Airlines					
242	A319-100	0858	N813UA	Jul-98	166,400	V2522-A5	United Airlines					
243	A319-100	0862	N814UA	Aug-98	166,400	V2522-A5	United Airlines					
244	A319-100	0867	N815UA	Aug-98	166,400	V2522-A5	United Airlines					
245	A319-100	0871	N816UA	Sep-98	166,400	V2522-A5	United Airlines					
246	A319-100	0873	N817UA	Sep-98	166,400	V2522-A5	United Airlines					
247	A319-100	0882	N818UA	Oct-98	166,400	V2522-A5	United Airlines					
248	A319-100	0893	N819UA	Oct-98	166,400	V2522-A5	United Airlines					
249	A319-100	0898	N820UA	Oct-98	166,400	V2522-A5	United Airlines					
250	A319-100	0944	N821UA	Jan-99	166,400	V2522-A5	United Airlines					
251	A319-100	0948	N822UA	Feb-99	166,400	V2522-A5	United Airlines					
252	A319-100	0952	N823UA	Feb-99	166,400	V2522-A5	United Airlines					
253	A319-100	0965	N824UA	Feb-99	166,400	V2522-A5	United Airlines					
254	A319-100	0980	N825UA	Mar-99	166,400	V2522-A5	United Airlines					
255	A319-100	0989	N826UA	Mar-99	166,400	V2522-A5	United Airlines					
256	A319-100	1022	N827UA	May-99	166,400	V2522-A5	United Airlines					
257	A319-100	1031	N828UA	Jun-99	166,400	V2522-A5	United Airlines					
258	A319-100	1211	N829UA	Apr-00	166,400	V2522-A5	United Airlines					
259	A319-100	1243	N830UA	Jun-00	166,400	V2522-A5	United Airlines					
260	A319-100	1291	N831UA	Aug-00	166,400	V2522-A5	United Airlines					
261	A319-100	1321	N832UA	Sep-00	166,400	V2522-A5	United Airlines					
262	A319-100	1401	N833UA	Jan-01	166,400	V2522-A5	United Airlines					
263	A319-100	1420	N834UA	Feb-01	166,400	V2522-A5	United Airlines					
264	A319-100	1426	N835UA	Feb-01	166,400	V2522-A5	United Airlines					
265	A319-100	1460	N836UA	Mar-01	166,400	V2522-A5	United Airlines					
266	A319-100	1474	N837UA	Apr-01	166,400	V2522-A5	United Airlines					
267	A319-100	1477	N838UA	Apr-01	166,400	V2522-A5	United Airlines					
268	A319-100	1507	N839UA	May-01	166,400	V2522-A5	United Airlines					
269	A319-100	1522	N840UA	Jun-01	166,400	V2522-A5	United Airlines					
270	A319-100	1545	N841UA	Jul-01	166,400	V2522-A5	United Airlines					
271	A319-100	1569	N842UA	Sep-01	166,400	V2522-A5	United Airlines					

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	Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator					
272	A319-100	1573	N843UA	Aug-01	166,400	V2522-A5	United Airlines					
273	A319-100	1581	N844UA	Nov-01	166,400	V2522-A5	United Airlines					
274	A319-100	1585	N845UA	Nov-01	166,400	V2522-A5	United Airlines					
275	A319-100	1600	N846UA	Nov-01	166,400	V2522-A5	United Airlines					
276	A319-100	1627	N847UA	Nov-01	166,400	V2522-A5	United Airlines					
277	A319-100	1647	N848UA	Jan-02	166,400	V2522-A5	United Airlines					
278	A319-100	1649	N849UA	Feb-02	166,400	V2522-A5	United Airlines					
279	A319-100	1653	N850UA	Feb-02	166,400	V2522-A5	United Airlines					
280	A319-100	1664	N851UA	Mar-02	166,400	V2522-A5	United Airlines					
281	A319-100	1671	N852UA	Mar-02	166,400	V2522-A5	United Airlines					
282	A320-200	2714	N1902U	Feb-06	169,700	V2527-A5	United Airlines					
283	A320-200	504	N423UA	Feb-95	169,700	V2527-A5	United Airlines					
284	A320-200	506	N424UA	Feb-95	169,700	V2527-A5	United Airlines					
285	A320-200	508	N425UA	Mar-95	169,700	V2527-A5	United Airlines					
286	A320-200	510	N426UA	Mar-95	169,700	V2527-A5	United Airlines					
287	A320-200	512	N427UA	Apr-95	169,700	V2527-A5	United Airlines					
288	A320-200	523	N428UA	May-95	169,700	V2527-A5	United Airlines					
289	A320-200	539	N429UA	Jun-95	169,700	V2527-A5	United Airlines					
290	A320-200	568	N430UA	Feb-96	169,700	V2527-A5	United Airlines					
291	A320-200	571	N431UA	Mar-96	169,700	V2527-A5	United Airlines					
292	A320-200	587	N432UA	May-96	169,700	V2527-A5	United Airlines					
293	A320-200	589	N433UA	Jun-96	169,700	V2527-A5	United Airlines					
294	A320-200	592	N434UA	Jun-96	169,700	V2527-A5	United Airlines					
295	A320-200	613	N435UA	Sep-96	169,700	V2527-A5	United Airlines					
296	A320-200	638	N436UA	Dec-96	169,700	V2527-A5	United Airlines					
297	A320-200	655	N437UA	Feb-97	169,700	V2527-A5	United Airlines					
298	A320-200	678	N438UA	May-97	169,700	V2527-A5	United Airlines					
299	A320-200	683	N439UA	Jun-97	169,700	V2527-A5	United Airlines					
300	A320-200	702	N440UA	Jul-97	169,700	V2527-A5	United Airlines					
301	A320-200	751	N441UA	Dec-97	169,700	V2527-A5	United Airlines					
302	A320-200	780	N442UA	Feb-98	169,700	V2527-A5	United Airlines					
303	A320-200	820	N443UA	May-98	169,700	V2527-A5	United Airlines					
304	A320-200	824	N444UA	May-98	169,700	V2527-A5	United Airlines					
305	A320-200	826	N445UA	Jun-98	169,700	V2527-A5	United Airlines					
306	A320-200	834	N446UA	Jun-98	169,700	V2527-A5	United Airlines					
307	A320-200	836	N447UA	Jul-98	169,700	V2527-A5	United Airlines					
308	A320-200	842	N448UA	Jul-98	169,700	V2527-A5	United Airlines					
309	A320-200	851	N449UA	Jul-98	169,700	V2527-A5	United Airlines					

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Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator				
310	A320-200	865	N451UA	Sep-98	169,700	V2527-A5	United Airlines				
311	A320-200	0955	N452UA	Mar-99	169,700	V2527-A5	United Airlines				
312	A320-200	1001	N453UA	Apr-99	169,700	V2527-A5	United Airlines				
313	A320-200	1104	N454UA	Nov-99	169,700	V2527-A5	United Airlines				
314	A320-200	1105	N455UA	Nov-99	169,700	V2527-A5	United Airlines				
315	A320-200	1128	N456UA	Dec-99	169,700	V2527-A5	United Airlines				
316	A320-200	1146	N457UA	Jan-00	169,700	V2527-A5	United Airlines				
317	A320-200	1163	N458UA	Feb-00	169,700	V2527-A5	United Airlines				
318	A320-200	1192	N459UA	Apr-00	169,700	V2527-A5	United Airlines				
319	A320-200	1248	N460UA	Jun-00	169,700	V2527-A5	United Airlines				
320	A320-200	1266	N461UA	Jul-00	169,700	V2527-A5	United Airlines				
321	A320-200	1272	N462UA	Jul-00	169,700	V2527-A5	United Airlines				
322	A320-200	1282	N463UA	Aug-00	169,700	V2527-A5	United Airlines				
323	A320-200	1290	N464UA	Aug-00	169,700	V2527-A5	United Airlines				
324	A320-200	1341	N465UA	Nov-00	169,700	V2527-A5	United Airlines				
325	A320-200	1343	N466UA	Nov-00	169,700	V2527-A5	United Airlines				
326	A320-200	1359	N467UA	Dec-00	169,700	V2527-A5	United Airlines				
327	A320-200	1363	N468UA	Dec-00	169,700	V2527-A5	United Airlines				
328	A320-200	1409	N469UA	Feb-01	169,700	V2527-A5	United Airlines				
329	A320-200	1427	N470UA	Mar-01	169,700	V2527-A5	United Airlines				
330	A320-200	1432	N471UA	Mar-01	169,700	V2527-A5	United Airlines				
331	A320-200	1435	N472UA	Apr-01	169,700	V2527-A5	United Airlines				
332	A320-200	1469	N473UA	May-01	169,700	V2527-A5	United Airlines				
333	A320-200	1475	N474UA	May-01	169,700	V2527-A5	United Airlines				
334	A320-200	1495	N475UA	Jun-01	169,700	V2527-A5	United Airlines				
335	A320-200	1508	N476UA	Jul-01	169,700	V2527-A5	United Airlines				
336	A320-200	1514	N477UA	Jul-01	169,700	V2527-A5	United Airlines				
337	A320-200	1533	N478UA	Aug-01	169,700	V2527-A5	United Airlines				
338	A320-200	1538	N479UA	Aug-01	169,700	V2527-A5	United Airlines				
339	A320-200	1555	N480UA	Sep-01	169,700	V2527-A5	United Airlines				
340	A320-200	1620	N486UA	Dec-01	169,700	V2527-A5	United Airlines				
341	A320-200	1669	N487UA	Jan-02	169,700	V2527-A5	United Airlines				
342	A320-200	1680	N488UA	Feb-02	169,700	V2527-A5	United Airlines				
343	A320-200	2680	N4901U	Feb-06	169,700	V2527-A5	United Airlines				
344	A320-200	1728	N490UA	Apr-02	169,700	V2527-A5	United Airlines				
345	A320-200	1741	N491UA	Apr-02	169,700	V2527-A5	United Airlines				
346	A320-200	1755	N492UA	Apr-02	169,700	V2527-A5	United Airlines				
347	A320-200	1821	N493UA	Jul-02	169,700	V2527-A5	United Airlines				

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	Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator					
348	A320-200	1840	N494UA	Sep-02	169,700	V2527-A5	United Airlines					
349	A320-200	1842	N495UA	Aug-02	169,700	V2527-A5	United Airlines					
350	A320-200	1845	N496UA	Sep-02	169,700	V2527-A5	United Airlines					
351	A320-200	1847	N497UA	Sep-02	169,700	V2527-A5	United Airlines					
352	A320-200	1865	N498UA	Oct-02	169,700	V2527-A5	United Airlines					
353	CF6-80C2B8F	706368		Oct-01		CF6-80C2B8F	United Airlines					
354	CF6-80C2B8F	706439		Jul-00		CF6-80C2B8F	United Airlines					
355	CF6-80C2B8F	706323		May-01		CF6-80C2B8F	United Airlines					
356	CFM56-7B24	890202		Aug-02		CFM56-7B26	United Airlines					
357	CFM56-7B24	890307		Oct-02		CFM56-7B26	United Airlines					
358	CFM56-7B24	890418		Mar-03		CFM56-7B26	United Airlines					
359	CFM56-7B24	890436		Apr-03		CFM56-7B26	United Airlines					
360	CFM56-7B24	874219		Jan-98		CFM56-7B24	United Airlines					
361	CFM56-7B24	874792		May-99		CFM56-7B26	United Airlines					
362	CFM56-7B24	876266		Mar-00		CFM56-7B26	United Airlines					
363	CFM56-7B24	876563		Sep-00		CFM56-7B26	United Airlines					
364	CFM56-7B24	889320		Sep-01		CFM56-7B24	United Airlines					
365	CFM56-7B26	890452		May-03		CFM56-7B26	United Airlines					
366	CFM56-7B26	890516		Jun-03		CFM56-7B26	United Airlines					
367	CFM56-7B26	890612		Sep-03		CFM56-7B26	United Airlines					
368	CFM56-7B26	890652		Oct-03		CFM56-7B24	United Airlines					
369	CFM56-7B26	890684		Dec-03		CFM56-7B26	United Airlines					
370	CFM56-7B26	890775		Mar-04		CFM56-7B26	United Airlines					
371	CFM56-7B26	874336		Jul-98		CFM56-7B26	United Airlines					
372	CFM56-7B26	876213		Dec-99		CFM56-7B26	United Airlines					
373	CFM56-7B26	876633		Sep-00		CFM56-7B26	United Airlines					
374	CFM56-7B26	888436		May-01		CFM56-7B24	United Airlines					
375	CFM56-7B26	888868		Jan-02		CFM56-7B24	United Airlines					
376	CFM56-7B26	890339		Dec-02		CFM56-7B26	United Airlines					
377	CFM56-7B26E	660372		Sep-14		CFM56-7B26E	United Airlines					
378	CFM56-7B26E	862250		Jun-15		CFM56-7B26E	United Airlines					
379	CFM56-7B26E	862937		Feb-16		CFM56-7B26/3	United Airlines					
380	CFM56-7B26E	660119		Jun-14		CFM56-7B26E	United Airlines					
381	CFM56-7B26E	660170		Jun-14		CFM56-7B26E	United Airlines					
382	GE90-115B	901480		Oct-19		GE90-115B	United Airlines					
383	GE90-115B	901096		Nov-16		GE90-115B	United Airlines					
384	GE90-115B	901281		Nov-17		GE90-115B	United Airlines					
385	GE90-90B	900272		Dec-98		GE90-90B	United Airlines					

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Aircraft Portfolio											
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator				
386	GE90-90B	900352		Sep-01		GE90-90B	United Airlines				
387	GE90-90B	900361		Oct-01		GE90-90B	United Airlines				
388	GE90-90B	900392		Sep-02		GE90-90B	United Airlines				
389	GE90-90B	900242		Aug-98		GE90-90B	United Airlines				
390	GE90-90B	900325		Jan-00		GE90-90B	United Airlines				
391	GEnx-1B70	956883		Jan-17		1B74/75/P2G01	United Airlines				
392	GEnx-1B70	956912		Mar-17		1B70/P2G02	United Airlines				
393	GEnx-1B70	958090		Mar-18		1B74/75/P2G01	United Airlines				
394	GEnx-1B70	958338		Mar-19		1B76/P2G01	United Airlines				
395	GEnx-1B70	958576		Mar-20		1B70/P2G02	United Airlines				
396	GEnx-1B70	956295		Dec-13		1B70/P2G02	United Airlines				
397	GEnx-1B70	956322		Dec-13		1B74/75/P2G01	United Airlines				
398	GEnx-1B70	956515		Mar-15		1B74/75/P2G01	United Airlines				
399	GEnx-1B70	956679		Dec-15		1B70/P2G02	United Airlines				
400	LEAP-1B26/28	603331		Apr-19		LEAP-1B26/28	United Airlines				
401	LEAP-1B26/28	602853		Sep-18		LEAP-1B26/28	United Airlines				
402	LEAP-1B26/28	602518		Apr-18		LEAP-1B26/28	United Airlines				
403	PW4056	727787		Jun-98		PW4056	United Airlines				
404	PW4056	727948		Oct-99		PW4056	United Airlines				
405	PW4056	727569		Mar-96		PW4056	United Airlines				
406	PW4077	P222309		Feb-15		PW4077	United Airlines				
407	PW4077	P222310		Dec-14		PW4077	United Airlines				
408	PW4077	P222311		Feb-15		PW4077	United Airlines				
409	PW4077	222258		Apr-07		PW4077	United Airlines				
410	PW4077	777067		Feb-97		PW4077	United Airlines				
411	PW4077	P222308		Nov-14		PW4077	United Airlines				
412	PW4090	222067		May-98		PW4090	United Airlines				
413	PW4090	222068		May-98		PW4090	United Airlines				
414	PW4090	222099		Mar-99		PW4090	United Airlines				
415	PW4090	222108		Jul-15		PW4090	United Airlines				
416	PW4090	222182		Dec-01		PW4090	United Airlines				
417	PW4090	222215		Jun-18		PW4090	United Airlines				
418	PW4090	222225		Dec-12		PW4090	United Airlines				
419	PW4090	222254		May-17		PW4090	United Airlines				
420	PW4090	222022		Jun-16		PW4090	United Airlines				
421	PW4090	222025		May-97		PW4090	United Airlines				
422	PW4090	222035		Apr-16		PW4090	United Airlines				
423	PW4090	222036		Jan-16		PW4090	United Airlines				

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	Aircraft Portfolio												
No.	Aircraft Type	Serial Number	Registration	Manufacture Date	MTOW (lbs)	Engine Type	Operator						
424	PW4090	222037		Jun-16		PW4090	United Airlines						
425	PW4090	222043		May-98		PW4090	United Airlines						
426	PW4090	222048		Oct-97		PW4090	United Airlines						
427	PW4090	222056		Jan-98		PW4090	United Airlines						
428	RB211-535E4B	31572		Jun-98		RB211-535E4B	United Airlines						
429	RB211-535E4B	E31620		Jan-99		RB211-535E4B	United Airlines						
430	RB211-535E4B	31655		Jun-99		RB211-535E4B	United Airlines						
431	RB211-535E4B	31849		Dec-01		RB211-535E4B	United Airlines						
432	RB211-535E4B	31884		Dec-03		RB211-535E4B	United Airlines						
433	RB211-535E4B	31900		Oct-04		RB211-535E4B	United Airlines						
434	RB211-535E4B	31378		Jun-95		RB211-535E4B	United Airlines						
435	RB211-535E4B	31379		Jun-95		RB211-535E4B	United Airlines						
436	RB211-535E4B	31412		May-96		RB211-535E4B	United Airlines						
437	RB211-535E4B	31515		Oct-97		RB211-535E4B	United Airlines						
438	V2522-A5	V10327		Mar-98		V2527A5	United Airlines						
439	V2522-A5	V10824		Mar-01		V2527A5	United Airlines						
440	V2522-A5	V11050		Aug-01		V2522-A5	United Airlines						
441	V2522-A5	V10232		Jun-97		V2522-A5	United Airlines						
442	V2522-A5	V10316		Feb-98		V2527A5	United Airlines						
443	V2524-A5	V12173		Aug-18		V2524-A5	United Airlines						
444	V2524-A5	V11807		Aug-18		V2527A5	United Airlines						
445	V2527-A5	V11395		Mar-17		V2524A5	United Airlines						
446	V2527-A5	V12083		Sep-96		V2527-A5	United Airlines						
447	V2527-A5	V12169		Dec-05		V2527-A5	United Airlines						
448	V2527-A5	V12521		Feb-07		V2527-A5	United Airlines						
449	V2527-A5	V10167		Jun-96		V2527-A5	United Airlines						
450	V2527-A5	V10372		May-98		V2527-A5	United Airlines						
451	V2524A5	V11394		Mar-17		V2524A5	United Airlines						

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	Double lie Melvediene												
	Portfolio Valuations (US\$ Million)												
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
1	737-700	28766	\$7.95	\$0.00	\$0.20	\$0.15	\$0.35	\$8.65	110.1%	\$9.52	(\$2.56)	\$6.09	\$6.96
2	737-700	28767	\$7.95	\$0.00	\$0.20	\$0.15	\$0.35	\$8.65	110.1%	\$9.52	(\$3.77)	\$4.88	\$5.75
3	737-700	28768	\$7.95	\$0.00	\$0.20	\$0.15	\$0.35	\$8.65	110.1%	\$9.52	(\$0.35)	\$8.30	\$9.17
4	737-700	28769	\$8.00	\$0.00	\$0.20	\$0.15	\$0.35	\$8.70	110.1%	\$9.57	(\$0.40)	\$8.30	\$9.17
5	737-700	28779	\$8.09	\$0.00	\$0.20	\$0.15	\$0.35	\$8.79	110.1%	\$9.67	(\$1.83)	\$6.96	\$7.84
6	737-700	28780	\$8.09	\$0.00	\$0.20	\$0.15	\$0.35	\$8.79	110.1%	\$9.67	\$1.57	\$10.36	\$11.24
7	737-700	28782	\$8.14	\$0.00	\$0.20	\$0.15	\$0.35	\$8.84	110.1%	\$9.73	\$0.80	\$9.64	\$10.53
8	737-700	28783	\$8.14	\$0.00	\$0.20	\$0.15	\$0.35	\$8.84	110.1%	\$9.73	(\$2.86)	\$5.98	\$6.87
9	737-700	28785	\$8.14	\$0.00	\$0.20	\$0.15	\$0.35	\$8.84	110.1%	\$9.73	(\$4.40)	\$4.44	\$5.33
10	737-700	28786	\$8.19	\$0.00	\$0.20	\$0.15	\$0.35	\$8.89	110.1%	\$9.78	(\$0.46)	\$8.43	\$9.32
11	737-700	28787	\$8.28	\$0.00	\$0.20	\$0.15	\$0.35	\$8.98	110.1%	\$9.88	(\$2.86)	\$6.12	\$7.02
12	737-700	28936	\$8.33	\$0.00	\$0.20	\$0.15	\$0.35	\$9.03	107.4%	\$9.70	(\$0.82)	\$8.21	\$8.88
13	737-700	28937	\$8.33	\$0.00	\$0.20	\$0.15	\$0.35	\$9.03	107.4%	\$9.70	(\$3.59)	\$5.44	\$6.11
14	737-700	28938	\$8.38	\$0.00	\$0.20	\$0.15	\$0.35	\$9.08	107.4%	\$9.76	(\$4.57)	\$4.51	\$5.19
15	737-700	28939	\$8.38	\$0.00	\$0.20	\$0.15	\$0.00	\$8.73	107.4%	\$9.38	(\$0.64)	\$8.09	\$8.74
16	737-700	28940	\$8.43	\$0.00	\$0.20	\$0.15	\$0.35	\$9.13	107.4%	\$9.81	(\$3.33)	\$5.80	\$6.48
17	737-700	28789	\$8.48	\$0.00	\$0.20	\$0.15	\$0.35	\$9.18	107.4%	\$9.86	\$1.32	\$10.50	\$11.18
18	737-700	28790	\$8.48	\$0.00	\$0.20	\$0.15	\$0.35	\$9.18	107.4%	\$9.86	(\$3.44)	\$5.74	\$6.42
19	737-700	28944	\$8.64	\$0.00	\$0.20	\$0.15	\$0.35	\$9.34	107.4%	\$10.04	(\$2.54)	\$6.80	\$7.50
20	737-700	28945	\$8.64	\$0.00	\$0.20	\$0.15	\$0.35	\$9.34	107.4%	\$10.04	(\$3.49)	\$5.85	\$6.55
21	737-700	28799	\$8.69	\$0.00	\$0.20	\$0.15	\$0.35	\$9.39	107.4%	\$10.09	(\$1.95)	\$7.44	\$8.14
22	737-700	28948	\$8.69	\$0.00	\$0.20	\$0.15	\$0.35	\$9.39	107.4%	\$10.09	(\$2.67)	\$6.72	\$7.42
23	737-700	28800	\$8.74	\$0.00	\$0.20	\$0.15	\$0.35	\$9.44	107.4%	\$10.14	(\$1.51)	\$7.93	\$8.63
24	737-700	28949	\$8.74	\$0.00	\$0.20	\$0.15	\$0.00	\$9.09	107.4%	\$9.77	(\$1.80)	\$7.29	\$7.97
25	737-700	28950	\$8.74	\$0.00	\$0.20	\$0.15	\$0.00	\$9.09	107.4%	\$9.77	\$0.73	\$9.82	\$10.50
26	737-700	28803	\$8.74	\$0.00	\$0.20	\$0.15	\$0.00	\$9.09	107.4%	\$9.77	(\$1.65)	\$7.44	\$8.12

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	Portfolio Valuations												
						(US\$ I	Million)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
27	737-700	29047	\$8.43	\$0.00	\$0.20	\$0.15	\$0.00	\$8.78	107.4%	\$9.43	(\$3.65)	\$5.13	\$5.78
28	737-700	29048	\$8.53	\$0.00	\$0.20	\$0.15	\$0.00	\$8.88	107.4%	\$9.54	(\$2.71)	\$6.17	\$6.83
29	737-700	32679	\$12.13	\$0.00	(\$0.20)	\$0.00	\$0.00	\$11.93	94.6%	\$11.29	\$6.78	\$18.71	\$18.07
30	737-700	32653	\$12.41	\$0.00	(\$0.20)	\$0.00	\$0.00	\$12.21	94.6%	\$11.55	\$5.81	\$18.02	\$17.36
31	737-800	28958	\$12.16	\$0.00	(\$0.20)	\$0.15	\$0.00	\$12.11	97.8%	\$11.85	(\$0.12)	\$11.99	\$11.73
32	737-800	30581	\$12.73	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.03	96.5%	\$12.57	(\$2.94)	\$10.09	\$9.63
33	737-800	28770	\$11.00	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.30	99.0%	\$11.18	(\$2.30)	\$9.00	\$8.88
34	737-800	28771	\$11.00	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.30	99.0%	\$11.18	(\$2.81)	\$8.49	\$8.37
35	737-800	28772	\$11.00	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.30	99.0%	\$11.18	\$2.91	\$14.21	\$14.09
36	737-800	28773	\$11.06	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.36	99.0%	\$11.24	\$0.54	\$11.90	\$11.78
37	737-800	28774	\$11.06	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.36	99.0%	\$11.24	(\$1.10)	\$10.26	\$10.14
38	737-800	28775	\$11.12	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.42	99.0%	\$11.30	(\$2.61)	\$8.81	\$8.69
39	737-800	28776	\$11.12	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.42	99.0%	\$11.30	(\$0.79)	\$10.63	\$10.51
40	737-800	28777	\$11.06	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.36	99.0%	\$11.24	(\$0.04)	\$11.32	\$11.20
41	737-800	28778	\$11.12	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.42	99.0%	\$11.30	\$4.80	\$16.22	\$16.10
42	737-800	28781	\$11.12	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.42	99.0%	\$11.30	\$0.75	\$12.17	\$12.05
43	737-800	28929	\$11.31	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.61	99.0%	\$11.49	(\$1.14)	\$10.47	\$10.35
44	737-800	28930	\$11.37	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.67	99.0%	\$11.55	\$0.90	\$12.57	\$12.45
45	737-800	28931	\$11.37	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.67	99.0%	\$11.55	(\$2.35)	\$9.32	\$9.20
46	737-800	28932	\$11.37	\$0.00	(\$0.20)	\$0.15	\$0.35	\$11.67	99.0%	\$11.55	(\$0.67)	\$11.00	\$10.88
47	737-800	28788	\$11.70	\$0.00	(\$0.20)	\$0.15	\$0.00	\$11.65	97.8%	\$11.40	(\$1.28)	\$10.37	\$10.12
48	737-800	28792	\$11.70	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.00	97.8%	\$11.74	(\$1.91)	\$10.09	\$9.83
49	737-800	28942	\$11.76	\$0.00	(\$0.20)	\$0.15	\$0.00	\$11.71	97.8%	\$11.45	(\$0.36)	\$11.35	\$11.09
50	737-800	28946	\$11.90	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.20	97.8%	\$11.93	\$1.95	\$14.15	\$13.88
51	737-800	28947	\$11.90	\$0.00	(\$0.20)	\$0.15	\$0.00	\$11.85	97.8%	\$11.59	\$2.71	\$14.56	\$14.30
52	737-800	28801	\$11.96	\$0.00	(\$0.20)	\$0.15	\$0.00	\$11.91	97.8%	\$11.65	(\$2.13)	\$9.78	\$9.52

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	Portfolio Valuations												
					P	US\$ N		15					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	HT CBV	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
53	737-800	28802	\$11.96	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.26	97.8%	\$11.99	\$0.32	\$12.58	\$12.31
54	737-800	28952	\$12.03	\$0.00	(\$0.20)	\$0.15	\$0.00	\$11.98	97.8%	\$11.72	(\$0.90)	\$11.08	\$10.82
55	737-800	28806	\$12.03	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.33	97.8%	\$12.06	(\$0.40)	\$11.93	\$11.66
56	737-800	28955	\$12.10	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.40	97.8%	\$12.13	(\$1.09)	\$11.31	\$11.04
57	737-800	28957	\$12.16	\$0.00	(\$0.20)	\$0.15	\$0.35	\$12.46	97.8%	\$12.19	(\$2.69)	\$9.77	\$9.50
58	737-800	30583	\$12.80	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.10	96.5%	\$12.64	\$0.90	\$14.00	\$13.54
59	737-800	30584	\$12.80	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.10	96.5%	\$12.64	(\$1.95)	\$11.15	\$10.69
60	737-800	30779	\$12.80	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.10	96.5%	\$12.64	(\$1.99)	\$11.11	\$10.65
61	737-800	30802	\$12.94	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.24	96.5%	\$12.77	\$3.90	\$17.14	\$16.67
62	737-800	30855	\$13.46	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.76	95.3%	\$13.11	\$5.14	\$18.90	\$18.25
63	737-800	32403	\$13.61	\$0.00	(\$0.20)	\$0.15	\$0.35	\$13.91	95.3%	\$13.25	(\$0.65)	\$13.26	\$12.60
64	737-800	31590	\$13.84	\$0.00	(\$0.20)	\$0.15	\$0.35	\$14.14	95.3%	\$13.47	\$3.01	\$17.15	\$16.48
65	737-800	31594	\$14.07	\$0.00	(\$0.20)	\$0.15	\$0.35	\$14.37	94.0%	\$13.51	(\$3.43)	\$10.94	\$10.08
66	737-800	31595	\$14.15	\$0.00	(\$0.20)	\$0.15	\$0.35	\$14.45	94.0%	\$13.58	\$3.80	\$18.25	\$17.38
67	737-800	31596	\$15.74	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.04	94.0%	\$15.08	\$1.66	\$17.70	\$16.74
68	737-800	31597	\$15.83	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.13	94.0%	\$15.16	\$1.21	\$17.34	\$16.37
69	737-800	31598	\$15.91	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.21	94.0%	\$15.23	(\$1.90)	\$14.31	\$13.33
70	737-800	31599	\$15.91	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.21	94.0%	\$15.23	(\$1.15)	\$15.06	\$14.08
71	737-800	31600	\$16.37	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.67	94.4%	\$15.73	(\$4.15)	\$12.52	\$11.58
72	737-800	31636	\$16.37	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.67	94.4%	\$15.73	(\$3.61)	\$13.06	\$12.12
73	737-800	33451	\$16.46	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.76	94.4%	\$15.82	\$4.20	\$20.96	\$20.02
74	737-800	31607	\$16.56	\$0.00	(\$0.20)	\$0.15	\$0.35	\$16.86	94.4%	\$15.91	(\$1.47)	\$15.39	\$14.44
75	737-800	31601	\$16.74	\$0.00	(\$0.20)	\$0.15	\$0.35	\$17.04	94.4%	\$16.08	(\$0.15)	\$16.89	\$15.93
76	737-800	33455	\$17.02	\$0.00	(\$0.20)	\$0.15	\$0.35	\$17.32	94.4%	\$16.35	\$0.55	\$17.87	\$16.90
77	737-800	34001	\$17.80	\$0.00	(\$0.20)	\$0.15	\$0.35	\$18.10	94.7%	\$17.15	(\$0.28)	\$17.82	\$16.87

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	Portfolio Valuations												
						(US\$ M							
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
78	737-800	34002	\$17.90	\$0.00	(\$0.20)	\$0.15	\$0.35	\$18.20	94.7%	\$17.24	(\$2.17)	\$16.03	\$15.07
79	737-800	31602	\$18.94	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.24	95.1%	\$18.30	(\$3.67)	\$15.57	\$14.63
80	737-800	31603	\$19.04	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.34	95.1%	\$18.40	(\$1.78)	\$17.56	\$16.62
81	737-800	33461	\$19.04	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.34	95.1%	\$18.40	(\$1.54)	\$17.80	\$16.86
82	737-800	31604	\$19.04	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.34	95.1%	\$18.40	\$0.08	\$19.42	\$18.48
83	737-800	32834	\$19.15	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.45	95.1%	\$18.50	(\$2.96)	\$16.49	\$15.54
84	737-800	32832	\$19.25	\$0.00	(\$0.20)	\$0.15	\$0.35	\$19.55	95.1%	\$18.60	(\$0.69)	\$18.86	\$17.91
85	737-800	30132	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.68)	\$21.73	\$20.87
86	737-800	31658	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$1.76)	\$23.65	\$22.79
87	737-800	31662	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.86)	\$21.55	\$20.69
88	737-800	31660	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.94)	\$21.47	\$20.61
89	737-800	37101	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.95)	\$21.46	\$20.60
90	737-800	31642	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.72)	\$21.69	\$20.83
91	737-800	31659	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.45)	\$21.96	\$21.10
92	737-800	38700	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.96)	\$21.45	\$20.59
93	737-800	38701	\$24.91	\$0.00	\$0.00	\$0.15	\$0.35	\$25.41	96.6%	\$24.55	(\$3.54)	\$21.87	\$21.01
94	737-900ER	37094	\$21.97	\$0.00	(\$0.20)	\$0.15	\$0.35	\$22.27	97.2%	\$21.64	\$1.10	\$23.37	\$22.74
95	737-900ER	31620	\$22.08	\$0.00	(\$0.20)	\$0.15	\$0.35	\$22.38	97.2%	\$21.75	(\$3.42)	\$18.96	\$18.33
96	737-900ER	33528	\$24.17	\$0.00	(\$0.20)	\$0.15	\$0.35	\$24.47	97.4%	\$23.82	(\$4.78)	\$19.69	\$19.04
97	737-900ER	33534	\$23.92	\$0.00	(\$0.20)	\$0.15	\$0.35	\$24.22	97.4%	\$23.58	(\$3.11)	\$21.11	\$20.47
98	737-900ER	33535	\$23.92	\$0.00	(\$0.20)	\$0.15	\$0.35	\$24.22	97.4%	\$23.58	(\$2.86)	\$21.36	\$20.72
99	737-900ER	30131	\$24.04	\$0.00	(\$0.20)	\$0.15	\$0.35	\$24.34	97.4%	\$23.70	(\$3.28)	\$21.06	\$20.42
100	737-900ER	33536	\$24.04	\$0.00	(\$0.20)	\$0.15	\$0.35	\$24.34	97.4%	\$23.70	(\$3.23)	\$21.11	\$20.47
101	757-200	27298	\$6.44	\$0.20	\$0.00	\$0.50	\$0.35	\$7.49	91.3%	\$6.83	\$2.41	\$9.90	\$9.24
102	757-200	27299	\$6.48	\$0.20	\$0.00	\$0.50	\$0.35	\$7.53	91.3%	\$6.87	\$3.70	\$11.23	\$10.57

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					D	ortfolio \	/aluation	NC .					
					F,	US\$ M		5					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
103	757-200	27300	\$6.48	\$0.20	\$0.00	\$0.50	\$0.35	\$7.53	91.3%	\$6.87	(\$0.93)	\$6.60	\$5.94
104	757-200	27301	\$6.48	\$0.20	\$0.00	\$0.50	\$0.35	\$7.53	91.3%	\$6.87	(\$1.56)	\$5.97	\$5.31
105	757-200	27302	\$6.56	\$0.20	\$0.00	\$0.50	\$0.35	\$7.61	90.3%	\$6.87	\$1.23	\$8.84	\$8.10
106	757-200	27555	\$6.64	\$0.20	\$0.00	\$0.50	\$0.35	\$7.69	90.3%	\$6.95	(\$1.10)	\$6.59	\$5.85
107	757-200	27556	\$6.77	\$0.20	\$0.00	\$0.50	\$0.35	\$7.82	90.3%	\$7.06	(\$1.41)	\$6.41	\$5.65
108	757-200	27558	\$7.10	\$0.20	\$0.00	\$0.50	\$0.35	\$8.15	89.6%	\$7.30	\$0.01	\$8.16	\$7.31
109	757-200	27559	\$7.14	\$0.20	\$0.00	\$0.50	\$0.35	\$8.19	89.6%	\$7.34	(\$1.50)	\$6.69	\$5.84
110	757-200	27560	\$7.64	\$0.20	\$0.00	\$0.50	\$0.35	\$8.69	88.7%	\$7.71	(\$2.33)	\$6.36	\$5.38
111	757-200	27561	\$7.73	\$0.20	\$0.00	\$0.50	\$0.35	\$8.78	88.7%	\$7.79	(\$4.24)	\$4.54	\$3.55
112	757-200	27562	\$7.78	\$0.20	\$0.00	\$0.50	\$0.35	\$8.83	88.7%	\$7.83	(\$1.47)	\$7.36	\$6.36
113	757-200	27563	\$7.83	\$0.20	\$0.00	\$0.50	\$0.35	\$8.88	88.7%	\$7.88	(\$3.48)	\$5.40	\$4.40
114	757-200	27564	\$7.87	\$0.20	\$0.00	\$0.50	\$0.35	\$8.92	88.7%	\$7.91	(\$4.01)	\$4.91	\$3.90
115	757-200	27566	\$8.16	\$0.20	\$0.00	\$0.50	\$0.35	\$9.21	87.8%	\$8.09	\$2.22	\$11.43	\$10.31
116	757-200	28968	\$8.16	\$0.20	\$0.00	\$0.50	\$0.35	\$9.21	87.8%	\$8.09	(\$4.01)	\$5.20	\$4.08
117	757-200	27567	\$8.21	\$0.20	\$0.00	\$0.50	\$0.35	\$9.26	87.8%	\$8.13	\$4.65	\$13.91	\$12.78
118	757-200	28969	\$8.21	\$0.20	\$0.00	\$0.50	\$0.35	\$9.26	87.8%	\$8.13	(\$3.53)	\$5.73	\$4.60
119	757-200	28970	\$8.32	\$0.20	\$0.00	\$0.50	\$0.35	\$9.37	87.8%	\$8.23	(\$2.21)	\$7.16	\$6.02
120	757-200	28971	\$8.37	\$0.20	\$0.00	\$0.50	\$0.35	\$9.42	87.8%	\$8.27	(\$5.38)	\$4.04	\$2.89
121	757-200	29281	\$8.37	\$0.20	\$0.00	\$0.50	\$0.35	\$9.42	87.8%	\$8.27	\$2.02	\$11.44	\$10.29
122	757-200	29283	\$8.79	\$0.20	\$0.00	\$0.50	\$0.35	\$9.84	86.8%	\$8.54	(\$0.80)	\$9.04	\$7.74
123	757-200	29284	\$8.79	\$0.20	\$0.00	\$0.50	\$0.35	\$9.84	86.8%	\$8.54	(\$3.79)	\$6.05	\$4.75
124	757-200	29285	\$8.84	\$0.20	\$0.00	\$0.50	\$0.35	\$9.89	86.8%	\$8.59	(\$2.30)	\$7.59	\$6.29
125	757-200	30229	\$9.28	\$0.20	\$0.00	\$0.50	\$0.35	\$10.33	86.8%	\$8.97	\$3.13	\$13.46	\$12.10
126	757-200	30351	\$9.34	\$0.20	\$0.00	\$0.50	\$0.35	\$10.39	86.8%	\$9.02	\$0.83	\$11.22	\$9.85
127	757-200	30352	\$9.45	\$0.19	\$0.00	\$0.50	\$0.35	\$10.49	85.9%	\$9.02	(\$1.09)	\$9.40	\$7.93

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					P	ortfolio \ (บร\$ พ		S					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
128	757-200	30353	\$9.45	\$0.19	\$0.00	\$0.50	\$0.35	\$10.49	85.9%	\$9.02	\$1.13	\$11.62	\$10.15
129	757-200	30354	\$9.69	\$0.19	\$0.00	\$0.50	\$0.35	\$10.73	85.9%	\$9.22	\$5.82	\$16.55	\$15.04
130	757-300	32810	\$13.35	\$0.04	\$0.00	\$0.50	\$0.00	\$13.89	89.2%	\$12.39	(\$1.16)	\$12.73	\$11.23
131	757-300	32811	\$13.35	\$0.04	\$0.00	\$0.50	\$0.00	\$13.89	89.2%	\$12.39	(\$2.06)	\$11.83	\$10.33
132	757-300	32812	\$13.51	\$0.04	\$0.00	\$0.50	\$0.00	\$14.05	88.8%	\$12.47	(\$1.69)	\$12.36	\$10.78
133	757-300	32813	\$13.51	\$0.04	\$0.00	\$0.50	\$0.00	\$14.05	88.8%	\$12.47	(\$3.57)	\$10.48	\$8.90
134	757-300	32814	\$15.54	\$0.05	\$0.00	\$0.50	\$0.00	\$16.09	88.0%	\$14.15	\$4.56	\$20.65	\$18.71
135	757-300	32815	\$15.54	\$0.05	\$0.00	\$0.50	\$0.00	\$16.09	88.0%	\$14.15	\$0.81	\$16.90	\$14.96
136	757-300	32816	\$15.64	\$0.05	\$0.00	\$0.50	\$0.00	\$16.19	88.0%	\$14.24	\$1.08	\$17.27	\$15.32
137	757-300	32817	\$15.74	\$0.05	\$0.00	\$0.50	\$0.00	\$16.29	88.0%	\$14.33	\$0.04	\$16.33	\$14.37
138	757-300	32818	\$15.84	\$0.05	\$0.00	\$0.50	\$0.00	\$16.39	88.0%	\$14.42	\$1.22	\$17.61	\$15.64
139	767-300ER	29236	\$10.15	\$0.00	\$0.00	\$0.60	\$0.00	\$10.75	93.1%	\$10.01	(\$5.71)	\$5.04	\$4.30
140	767-300ER	29238	\$10.27	\$0.00	\$0.00	\$0.60	\$0.00	\$10.87	93.1%	\$10.12	(\$5.97)	\$4.90	\$4.15
141	767-300ER	29239	\$10.27	\$0.00	\$0.00	\$0.60	\$0.00	\$10.87	93.1%	\$10.12	(\$6.07)	\$4.80	\$4.05
142	767-300ER	300242	\$10.73	\$0.00	\$0.00	\$0.60	\$0.00	\$11.33	92.5%	\$10.48	(\$10.51)	\$1.40	\$1.40
143	767-300ER	30025 <b>2</b>	\$10.93	\$0.00	\$0.00	\$0.60	\$0.00	\$11.53	92.5%	\$10.67	(\$11.35)	\$1.40	\$1.40
144	767-300ER	29240	\$11.07	\$0.00	\$0.00	\$0.60	\$0.00	\$11.67	92.5%	\$10.80	(\$8.26)	\$3.41	\$2.54
145	767-300ER	30026	\$11.21	\$0.00	\$0.00	\$0.60	\$0.00	\$11.81	92.5%	\$10.93	(\$7.79)	\$4.02	\$3.14
146	767-300ER	29241 <b>2</b>	\$11.41	\$0.00	\$0.00	\$0.60	\$0.00	\$12.01	91.9%	\$11.04	(\$10.29)	\$1.72	\$1.40
147	767-300ER	29242	\$11.63	\$0.00	\$0.00	\$0.60	\$0.00	\$12.23	91.9%	\$11.24	(\$5.24)	\$6.99	\$6.00
148	767-300ER	29243	\$11.93	\$0.00	\$0.00	\$0.60	\$0.00	\$12.53	91.9%	\$11.52	(\$7.05)	\$5.48	\$4.47
149	767-300ER	30028 <b>2</b>	\$12.54	\$0.00	\$0.00	\$0.60	\$0.00	\$13.14	91.2%	\$11.99	(\$10.87)	\$2.27	\$1.40
150	767-300ER	33466	\$13.94	\$0.00	\$0.00	\$0.60	\$0.00	\$14.54	90.6%	\$13.18	(\$6.71)	\$7.83	\$6.47
151	767-300ER	33467	\$14.11	\$0.00	\$0.00	\$0.60	\$0.00	\$14.71	90.6%	\$13.33	(\$2.23)	\$12.48	\$11.10

<sup>&</sup>lt;sup>2</sup> Salvage Value provided, as the maintenance adjustment results in a negative maintenance adjusted value.

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					Po	ortfolio \ (US\$ M	/aluation	S					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
152	767-300ER	33468	\$14.28	\$0.00	\$0.00	\$0.60	\$0.00	\$14.88	90.0%	\$13.39	(\$2.95)	\$11.93	\$10.44
153	767-400ER	29446	\$13.26	\$0.00	\$0.00	\$0.00	\$0.00	\$13.26	98.0%	\$13.00	\$3.98	\$17.24	\$16.98
154	767-400ER	29447	\$13.35	\$0.00	\$0.00	\$0.00	\$0.00	\$13.35	98.0%	\$13.09	(\$1.01)	\$12.34	\$12.08
155	767-400ER	29448	\$13.45	\$0.00	\$0.00	\$0.00	\$0.00	\$13.45	98.0%	\$13.18	(\$5.17)	\$8.28	\$8.01
156	767-400ER	29451	\$14.25	\$0.00	\$0.00	\$0.00	\$0.00	\$14.25	98.0%	\$13.97	(\$0.25)	\$14.00	\$13.72
157	767-400ER	29452	\$14.97	\$0.00	\$0.00	\$0.00	\$0.00	\$14.97	98.0%	\$14.67	(\$2.45)	\$12.52	\$12.22
158	767-400ER	29453	\$14.97	\$0.00	\$0.00	\$0.00	\$0.00	\$14.97	98.0%	\$14.67	\$3.06	\$18.03	\$17.73
159	767-400ER	29454	\$15.08	\$0.00	\$0.00	\$0.00	\$0.00	\$15.08	98.0%	\$14.78	(\$2.66)	\$12.42	\$12.12
160	767-400ER	29455	\$15.08	\$0.00	\$0.00	\$0.00	\$0.00	\$15.08	98.0%	\$14.78	\$0.55	\$15.63	\$15.33
161	767-400ER	29456	\$15.19	\$0.00	\$0.00	\$0.00	\$0.00	\$15.19	98.0%	\$14.89	\$0.24	\$15.43	\$15.13
162	767-400ER	29457	\$15.19	\$0.00	\$0.00	\$0.00	\$0.00	\$15.19	98.0%	\$14.89	(\$3.74)	\$11.45	\$11.15
163	767-400ER	29458	\$15.31	\$0.00	\$0.00	\$0.00	\$0.00	\$15.31	98.0%	\$15.00	\$2.01	\$17.32	\$17.01
164	767-400ER	29459	\$15.31	\$0.00	\$0.00	\$0.00	\$0.00	\$15.31	98.0%	\$15.00	\$4.28	\$19.59	\$19.28
165	767-400ER	29460	\$15.42	\$0.00	\$0.00	\$0.00	\$0.00	\$15.42	98.0%	\$15.11	(\$1.05)	\$14.37	\$14.06
166	767-400ER	29461	\$15.42	\$0.00	\$0.00	\$0.00	\$0.00	\$15.42	98.0%	\$15.11	(\$1.10)	\$14.32	\$14.01
167	777-200	30216 <b>2</b>	\$11.49	\$0.00	\$0.00	\$0.00	(\$0.60)	\$10.89	74.2%	\$8.08	(\$10.15)	\$1.50	\$1.50
168	777-200	30221 <b>2</b>	\$11.83	\$0.00	\$0.00	\$0.00	(\$0.60)	\$11.23	74.2%	\$8.33	(\$11.70)	\$1.50	\$1.50
169	777-200	26919 <b>2</b>	\$9.15	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.55	70.0%	\$5.98	(\$8.68)	\$1.50	\$1.50
170	777-200	26921	\$9.15	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.55	70.0%	\$5.98	\$1.65	\$10.20	\$7.63
171	777-200	26932 <b>2</b>	\$9.34	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.74	70.0%	\$6.12	(\$11.58)	\$1.50	\$1.50
172	777-200	26930 <b>2</b>	\$9.27	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.67	70.0%	\$6.07	(\$10.64)	\$1.50	\$1.50
173	777-200	26929 <b>2</b>	\$9.42	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.82	70.8%	\$6.25	(\$8.29)	\$1.50	\$1.50
174	777-200	26936 <b>2</b>	\$9.50	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.90	70.8%	\$6.30	(\$7.33)	\$1.57	\$1.50
175	777-200	26947 <b>2</b>	\$9.42	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.82	70.8%	\$6.25	(\$5.67)	\$3.15	\$1.50
176	777-200	26937 <b>2</b>	\$9.54	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.94	70.8%	\$6.33	(\$6.77)	\$2.17	\$1.50

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					P	ortfolio \ (US\$ M	/aluation	S					
No.	Aircraft Type	Serial Number	BV wl Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
177	777-200	26916 <b>2</b>	\$9.11	\$0.00	\$0.00	\$0.00	(\$0.60)	\$8.51	70.0%	\$5.96	(\$13.46)	\$1.50	\$1.50
178	777-200	26940	\$9.66	\$0.00	\$0.00	\$0.00	(\$0.60)	\$9.06	70.8%	\$6.42	(\$3.52)	\$5.54	\$2.90
179	777-200	26941 <b>2</b>	\$9.66	\$0.00	\$0.00	\$0.00	(\$0.60)	\$9.06	70.8%	\$6.42	(\$7.26)	\$1.80	\$1.50
180	777-200	26944 <b>2</b>	\$9.70	\$0.00	\$0.00	\$0.00	(\$0.60)	\$9.10	70.8%	\$6.44	(\$12.60)	\$1.50	\$1.50
181	777-200	26945 <b>2</b>	\$9.74	\$0.00	\$0.00	\$0.00	(\$0.60)	\$9.14	70.8%	\$6.47	(\$7.59)	\$1.55	\$1.50
182	777-200ER	27577	\$16.05	\$0.00	\$0.00	\$0.00	\$0.00	\$16.05	65.0%	\$10.44	(\$0.72)	\$15.33	\$9.72
183	777-200ER	27578	\$16.05	\$0.00	\$0.00	\$0.00	\$0.00	\$16.05	65.0%	\$10.44	\$6.50	\$22.55	\$16.94
184	777-200ER	27579	\$16.27	\$0.00	\$0.00	\$0.00	\$0.00	\$16.27	65.0%	\$10.58	(\$0.57)	\$15.70	\$10.01
185	777-200ER	27580	\$16.27	\$0.00	\$0.00	\$0.00	\$0.00	\$16.27	65.0%	\$10.58	(\$0.20)	\$16.07	\$10.38
186	777-200ER	27581	\$16.38	\$0.00	\$0.00	\$0.00	\$0.00	\$16.38	65.0%	\$10.65	(\$2.07)	\$14.31	\$8.58
187	777-200ER	29476	\$16.38	\$0.00	\$0.00	\$0.00	\$0.00	\$16.38	65.0%	\$10.65	\$3.17	\$19.55	\$13.82
188	777-200ER	29477	\$16.61	\$0.00	\$0.00	\$0.00	\$0.00	\$16.61	65.0%	\$10.80	\$9.17	\$25.78	\$19.97
189	777-200ER	29478	\$16.73	\$0.00	\$0.00	\$0.00	\$0.00	\$16.73	65.0%	\$10.88	\$1.86	\$18.59	\$12.74
190	777-200ER	29479	\$16.85	\$0.00	\$0.00	\$0.00	\$0.00	\$16.85	65.0%	\$10.95	\$1.75	\$18.60	\$12.70
191	777-200ER	29480	\$16.96	\$0.00	\$0.00	\$0.00	\$0.00	\$16.96	65.0%	\$11.03	\$1.99	\$18.95	\$13.02
192	777-200ER	29859	\$17.08	\$0.00	\$0.00	\$0.00	\$0.00	\$17.08	65.0%	\$11.10	\$0.76	\$17.84	\$11.86
193	777-200ER	29861	\$17.44	\$0.00	\$0.00	\$0.00	\$0.00	\$17.44	65.0%	\$11.34	\$6.72	\$24.16	\$18.06
194	777-200ER	28678	\$18.30	\$0.00	\$0.00	\$0.00	\$0.00	\$18.30	65.0%	\$11.89	\$0.47	\$18.77	\$12.36
195	777-200ER	28679	\$18.42	\$0.00	\$0.00	\$0.00	\$0.00	\$18.42	65.0%	\$11.97	\$3.60	\$22.02	\$15.57
196	777-200ER	31679	\$21.43	\$0.00	\$0.00	\$0.00	\$0.00	\$21.43	65.0%	\$13.92	\$3.72	\$25.15	\$17.64
197	777-200ER	31680	\$21.59	\$0.00	\$0.00	\$0.00	\$0.00	\$21.59	65.0%	\$14.03	\$1.72	\$23.31	\$15.75
198	777-200ER	35547	\$32.41	\$0.00	\$0.00	\$0.00	\$0.00	\$32.41	65.0%	\$21.07	\$15.22	\$47.63	\$36.29
199	777-200ER	31687	\$32.64	\$0.00	\$0.00	\$0.00	\$0.00	\$32.64	65.0%	\$21.22	\$8.26	\$40.90	\$29.48
200	777-200ER	39776	\$42.72	\$0.00	\$0.00	\$0.00	\$0.00	\$42.72	65.0%	\$27.76	\$10.82	\$53.54	\$38.58
201	777-200ER	39777	\$42.72	\$0.00	\$0.00	\$0.00	\$0.00	\$42.72	65.0%	\$27.76	\$4.32	\$47.04	\$32.08

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No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
202	777-200ER	28713	\$16.61	(\$0.10)	\$0.00	\$0.00	\$0.00	\$16.51	65.0%	\$10.73	(\$6.62)	\$9.89	\$4.11
203	777-200ER	30212 <b>2</b>	\$16.96	(\$0.10)	\$0.00	\$0.00	\$0.00	\$16.86	65.0%	\$10.96	(\$9.88)	\$6.98	\$1.50
204	777-200ER	30215 <b>2</b>	\$17.79	(\$0.10)	\$0.00	\$0.00	\$0.00	\$17.69	65.0%	\$11.50	(\$13.53)	\$4.16	\$1.50
205	777-200ER	30222 <b>2</b>	\$19.45	(\$0.11)	\$0.00	\$0.00	\$0.00	\$19.34	65.0%	\$12.57	(\$13.92)	\$5.42	\$1.50
206	777-200ER	30551 <b>2</b>	\$19.45	(\$0.11)	\$0.00	\$0.00	\$0.00	\$19.34	65.0%	\$12.57	(\$15.53)	\$3.81	\$1.50
207	777-200ER	30223 <b>2</b>	\$20.01	(\$0.11)	\$0.00	\$0.00	\$0.00	\$19.90	65.0%	\$12.93	(\$11.64)	\$8.26	\$1.50
208	777-200ER	30552	\$20.15	(\$0.11)	\$0.00	\$0.00	\$0.00	\$20.04	65.0%	\$13.02	(\$0.90)	\$19.14	\$12.12
209	777-200ER	30553	\$20.29	(\$0.11)	\$0.00	\$0.00	\$0.00	\$20.18	65.0%	\$13.11	(\$5.02)	\$15.16	\$8.09
210	777-200ER	30225	\$20.99	(\$0.11)	\$0.00	\$0.00	\$0.00	\$20.88	65.0%	\$13.57	(\$7.02)	\$13.86	\$6.55
211	777-200ER	30554 <b>2</b>	\$20.99	(\$0.11)	\$0.00	\$0.00	\$0.00	\$20.88	65.0%	\$13.57	(\$11.87)	\$9.01	\$1.70
212	777-200ER	30226 <b>2</b>	\$21.13	(\$0.11)	\$0.00	\$0.00	\$0.00	\$21.02	65.0%	\$13.66	(\$13.08)	\$7.94	\$1.50
213	777-200ER	30555 <b>2</b>	\$21.13	(\$0.11)	\$0.00	\$0.00	\$0.00	\$21.02	65.0%	\$13.66	(\$13.88)	\$7.14	\$1.50
214	777-200ER	26948 <b>2</b>	\$14.17	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.07	65.0%	\$9.14	(\$12.97)	\$1.50	\$1.50
215	777-200ER	26950 <b>2</b>	\$14.17	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.07	65.0%	\$9.14	(\$14.62)	\$1.50	\$1.50
216	777-200ER	26951 <b>2</b>	\$14.27	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.17	65.0%	\$9.21	(\$14.27)	\$1.50	\$1.50
217	777-200ER	26954 <b>2</b>	\$14.37	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.27	65.0%	\$9.27	(\$13.06)	\$1.50	\$1.50
218	777-200ER	26938 <b>2</b>	\$14.27	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.17	65.0%	\$9.21	(\$12.79)	\$1.50	\$1.50
219	777-200ER	26939 <b>2</b>	\$14.47	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.37	65.0%	\$9.34	(\$12.08)	\$2.29	\$1.50
220	777-200ER	26942 <b>2</b>	\$14.58	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.48	65.0%	\$9.41	(\$9.85)	\$4.63	\$1.50
221	777-200ER	26933 <b>2</b>	\$14.68	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.58	65.0%	\$9.48	(\$12.66)	\$1.92	\$1.50
222	777-200ER	26934 <b>2</b>	\$14.78	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.68	65.0%	\$9.54	(\$9.47)	\$5.21	\$1.50
223	777-200ER	26946 <b>2</b>	\$14.88	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.78	65.0%	\$9.61	(\$13.25)	\$1.53	\$1.50
224	777-200ER	26953 <b>2</b>	\$14.98	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.88	65.0%	\$9.67	(\$9.33)	\$5.55	\$1.50
225	777-200ER	26927 <b>2</b>	\$15.08	(\$0.10)	\$0.00	\$0.00	\$0.00	\$14.98	65.0%	\$9.74	(\$12.62)	\$2.36	\$1.50
226	777-200ER	26931 <b>2</b>	\$15.18	(\$0.10)	\$0.00	\$0.00	\$0.00	\$15.08	65.0%	\$9.80	(\$10.87)	\$4.21	\$1.50

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					Р	ortfolio \ US\$ N		ıs					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
227	777-200ER	26924 <b>2</b>	\$15.29	(\$0.10)	\$0.00	\$0.00	\$0.00	\$15.19	65.0%	\$9.88	(\$10.63)	\$4.56	\$1.50
228	777-200ER	26928 <b>2</b>	\$15.29	(\$0.10)	\$0.00	\$0.00	\$0.00	\$15.19	65.0%	\$9.88	(\$9.06)	\$6.13	\$1.50
229	777-200ER	26926 <b>2</b>	\$15.62	(\$0.10)	\$0.00	\$0.00	\$0.00	\$15.52	65.0%	\$10.09	(\$15.17)	\$1.50	\$1.50
230	A319-100	686	\$6.72	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.64	112.0%	\$7.44	(\$1.22)	\$5.42	\$6.22
231	A319-100	690	\$6.72	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.64	112.0%	\$7.44	(\$0.62)	\$6.02	\$6.82
232	A319-100	0748	\$6.94	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.86	112.0%	\$7.68	(\$4.01)	\$2.85	\$3.67
233	A319-100	0759	\$6.98	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.90	112.0%	\$7.73	(\$2.94)	\$3.96	\$4.79
234	A319-100	0783	\$7.07	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.99	109.0%	\$7.62	(\$0.92)	\$6.07	\$6.70
235	A319-100	0788	\$7.07	\$0.12	(\$0.20)	\$0.00	\$0.00	\$6.99	109.0%	\$7.62	(\$0.90)	\$6.09	\$6.72
236	A319-100	0798	\$7.11	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.03	109.0%	\$7.66	(\$0.25)	\$6.78	\$7.41
237	A319-100	0804	\$7.11	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.03	109.0%	\$7.66	(\$2.08)	\$4.95	\$5.58
238	A319-100	0825	\$7.20	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.12	109.0%	\$7.76	(\$3.63)	\$3.49	\$4.13
239	A319-100	0843	\$7.25	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.17	109.0%	\$7.81	(\$1.10)	\$6.07	\$6.71
240	A319-100	0847	\$7.30	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.22	109.0%	\$7.87	\$1.35	\$8.57	\$9.22
241	A319-100	0850	\$7.30	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.22	109.0%	\$7.87	(\$2.58)	\$4.64	\$5.29
242	A319-100	0858	\$7.30	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.22	109.0%	\$7.87	(\$1.98)	\$5.24	\$5.89
243	A319-100	0862	\$7.34	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.26	109.0%	\$7.91	(\$1.45)	\$5.81	\$6.46
244	A319-100	0867	\$7.34	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.26	109.0%	\$7.91	(\$1.38)	\$5.88	\$6.53
245	A319-100	0871	\$7.39	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.31	109.0%	\$7.97	\$0.35	\$7.66	\$8.32
246	A319-100	0873	\$7.39	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.31	109.0%	\$7.97	(\$0.03)	\$7.28	\$7.94
247	A319-100	0882	\$7.43	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.35	109.0%	\$8.01	\$0.95	\$8.30	\$8.96
248	A319-100	0893	\$7.43	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.35	109.0%	\$8.01	(\$3.38)	\$3.97	\$4.63
249	A319-100	0898	\$7.43	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.35	109.0%	\$8.01	(\$0.71)	\$6.64	\$7.30
250	A319-100	0944	\$7.57	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.49	105.9%	\$7.94	\$2.13	\$9.62	\$10.07
251	A319-100	0948	\$7.62	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.54	105.9%	\$7.99	(\$0.74)	\$6.80	\$7.25

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						ortfolio `	Valuation						
						US\$ N		115					
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
252	A319-100	0952	\$7.62	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.54	105.9%	\$7.99	\$0.15	\$7.69	\$8.14
253	A319-100	0965	\$7.62	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.54	105.9%	\$7.99	\$1.26	\$8.80	\$9.25
254	A319-100	0980	\$7.67	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.59	105.9%	\$8.04	\$0.72	\$8.31	\$8.76
255	A319-100	0989	\$7.67	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.59	105.9%	\$8.04	(\$2.09)	\$5.50	\$5.95
256	A319-100	1022	\$7.77	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.69	105.9%	\$8.15	(\$0.53)	\$7.16	\$7.62
257	A319-100	1031	\$7.82	\$0.12	(\$0.20)	\$0.00	\$0.00	\$7.74	105.9%	\$8.20	\$0.13	\$7.87	\$8.33
258	A319-100	1211	\$8.32	\$0.12	(\$0.20)	\$0.00	\$0.00	\$8.24	102.9%	\$8.48	(\$0.38)	\$7.86	\$8.10
259	A319-100	1243	\$8.42	\$0.12	(\$0.20)	\$0.00	\$0.00	\$8.34	102.9%	\$8.59	(\$1.52)	\$6.82	\$7.07
260	A319-100	1291	\$8.53	\$0.12	(\$0.20)	\$0.00	\$0.00	\$8.45	102.9%	\$8.70	(\$0.39)	\$8.06	\$8.31
261	A319-100	1321	\$8.58	\$0.12	(\$0.20)	\$0.00	\$0.00	\$8.50	102.9%	\$8.75	\$0.13	\$8.63	\$8.88
262	A319-100	1401	\$8.79	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.72	100.0%	\$8.72	\$2.02	\$10.74	\$10.74
263	A319-100	1420	\$8.85	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.78	100.0%	\$8.78	\$2.66	\$11.44	\$11.44
264	A319-100	1426	\$8.85	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.78	100.0%	\$8.78	(\$1.63)	\$7.15	\$7.15
265	A319-100	1460	\$8.91	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.84	100.0%	\$8.84	\$1.26	\$10.10	\$10.10
266	A319-100	1474	\$8.96	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.89	100.0%	\$8.89	\$0.23	\$9.12	\$9.12
267	A319-100	1477	\$8.96	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.89	100.0%	\$8.89	\$0.05	\$8.94	\$8.94
268	A319-100	1507	\$9.02	\$0.13	(\$0.20)	\$0.00	\$0.00	\$8.95	100.0%	\$8.95	(\$0.42)	\$8.53	\$8.53
269	A319-100	1522	\$9.08	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.01	100.0%	\$9.01	(\$1.81)	\$7.20	\$7.20
270	A319-100	1545	\$9.14	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.07	100.0%	\$9.07	(\$1.16)	\$7.91	\$7.91
271	A319-100	1569	\$9.25	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.18	100.0%	\$9.18	\$1.16	\$10.34	\$10.34
272	A319-100	1573	\$9.19	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.12	100.0%	\$9.12	(\$0.67)	\$8.45	\$8.45
273	A319-100	1581	\$9.37	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.30	100.0%	\$9.30	(\$0.10)	\$9.20	\$9.20
274	A319-100	1585	\$9.37	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.30	100.0%	\$9.30	\$4.20	\$13.50	\$13.50
275	A319-100	1600	\$9.37	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.30	100.0%	\$9.30	\$1.24	\$10.54	\$10.54
276	A319-100	1627	\$9.37	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.30	100.0%	\$9.30	(\$0.27)	\$9.03	\$9.03

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					P	ortfolio \	/aluatior	ıs					
						(US\$ M	illion)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	HT CBV	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
277	A319-100	1647	\$9.48	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.41	97.0%	\$9.13	\$0.08	\$9.49	\$9.21
278	A319-100	1649	\$9.54	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.47	97.0%	\$9.19	\$2.57	\$12.04	\$11.76
279	A319-100	1653	\$9.54	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.47	97.0%	\$9.19	\$0.90	\$10.37	\$10.09
280	A319-100	1664	\$9.60	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.53	97.0%	\$9.25	\$1.57	\$11.10	\$10.82
281	A319-100	1671	\$9.60	\$0.13	(\$0.20)	\$0.00	\$0.00	\$9.53	97.0%	\$9.25	(\$0.70)	\$8.83	\$8.55
282	A320-200	2714	\$16.04	\$0.00	(\$0.30)	\$0.00	\$0.00	\$15.74	95.0%	\$14.95	\$4.68	\$20.42	\$19.63
283	A320-200	504	\$7.18	\$0.00	(\$0.30)	\$0.00	\$0.00	\$6.88	97.5%	\$6.71	\$0.84	\$7.72	\$7.55
284	A320-200	506	\$7.18	\$0.00	(\$0.30)	\$0.00	\$0.00	\$6.88	97.5%	\$6.71	\$0.99	\$7.87	\$7.70
285	A320-200	508	\$7.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$6.92	97.5%	\$6.75	(\$0.43)	\$6.49	\$6.32
286	A320-200	510	\$7.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$6.92	97.5%	\$6.75	(\$0.43)	\$6.49	\$6.32
287	A320-200	512	\$7.27	\$0.00	(\$0.30)	\$0.00	\$0.00	\$6.97	97.5%	\$6.79	(\$3.16)	\$3.81	\$3.63
288	A320-200	523	\$7.31	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.01	97.5%	\$6.83	\$1.00	\$8.01	\$7.83
289	A320-200	539	\$7.36	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.06	97.5%	\$6.88	(\$2.50)	\$4.56	\$4.38
290	A320-200	568	\$7.73	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.43	97.1%	\$7.22	(\$2.14)	\$5.29	\$5.08
291	A320-200	571	\$7.78	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.48	97.1%	\$7.27	(\$3.86)	\$3.62	\$3.41
292	A320-200	587	\$7.87	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.57	97.1%	\$7.35	(\$0.46)	\$7.11	\$6.89
293	A320-200	589	\$7.92	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.62	97.1%	\$7.40	(\$0.46)	\$7.16	\$6.94
294	A320-200	592	\$7.92	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.62	97.1%	\$7.40	(\$2.38)	\$5.24	\$5.02
295	A320-200	613	\$8.07	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.77	97.1%	\$7.55	(\$0.54)	\$7.23	\$7.01
296	A320-200	638	\$8.21	\$0.00	(\$0.30)	\$0.00	\$0.00	\$7.91	97.1%	\$7.68	(\$4.08)	\$3.83	\$3.60
297	A320-200	655	\$8.31	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.01	96.9%	\$7.76	(\$3.56)	\$4.45	\$4.20
298	A320-200	678	\$8.47	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.17	96.9%	\$7.91	(\$5.50)	\$2.67	\$2.41
299	A320-200	683	\$8.52	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.22	96.9%	\$7.96	(\$1.87)	\$6.35	\$6.09
300	A320-200	702	\$8.57	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.27	96.9%	\$8.01	(\$3.69)	\$4.58	\$4.32
301	A320-200	751	\$8.83	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.53	96.9%	\$8.26	(\$2.68)	\$5.85	\$5.58

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					P	ortfolio \	/aluatior	IS					
						(US\$ M	illion)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
302	A320-200	780	\$8.94	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.64	96.6%	\$8.35	(\$3.55)	\$5.09	\$4.80
303	A320-200	820	\$9.11	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.81	96.6%	\$8.51	(\$3.97)	\$4.84	\$4.54
304	A320-200	824	\$9.11	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.81	96.6%	\$8.51	(\$2.38)	\$6.43	\$6.13
305	A320-200	826	\$9.16	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.86	96.6%	\$8.56	(\$2.07)	\$6.79	\$6.49
306	A320-200	834	\$9.16	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.86	96.6%	\$8.56	(\$1.28)	\$7.58	\$7.28
307	A320-200	836	\$9.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.92	96.6%	\$8.62	(\$4.99)	\$3.93	\$3.63
308	A320-200	842	\$9.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.92	96.6%	\$8.62	(\$4.78)	\$4.14	\$3.84
309	A320-200	851	\$9.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$8.92	96.6%	\$8.62	(\$3.25)	\$5.67	\$5.37
310	A320-200	865	\$9.33	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.03	96.6%	\$8.72	(\$2.56)	\$6.47	\$6.16
311	A320-200	0955	\$9.68	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.38	96.2%	\$9.03	\$0.25	\$9.63	\$9.28
312	A320-200	1001	\$9.74	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.44	96.2%	\$9.08	\$0.13	\$9.57	\$9.21
313	A320-200	1104	\$10.16	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.86	96.2%	\$9.49	(\$0.51)	\$9.35	\$8.98
314	A320-200	1105	\$10.16	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.86	96.2%	\$9.49	\$1.53	\$11.39	\$11.02
315	A320-200	1128	\$10.22	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.92	96.2%	\$9.55	(\$3.98)	\$5.94	\$5.57
316	A320-200	1146	\$10.28	\$0.00	(\$0.30)	\$0.00	\$0.00	\$9.98	96.0%	\$9.58	(\$0.46)	\$9.52	\$9.12
317	A320-200	1163	\$10.35	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.05	96.0%	\$9.65	(\$2.75)	\$7.30	\$6.90
318	A320-200	1192	\$10.48	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.18	96.0%	\$9.77	(\$0.57)	\$9.61	\$9.20
319	A320-200	1248	\$10.61	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.31	96.0%	\$9.90	\$0.99	\$11.30	\$10.89
320	A320-200	1266	\$10.67	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.37	96.0%	\$9.96	(\$0.49)	\$9.88	\$9.47
321	A320-200	1272	\$10.67	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.37	96.0%	\$9.96	(\$0.53)	\$9.84	\$9.43
322	A320-200	1282	\$10.74	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.44	96.0%	\$10.02	(\$1.02)	\$9.42	\$9.00
323	A320-200	1290	\$10.74	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.44	96.0%	\$10.02	\$0.30	\$10.74	\$10.32
324	A320-200	1341	\$10.93	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.63	96.0%	\$10.21	(\$0.16)	\$10.47	\$10.05
325	A320-200	1343	\$10.93	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.63	96.0%	\$10.21	\$1.37	\$12.00	\$11.58
326	A320-200	1359	\$11.00	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.70	96.0%	\$10.27	(\$0.67)	\$10.03	\$9.60

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No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	нт сму	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
327	A320-200	1363	\$11.00	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.70	96.0%	\$10.27	(\$0.37)	\$10.33	\$9.90
328	A320-200	1409	\$11.13	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.83	95.0%	\$10.29	(\$3.54)	\$7.29	\$6.75
329	A320-200	1427	\$11.20	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.90	95.0%	\$10.36	(\$0.57)	\$10.33	\$9.79
330	A320-200	1432	\$11.20	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.90	95.0%	\$10.36	\$2.77	\$13.67	\$13.13
331	A320-200	1435	\$11.27	\$0.00	(\$0.30)	\$0.00	\$0.00	\$10.97	95.0%	\$10.42	(\$1.66)	\$9.31	\$8.76
332	A320-200	1469	\$11.34	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.04	95.0%	\$10.49	\$0.73	\$11.77	\$11.22
333	A320-200	1475	\$11.34	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.04	95.0%	\$10.49	(\$2.46)	\$8.58	\$8.03
334	A320-200	1495	\$11.41	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.11	95.0%	\$10.56	(\$1.18)	\$9.93	\$9.38
335	A320-200	1508	\$11.48	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.18	95.0%	\$10.62	\$1.52	\$12.70	\$12.14
336	A320-200	1514	\$11.48	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.18	95.0%	\$10.62	(\$1.91)	\$9.27	\$8.71
337	A320-200	1533	\$11.55	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.25	95.0%	\$10.69	(\$2.68)	\$8.57	\$8.01
338	A320-200	1538	\$11.55	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.25	95.0%	\$10.69	(\$0.98)	\$10.27	\$9.71
339	A320-200	1555	\$11.62	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.32	95.0%	\$10.76	(\$2.07)	\$9.25	\$8.69
340	A320-200	1620	\$11.83	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.53	95.0%	\$10.96	(\$0.51)	\$11.02	\$10.45
341	A320-200	1669	\$11.90	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.60	95.0%	\$11.02	\$2.46	\$14.06	\$13.48
342	A320-200	1680	\$11.98	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.68	95.0%	\$11.09	(\$1.58)	\$10.10	\$9.51
343	A320-200	2680	\$16.04	\$0.00	(\$0.30)	\$0.00	\$0.00	\$15.74	95.0%	\$14.95	\$4.52	\$20.26	\$19.47
344	A320-200	1728	\$12.13	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.83	95.0%	\$11.23	(\$0.57)	\$11.26	\$10.66
345	A320-200	1741	\$12.13	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.83	95.0%	\$11.23	(\$0.94)	\$10.89	\$10.29
346	A320-200	1755	\$12.13	\$0.00	(\$0.30)	\$0.00	\$0.00	\$11.83	95.0%	\$11.23	(\$0.12)	\$11.71	\$11.11
347	A320-200	1821	\$12.35	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.05	95.0%	\$11.44	(\$0.61)	\$11.44	\$10.83
348	A320-200	1840	\$12.50	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.20	95.0%	\$11.58	(\$0.46)	\$11.74	\$11.12
349	A320-200	1842	\$12.43	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.13	95.0%	\$11.52	(\$2.09)	\$10.04	\$9.43
350	A320-200	1845	\$12.50	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.20	95.0%	\$11.58	\$2.68	\$14.88	\$14.26
351	A320-200	1847	\$12.50	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.20	95.0%	\$11.58	(\$0.07)	\$12.13	\$11.51

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						(US\$ M	lillion)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
352	A320-200	1865	\$12.58	\$0.00	(\$0.30)	\$0.00	\$0.00	\$12.28	95.0%	\$11.66	\$0.18	\$12.46	\$11.84
353	CF6- 80C2B8F	706368 <sup>2</sup>	\$2.50	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	90.0%	\$2.25	(\$2.64)	\$0.58	\$0.58
354	CF6- 80C2B8F	706439 <sup>2</sup>	\$2.50	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	90.0%	\$2.25	(\$2.80)	\$0.58	\$0.58
355	CF6- 80C2B8F	706323	\$2.50	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	90.0%	\$2.25	\$0.35	\$2.85	\$2.60
356	CFM56-7B24	890202	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$1.93)	\$4.22	\$2.99
357	CFM56-7B24	890307	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$0.49)	\$5.66	\$4.43
358	CFM56-7B24	890418	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.70	\$6.85	\$5.62
359	CFM56-7B24	890436	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$2.13)	\$4.02	\$2.79
360	CFM56-7B24	874219	\$5.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5.79	80.0%	\$4.63	(\$1.91)	\$3.88	\$2.72
361	CFM56-7B24	874792	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$1.10)	\$5.05	\$3.82
362	CFM56-7B24	876266	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.40	\$6.55	\$5.32
363	CFM56-7B24	876563	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.53	\$6.68	\$5.45
364	CFM56-7B24	889320	\$5.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5.79	80.0%	\$4.63	(\$0.25)	\$5.54	\$4.38
365	CFM56-7B26	890452	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.63	\$6.78	\$5.55
366	CFM56-7B26	890516	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$1.88)	\$4.27	\$3.04
367	CFM56-7B26	890612	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$1.08)	\$5.07	\$3.84
368	CFM56-7B26	890652	\$5.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5.79	80.0%	\$4.63	(\$0.67)	\$5.12	\$3.96
369	CFM56-7B26	890684	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$2.32)	\$3.83	\$2.60
370	CFM56-7B26	890775	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.62	\$6.77	\$5.54
371	CFM56-7B26	874336	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.58	\$6.73	\$5.50
372	CFM56-7B26	876213	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.41	\$6.56	\$5.33
373	CFM56-7B26	876633	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	\$0.47	\$6.62	\$5.39
374	CFM56-7B26	888436	\$5.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5.79	80.0%	\$4.63	\$0.71	\$6.50	\$5.34
375	CFM56-7B26	888868	\$5.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5.79	80.0%	\$4.63	\$0.53	\$6.32	\$5.16
376	CFM56-7B26	890339	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	80.0%	\$4.92	(\$2.41)	\$3.74	\$2.51

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						(US\$ N	lillion)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	HT CBV	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
377	CFM56- 7B26E	660372	\$6.42	\$0.00	\$0.00	\$0.00	\$0.00	\$6.42	79.5%	\$5.10	\$0.14	\$6.56	\$5.24
378	CFM56- 7B26E	862250	\$6.42	\$0.00	\$0.00	\$0.00	\$0.00	\$6.42	79.5%	\$5.10	\$0.25	\$6.67	\$5.35
379	CFM56- 7B26E	862937	\$6.33	\$0.00	\$0.00	\$0.00	\$0.00	\$6.33	80.0%	\$5.06	\$0.32	\$6.65	\$5.38
380	CFM56- 7B26E	660119	\$6.42	\$0.00	\$0.00	\$0.00	\$0.00	\$6.42	79.5%	\$5.10	\$0.22	\$6.64	\$5.32
381	CFM56- 7B26E	660170	\$6.42	\$0.00	\$0.00	\$0.00	\$0.00	\$6.42	79.5%	\$5.10	\$0.63	\$7.05	\$5.73
382	GE90-115B	901480	\$20.40	\$0.00	\$0.00	\$0.00	\$0.00	\$20.40	90.0%	\$18.36	\$9.47	\$29.87	\$27.83
383	GE90-115B	901096	\$20.40	\$0.00	\$0.00	\$0.00	\$0.00	\$20.40	90.0%	\$18.36	\$6.19	\$26.59	\$24.55
384	GE90-115B	901281	\$20.40	\$0.00	\$0.00	\$0.00	\$0.00	\$20.40	90.0%	\$18.36	\$6.37	\$26.77	\$24.73
385	GE90-90B	900272	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	\$1.95	\$8.10	\$6.62
386	GE90-90B	900352	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	\$1.55	\$7.70	\$6.22
387	GE90-90B	900361	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	(\$3.84)	\$2.31	\$0.83
388	GE90-90B	900392	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	(\$1.53)	\$4.62	\$3.14
389	GE90-90B	900242	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	\$1.72	\$7.87	\$6.39
390	GE90-90B	900325	\$6.15	\$0.00	\$0.00	\$0.00	\$0.00	\$6.15	76.0%	\$4.67	\$2.17	\$8.32	\$6.84
391	GEnx-1B70	956883	\$21.57	\$0.00	\$0.00	\$0.00	\$0.00	\$21.57	98.0%	\$21.14	\$4.77	\$26.34	\$25.91
392	GEnx-1B70	956912	\$17.06	\$0.00	\$0.00	\$0.00	\$0.00	\$17.06	98.0%	\$16.72	\$5.35	\$22.41	\$22.07
393	GEnx-1B70	958090	\$21.57	\$0.00	\$0.00	\$0.00	\$0.00	\$21.57	98.0%	\$21.14	\$5.42	\$26.99	\$26.56
394	GEnx-1B70	958338	\$22.82	\$0.00	\$0.00	\$0.00	\$0.00	\$22.82	98.0%	\$22.36	\$6.86	\$29.68	\$29.22
395	GEnx-1B70	958576	\$17.06	\$0.00	\$0.00	\$0.00	\$0.00	\$17.06	98.0%	\$16.72	\$8.14	\$25.20	\$24.86
396	GEnx-1B70	956295	\$17.06	\$0.00	\$0.00	\$0.00	\$0.00	\$17.06	98.0%	\$16.72	\$2.00	\$19.06	\$18.72
397	GEnx-1B70	956322	\$21.57	\$0.00	\$0.00	\$0.00	\$0.00	\$21.57	98.0%	\$21.14	\$0.99	\$22.56	\$22.13
398	GEnx-1B70	956515	\$21.57	\$0.00	\$0.00	\$0.00	\$0.00	\$21.57	98.0%	\$21.14	\$2.97	\$24.54	\$24.11
399	GEnx-1B70	956679	\$17.06	\$0.00	\$0.00	\$0.00	\$0.00	\$17.06	98.0%	\$16.72	\$4.63	\$21.69	\$21.35
400	LEAP- 1B26/28	603331	\$12.40	\$0.00	\$0.00	\$0.00	\$0.00	\$12.40	92.0%	\$11.41	\$3.85	\$16.25	\$15.26
401	LEAP- 1B26/28	602853	\$12.40	\$0.00	\$0.00	\$0.00	\$0.00	\$12.40	92.0%	\$11.41	\$3.85	\$16.25	\$15.26

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					D	ortfolio V	/aluation	e					
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No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	HT CBV	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
402	LEAP- 1B26/28	602518	\$12.40	\$0.00	\$0.00	\$0.00	\$0.00	\$12.40	92.0%	\$11.41	\$3.85	\$16.25	\$15.26
403	PW4056	727787 <sup>2</sup>	\$2.55	\$0.00	\$0.00	\$0.00	\$0.00	\$2.55	95.0%	\$2.42	(\$4.28)	\$0.50	\$0.50
404	PW4056	727948 <sup>2</sup>	\$2.55	\$0.00	\$0.00	\$0.00	\$0.00	\$2.55	95.0%	\$2.42	(\$4.49)	\$0.50	\$0.50
405	PW4056	727569 <sup>2</sup>	\$2.55	\$0.00	\$0.00	\$0.00	\$0.00	\$2.55	95.0%	\$2.42	(\$3.98)	\$0.50	\$0.50
406	PW4077	P222309	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$0.88)	\$2.72	\$1.93
407	PW4077	P222310	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$1.25)	\$2.35	\$1.56
408	PW4077	P222311	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$1.21)	\$2.39	\$1.60
409	PW4077	222258 <sup>2</sup>	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$4.78)	\$0.50	\$0.50
410	PW4077	777067 <sup>2</sup>	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$2.64)	\$0.96	\$0.50
411	PW4077	P222308	\$3.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3.60	78.0%	\$2.81	(\$1.45)	\$2.15	\$1.36
412	PW4090	222067	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$0.43)	\$4.37	\$3.41
413	PW4090	222068	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$0.91)	\$3.89	\$2.93
414	PW4090	222099	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$1.14)	\$3.66	\$2.70
415	PW4090	222108 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.43)	\$0.50	\$0.50
416	PW4090	222182 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$4.95)	\$0.50	\$0.50
417	PW4090	222215 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.26)	\$0.50	\$0.50
418	PW4090	222225	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$3.19)	\$1.61	\$0.65
419	PW4090	222254	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$2.57)	\$2.23	\$1.27
420	PW4090	222022	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$1.07)	\$3.73	\$2.77
421	PW4090	222025 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.30)	\$0.50	\$0.50
422	PW4090	222035 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.18)	\$0.50	\$0.50
423	PW4090	222036 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.08)	\$0.50	\$0.50
424	PW4090	222037	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$3.32)	\$1.48	\$0.52
425	PW4090	222043 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.02)	\$0.50	\$0.50
426	PW4090	222048	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$1.43)	\$3.37	\$2.41

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					P	ortfolio \	/aluation	ıs					
						(US\$ N	lillion)						
No.	Aircraft Type	Serial Number	BV w/ Newness	MTOW Adj.	Engine Adj.	Winglet Adj.	IFE Adj.	нт сву	MAF	HT CMV	Mx. Adj.	Mx. Adj. BV	Mx. Adj. MV
427	PW4090	222056 <sup>2</sup>	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4.80	80.0%	\$3.84	(\$5.48)	\$0.50	\$0.50
428	RB211- 535E4B	31572	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	\$0.43	\$2.95	\$2.70
429	RB211- 535E4B	E31620 <sup>2</sup>	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$1.63)	\$0.89	\$0.64
430	RB211- 535E4B	31655	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$0.44)	\$2.08	\$1.83
431	RB211- 535E4B	31849	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$1.14)	\$1.38	\$1.13
432	RB211- 535E4B	31884	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$0.62)	\$1.90	\$1.65
433	RB211- 535E4B	31900	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	\$1.51	\$4.03	\$3.78
434	RB211- 535E4B	31378	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	\$0.89	\$3.41	\$3.16
435	RB211- 535E4B	31379	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$2.13)	\$0.39	\$0.14
436	RB211- 535E4B	31412	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	(\$1.20)	\$1.32	\$1.07
437	RB211- 535E4B	31515	\$2.52	\$0.00	\$0.00	\$0.00	\$0.00	\$2.52	90.0%	\$2.27	\$1.65	\$4.17	\$3.92
438	V2522-A5	V10327	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	\$0.21	\$6.42	\$4.87
439	V2522-A5	V10824	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	\$0.40	\$6.61	\$5.06
440	V2522-A5	V11050	\$4.82	\$0.00	\$0.00	\$0.00	\$0.00	\$4.82	73.0%	\$3.52	\$0.82	\$5.64	\$4.34
441	V2522-A5	V10232	\$4.82	\$0.00	\$0.00	\$0.00	\$0.00	\$4.82	73.0%	\$3.52	(\$0.76)	\$4.06	\$2.76
442	V2522-A5	V10316	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	\$0.20	\$6.41	\$4.86
443	V2524-A5	V12173	\$5.13	\$0.00	\$0.00	\$0.00	\$0.00	\$5.13	73.0%	\$3.74	\$0.67	\$5.80	\$4.41
444	V2524-A5	V11807	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	\$0.44	\$6.65	\$5.10
445	V2527-A5	V11395	\$5.13	\$0.00	\$0.00	\$0.00	\$0.00	\$5.13	73.0%	\$3.74	\$0.69	\$5.82	\$4.43
446	V2527-A5	V12083	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	(\$3.53)	\$2.68	\$1.13
447	V2527-A5	V12169	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	(\$3.40)	\$2.81	\$1.26
448	V2527-A5	V12521	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	\$0.40	\$6.61	\$5.06
449	V2527-A5	V10167	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	(\$0.90)	\$5.31	\$3.76
450	V2527-A5	V10372	\$6.21	\$0.00	\$0.00	\$0.00	\$0.00	\$6.21	75.0%	\$4.66	(\$0.31)	\$5.90	\$4.35
451	V2524A5	V11394	\$5.13	\$0.00	\$0.00	\$0.00	\$0.00	\$5.13	73.0%	\$3.74	(\$0.36)	\$4.77	\$3.38

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	Portfolio Valuations												
	(US\$ Million)												
No.	Serial RV w/ MTOW Engine Winglet												
	Total \$5,012.63 \$9.73 (\$38.70) \$42.10 \$31.25 \$5,057.01 \$4,508.20 (\$717.72) \$4,388.47 \$3,956.4												

## Legend for Portfolio Valuation

Base Value adjusted for Month of Build Maximum Take-Off Weight Adjustment Adjustment for Engine Type Adjustment for Winglets/Sharklets/Scimitar Adjustment for In-Flight Entertainment Half Time Current Base Value Market Adjustment Factor Half Time Current Market Value BV w/ Newness -MTOW Adj. -Engine Adj. -

Winglet Adj. -IFE adj. -HT CBV -

MAF -HT CMV -Maintenance Adjustment
Maintenance Adjustment
Maintenance Adjusted Base Value
Maintenance Adjusted Market Value

Mx. Adj. -Mx. Adj. BV -Mx. Adj. MV -

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## Future Half Time Base Values at 2.0% Inflation

Future Half-Time Base Values (US\$ Million)											
No.	1	2	3	4	5	6	7	8	9	10	
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	
Serial Number	28766	28767	28768	28769	28779	28780	28782	28783	28785	28786	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$8.65	\$8.65	\$8.65	\$8.70	\$8.79	\$8.79	\$8.84	\$8.84	\$8.84	\$8.89	
2021	\$7.81	\$7.81	\$7.81	\$7.86	\$7.94	\$7.94	\$7.98	\$7.98	\$7.98	\$8.03	
2022	\$7.04	\$7.04	\$7.04	\$7.08	\$7.15	\$7.15	\$7.19	\$7.19	\$7.19	\$7.23	
2023	\$6.32	\$6.32	\$6.32	\$6.35	\$6.42	\$6.42	\$6.46	\$6.46	\$6.46	\$6.49	
2024	\$5.66	\$5.66	\$5.66	\$5.69	\$5.75	\$5.75	\$5.78	\$5.78	\$5.78	\$5.81	
2025	\$5.05	\$5.05	\$5.05	\$5.08	\$5.13	\$5.13	\$5.16	\$5.16	\$5.16	\$5.19	
2026	\$4.49	\$4.49	\$4.49	\$4.52	\$4.57	\$4.57	\$4.59	\$4.59	\$4.59	\$4.62	
2027	\$3.99	\$3.99	\$3.99	\$4.01	\$4.05	\$4.05	\$4.07	\$4.07	\$4.07	\$4.10	
2028	\$3.53	\$3.53	\$3.53	\$3.55	\$3.58	\$3.58	\$3.60	\$3.60	\$3.60	\$3.62	

	Future Half-Time Base Values											
				(US	\$ Million)							
No.	11	12	13	14	15	16	17	18	19	20		
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700		
Serial Number	28787	28936	28937	28938	28939	28940	28789	28790	28944	28945		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$8.98	\$9.03	\$9.03	\$9.08	\$8.73	\$9.13	\$9.18	\$9.18	\$9.34	\$9.34		
2021	\$8.11	\$8.18	\$8.18	\$8.23	\$7.91	\$8.27	\$8.32	\$8.32	\$8.46	\$8.46		
2022	\$7.31	\$7.39	\$7.39	\$7.43	\$7.14	\$7.47	\$7.51	\$7.51	\$7.64	\$7.64		
2023	\$6.56	\$6.65	\$6.65	\$6.69	\$6.43	\$6.73	\$6.77	\$6.77	\$6.88	\$6.88		
2024	\$5.87	\$5.98	\$5.98	\$6.01	\$5.78	\$6.04	\$6.07	\$6.07	\$6.18	\$6.18		
2025	\$5.24	\$5.35	\$5.35	\$5.38	\$5.17	\$5.41	\$5.44	\$5.44	\$5.53	\$5.53		
2026	\$4.66	\$4.78	\$4.78	\$4.80	\$4.62	\$4.83	\$4.85	\$4.85	\$4.94	\$4.94		
2027	\$4.14	\$4.25	\$4.25	\$4.27	\$4.11	\$4.30	\$4.32	\$4.32	\$4.40	\$4.40		
2028	\$3.66	\$3.77	\$3.77	\$3.79	\$3.65	\$3.81	\$3.83	\$3.83	\$3.90	\$3.90		

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Future Half-Time Base Values (US\$ Million)											
No.	21	22	23	24	25	26	27	28	29	30	
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	
Serial Number	28799	28948	28800	28949	28950	28803	29047	29048	32679	32653	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$9.39	\$9.39	\$9.44	\$9.09	\$9.09	\$9.09	\$8.78	\$8.88	\$11.93	\$12.21	
2021	\$8.51	\$8.51	\$8.55	\$8.24	\$8.24	\$8.24	\$7.95	\$8.04	\$10.97	\$11.23	
2022	\$7.68	\$7.68	\$7.73	\$7.44	\$7.44	\$7.44	\$7.18	\$7.27	\$10.06	\$10.29	
2023	\$6.92	\$6.92	\$6.96	\$6.70	\$6.70	\$6.70	\$6.47	\$6.54	\$9.19	\$9.41	
2024	\$6.21	\$6.21	\$6.25	\$6.02	\$6.02	\$6.02	\$5.81	\$5.88	\$8.38	\$8.58	
2025	\$5.56	\$5.56	\$5.59	\$5.39	\$5.39	\$5.39	\$5.20	\$5.26	\$7.61	\$7.79	
2026	\$4.97	\$4.97	\$4.99	\$4.81	\$4.81	\$4.81	\$4.64	\$4.70	\$6.90	\$7.06	
2027	\$4.42	\$4.42	\$4.44	\$4.28	\$4.28	\$4.28	\$4.13	\$4.18	\$6.23	\$6.38	
2028	\$3.92	\$3.92	\$3.94	\$3.80	\$3.80	\$3.80	\$3.67	\$3.71	\$5.61	\$5.74	

Future Half-Time Base Values (US\$ Million)											
No.	31	32	33	34	35	36	37	38	39	40	
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	
Serial Number	28958	30581	28770	28771	28772	28773	28774	28775	28776	28777	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$12.11	\$13.03	\$11.30	\$11.30	\$11.30	\$11.36	\$11.36	\$11.42	\$11.42	\$11.36	
2021	\$10.97	\$11.84	\$10.21	\$10.21	\$10.21	\$10.26	\$10.26	\$10.32	\$10.32	\$10.26	
2022	\$9.91	\$10.73	\$9.19	\$9.19	\$9.19	\$9.24	\$9.24	\$9.29	\$9.29	\$9.24	
2023	\$8.92	\$9.69	\$8.25	\$8.25	\$8.25	\$8.30	\$8.30	\$8.34	\$8.34	\$8.30	
2024	\$8.01	\$8.73	\$7.39	\$7.39	\$7.39	\$7.43	\$7.43	\$7.47	\$7.47	\$7.43	
2025	\$7.17	\$7.84	\$6.60	\$6.60	\$6.60	\$6.63	\$6.63	\$6.67	\$6.67	\$6.63	
2026	\$6.40	\$7.01	\$5.87	\$5.87	\$5.87	\$5.90	\$5.90	\$5.93	\$5.93	\$5.90	
2027	\$5.70	\$6.26	\$5.21	\$5.21	\$5.21	\$5.24	\$5.24	\$5.26	\$5.26	\$5.24	
2028	\$5.06	\$5.57	\$4.61	\$4.61	\$4.61	\$4.63	\$4.63	\$4.66	\$4.66	\$4.63	

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Future Half-Time Base Values (US\$ Million)											
No.	41	42	43	44	45	46	47	48	49	50	
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	
Serial Number	28778	28781	28929	28930	28931	28932	28788	28792	28942	28946	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$11.42	\$11.42	\$11.61	\$11.67	\$11.67	\$11.67	\$11.65	\$12.00	\$11.71	\$12.20	
2021	\$10.32	\$10.32	\$10.49	\$10.54	\$10.54	\$10.54	\$10.55	\$10.87	\$10.61	\$11.05	
2022	\$9.29	\$9.29	\$9.44	\$9.49	\$9.49	\$9.49	\$9.53	\$9.82	\$9.58	\$9.98	
2023	\$8.34	\$8.34	\$8.48	\$8.52	\$8.52	\$8.52	\$8.59	\$8.84	\$8.63	\$8.99	
2024	\$7.47	\$7.47	\$7.59	\$7.63	\$7.63	\$7.63	\$7.71	\$7.94	\$7.75	\$8.07	
2025	\$6.67	\$6.67	\$6.78	\$6.81	\$6.81	\$6.81	\$6.90	\$7.11	\$6.94	\$7.23	
2026	\$5.93	\$5.93	\$6.03	\$6.06	\$6.06	\$6.06	\$6.16	\$6.35	\$6.19	\$6.45	
2027	\$5.26	\$5.26	\$5.35	\$5.38	\$5.38	\$5.38	\$5.48	\$5.65	\$5.51	\$5.74	
2028	\$4.66	\$4.66	\$4.73	\$4.76	\$4.76	\$4.76	\$4.86	\$5.01	\$4.89	\$5.09	

Future Half Life Base Values USS Million											
No.	51	52	53	54	55	56	57	58	59	60	
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	
Serial Number	28947	28801	28802	28952	28806	28955	28957	30583	30584	30779	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$11.85	\$11.91	\$12.26	\$11.98	\$12.33	\$12.40	\$12.46	\$13.10	\$13.10	\$13.10	
2021	\$10.74	\$10.79	\$11.11	\$10.85	\$11.17	\$11.23	\$11.29	\$11.90	\$11.90	\$11.90	
2022	\$9.70	\$9.75	\$10.03	\$9.80	\$10.09	\$10.15	\$10.20	\$10.78	\$10.78	\$10.78	
2023	\$8.73	\$8.78	\$9.04	\$8.83	\$9.09	\$9.14	\$9.18	\$9.74	\$9.74	\$9.74	
2024	\$7.84	\$7.88	\$8.11	\$7.93	\$8.16	\$8.21	\$8.25	\$8.77	\$8.77	\$8.77	
2025	\$7.02	\$7.06	\$7.26	\$7.10	\$7.30	\$7.35	\$7.38	\$7.88	\$7.88	\$7.88	
2026	\$6.27	\$6.30	\$6.48	\$6.33	\$6.52	\$6.56	\$6.59	\$7.05	\$7.05	\$7.05	
2027	\$5.58	\$5.60	\$5.77	\$5.64	\$5.80	\$5.84	\$5.86	\$6.29	\$6.29	\$6.29	
2028	\$4.95	\$4.97	\$5.12	\$5.00	\$5.15	\$5.18	\$5.20	\$5.60	\$5.60	\$5.60	

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Future Half-Time Base Values (US\$ Million)											
No.	61	62	63	64	65	66	67	68	69	70	
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	
Serial Number	30802	30855	32403	31590	31594	31595	31596	31597	31598	31599	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$13.24	\$13.76	\$13.91	\$14.14	\$14.37	\$14.45	\$16.04	\$16.13	\$16.21	\$16.21	
2021	\$12.03	\$12.54	\$12.68	\$12.89	\$13.14	\$13.21	\$14.71	\$14.79	\$14.86	\$14.86	
2022	\$10.90	\$11.40	\$11.52	\$11.71	\$11.97	\$12.04	\$13.44	\$13.52	\$13.58	\$13.58	
2023	\$9.85	\$10.32	\$10.44	\$10.61	\$10.88	\$10.94	\$12.25	\$12.32	\$12.38	\$12.38	
2024	\$8.87	\$9.32	\$9.43	\$9.58	\$9.85	\$9.91	\$11.13	\$11.19	\$11.25	\$11.25	
2025	\$7.96	\$8.40	\$8.49	\$8.63	\$8.90	\$8.95	\$10.09	\$10.14	\$10.19	\$10.19	
2026	\$7.13	\$7.54	\$7.62	\$7.75	\$8.02	\$8.06	\$9.11	\$9.16	\$9.21	\$9.21	
2027	\$6.36	\$6.75	\$6.82	\$6.94	\$7.20	\$7.24	\$8.20	\$8.25	\$8.29	\$8.29	
2028	\$5.66	\$6.03	\$6.09	\$6.19	\$6.44	\$6.48	\$7.37	\$7.41	\$7.44	\$7.44	

Future Half-Time Base Values (US\$ Million)											
No.	71	72	73	74	75	76	77	78	79	80	
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	
Serial Number	31600	31636	33451	31607	31601	33455	34001	34002	31602	31603	
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020	\$16.67	\$16.67	\$16.76	\$16.86	\$17.04	\$17.32	\$18.10	\$18.20	\$19.24	\$19.34	
2021	\$15.33	\$15.33	\$15.41	\$15.50	\$15.67	\$15.93	\$16.69	\$16.79	\$17.80	\$17.89	
2022	\$14.05	\$14.05	\$14.13	\$14.21	\$14.37	\$14.60	\$15.35	\$15.43	\$16.41	\$16.50	
2023	\$12.85	\$12.85	\$12.92	\$12.99	\$13.13	\$13.35	\$14.07	\$14.15	\$15.09	\$15.17	
2024	\$11.71	\$11.71	\$11.77	\$11.84	\$11.97	\$12.16	\$12.86	\$12.94	\$13.84	\$13.91	
2025	\$10.64	\$10.64	\$10.70	\$10.76	\$10.87	\$11.05	\$11.72	\$11.79	\$12.65	\$12.71	
2026	\$9.64	\$9.64	\$9.69	\$9.75	\$9.85	\$10.01	\$10.65	\$10.71	\$11.53	\$11.59	
2027	\$8.71	\$8.71	\$8.75	\$8.80	\$8.90	\$9.05	\$9.65	\$9.70	\$10.47	\$10.53	
2028	\$7.84	\$7.84	\$7.88	\$7.93	\$8.01	\$8.15	\$8.72	\$8.77	\$9.49	\$9.54	

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Future Half-Time Base Values													
	(US\$ Million)												
No.	81	82	83	84	85	86	87	88	89	90			
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800			
Serial Number	33461	31604	32834	32832	30132	31658	31662	31660	37101	31642			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$19.34	\$19.34	\$19.45	\$19.55	\$25.41	\$25.41	\$25.41	\$25.41	\$25.41	\$25.41			
2021	\$17.89	\$17.89	\$17.99	\$18.08	\$23.79	\$23.79	\$23.79	\$23.79	\$23.79	\$23.79			
2022	\$16.50	\$16.50	\$16.59	\$16.68	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
2023	\$15.17	\$15.17	\$15.26	\$15.34	\$20.66	\$20.66	\$20.66	\$20.66	\$20.66	\$20.66			
2024	\$13.91	\$13.91	\$13.99	\$14.06	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17			
2025	\$12.71	\$12.71	\$12.79	\$12.85	\$17.73	\$17.73	\$17.73	\$17.73	\$17.73	\$17.73			
2026	\$11.59	\$11.59	\$11.65	\$11.71	\$16.35	\$16.35	\$16.35	\$16.35	\$16.35	\$16.35			
2027	\$10.53	\$10.53	\$10.59	\$10.64	\$15.04	\$15.04	\$15.04	\$15.04	\$15.04	\$15.04			
2028	\$9.54	\$9.54	\$9.59	\$9.64	\$13.78	\$13.78	\$13.78	\$13.78	\$13.78	\$13.78			

	Future Half-Time Base Values											
(US\$ Million)												
No.	91	92	93	94	95	96	97	98	99	100		
Aircraft Type	737-800	737-800	737-800	737- 900ER								
Serial Number	31659	38700	38701	37094	31620	33528	33534	33535	30131	33536		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$25.41	\$25.41	\$25.41	\$22.27	\$22.38	\$24.47	\$24.22	\$24.22	\$24.34	\$24.34		
2021	\$23.79	\$23.79	\$23.79	\$20.72	\$20.83	\$22.84	\$22.60	\$22.60	\$22.72	\$22.72		
2022	\$22.20	\$22.20	\$22.20	\$19.23	\$19.32	\$21.25	\$21.03	\$21.03	\$21.14	\$21.14		
2023	\$20.66	\$20.66	\$20.66	\$17.79	\$17.87	\$19.72	\$19.52	\$19.52	\$19.61	\$19.61		
2024	\$19.17	\$19.17	\$19.17	\$16.40	\$16.48	\$18.24	\$18.05	\$18.05	\$18.14	\$18.14		
2025	\$17.73	\$17.73	\$17.73	\$15.08	\$15.16	\$16.82	\$16.65	\$16.65	\$16.73	\$16.73		
2026	\$16.35	\$16.35	\$16.35	\$13.83	\$13.90	\$15.47	\$15.31	\$15.31	\$15.39	\$15.39		
2027	\$15.04	\$15.04	\$15.04	\$12.64	\$12.70	\$14.18	\$14.04	\$14.04	\$14.11	\$14.11		
2028	\$13.78	\$13.78	\$13.78	\$11.52	\$11.58	\$12.96	\$12.83	\$12.83	\$12.89	\$12.89		

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			Eut	uro Half T	imo Paco	Values						
	Future Half-Time Base Values (US\$ Million)											
No.	101	102	103	104	105	106	107	108	109	110		
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200		
Serial Number	27298	27299	27300	27301	27302	27555	27556	27558	27559	27560		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$7.49	\$7.53	\$7.53	\$7.53	\$7.61	\$7.69	\$7.82	\$8.15	\$8.19	\$8.69		
2021	\$6.84	\$6.87	\$6.87	\$6.87	\$6.96	\$7.03	\$7.15	\$7.47	\$7.50	\$7.97		
2022	\$6.23	\$6.26	\$6.26	\$6.26	\$6.35	\$6.42	\$6.53	\$6.83	\$6.86	\$7.31		
2023	\$5.67	\$5.70	\$5.70	\$5.70	\$5.79	\$5.85	\$5.95	\$6.23	\$6.26	\$6.68		
2024	\$5.14	\$5.17	\$5.17	\$5.17	\$5.26	\$5.32	\$5.41	\$5.68	\$5.71	\$6.10		
2025	\$4.66	\$4.69	\$4.69	\$4.69	\$4.78	\$4.83	\$4.91	\$5.16	\$5.19	\$5.56		
2026	\$4.22	\$4.24	\$4.24	\$4.24	\$4.33	\$4.38	\$4.45	\$4.69	\$4.71	\$5.05		
2027	\$3.81	\$3.83	\$3.83	\$3.83	\$3.92	\$3.96	\$4.03	\$4.25	\$4.27	\$4.59		
2028	\$3.43	\$3.45	\$3.45	\$3.45	\$3.54	\$3.57	\$3.64	\$3.84	\$3.86	\$4.16		

	Future Half Life Base Values US\$ Million													
No.	111	112	113	114	115	116	117	118	119	120				
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200				
Serial Number	27561	27562	27563	27564	27566	28968	27567	28969	28970	28971				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$8.78	\$8.83	\$8.88	\$8.92	\$9.21	\$9.21	\$9.26	\$9.26	\$9.37	\$9.42				
2021	\$8.06	\$8.10	\$8.15	\$8.19	\$8.47	\$8.47	\$8.51	\$8.51	\$8.61	\$8.66				
2022	\$7.38	\$7.42	\$7.46	\$7.50	\$7.77	\$7.77	\$7.81	\$7.81	\$7.91	\$7.95				
2023	\$6.75	\$6.79	\$6.83	\$6.86	\$7.12	\$7.12	\$7.16	\$7.16	\$7.24	\$7.28				
2024	\$6.16	\$6.20	\$6.23	\$6.26	\$6.51	\$6.51	\$6.54	\$6.54	\$6.62	\$6.66				
2025	\$5.61	\$5.64	\$5.68	\$5.70	\$5.94	\$5.94	\$5.97	\$5.97	\$6.04	\$6.08				
2026	\$5.10	\$5.13	\$5.16	\$5.19	\$5.41	\$5.41	\$5.44	\$5.44	\$5.51	\$5.54				
2027	\$4.63	\$4.66	\$4.69	\$4.71	\$4.92	\$4.92	\$4.95	\$4.95	\$5.01	\$5.04				
2028	\$4.20	\$4.22	\$4.25	\$4.27	\$4.47	\$4.47	\$4.49	\$4.49	\$4.55	\$4.57				

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	Future Half-Time Base Values (US\$ Million)												
No.	121	122	123	124	125	126	127	128	129	130			
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-300			
Serial Number	29281	29283	29284	29285	30229	30351	30352	30353	30354	32810			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$9.42	\$9.84	\$9.84	\$9.89	\$10.33	\$10.39	\$10.49	\$10.49	\$10.73	\$13.89			
2021	\$8.66	\$9.06	\$9.06	\$9.11	\$9.51	\$9.57	\$9.68	\$9.68	\$9.90	\$12.81			
2022	\$7.95	\$8.33	\$8.33	\$8.37	\$8.75	\$8.80	\$8.91	\$8.91	\$9.12	\$11.80			
2023	\$7.28	\$7.65	\$7.65	\$7.68	\$8.03	\$8.07	\$8.19	\$8.19	\$8.38	\$10.84			
2024	\$6.66	\$7.00	\$7.00	\$7.04	\$7.35	\$7.40	\$7.52	\$7.52	\$7.69	\$9.95			
2025	\$6.08	\$6.40	\$6.40	\$6.44	\$6.72	\$6.76	\$6.89	\$6.89	\$7.05	\$9.11			
2026	\$5.54	\$5.85	\$5.85	\$5.88	\$6.14	\$6.17	\$6.30	\$6.30	\$6.44	\$8.33			
2027	\$5.04	\$5.33	\$5.33	\$5.35	\$5.59	\$5.62	\$5.75	\$5.75	\$5.88	\$7.60			
2028	\$4.57	\$4.84	\$4.84	\$4.87	\$5.09	\$5.11	\$5.24	\$5.24	\$5.36	\$6.93			

	Future Half-Time Base Values (US\$ Million)													
No.	131	132	133	134	135	136	137	138	139	140				
Aircraft Type	757-300	757-300	757-300	757-300	757-300	757-300	757-300	757-300	767- 300ER	767- 300ER				
Serial Number	32811	32812	32813	32814	32815	32816	32817	32818	29236	29238				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$13.89	\$14.05	\$14.05	\$16.09	\$16.09	\$16.19	\$16.29	\$16.39	\$10.75	\$10.87				
2021	\$12.81	\$12.98	\$12.98	\$14.92	\$14.92	\$15.02	\$15.11	\$15.20	\$9.54	\$9.64				
2022	\$11.80	\$11.98	\$11.98	\$13.82	\$13.82	\$13.90	\$13.99	\$14.07	\$8.44	\$8.53				
2023	\$10.84	\$11.03	\$11.03	\$12.77	\$12.77	\$12.85	\$12.93	\$13.01	\$7.45	\$7.53				
2024	\$9.95	\$10.14	\$10.14	\$11.78	\$11.78	\$11.85	\$11.92	\$12.00	\$6.56	\$6.64				
2025	\$9.11	\$9.30	\$9.30	\$10.84	\$10.84	\$10.91	\$10.98	\$11.05	\$5.77	\$5.83				
2026	\$8.33	\$8.52	\$8.52	\$9.97	\$9.97	\$10.03	\$10.09	\$10.15	\$5.05	\$5.11				
2027	\$7.60	\$7.79	\$7.79	\$9.15	\$9.15	\$9.20	\$9.26	\$9.32	\$4.42	\$4.47				
2028	\$6.93	\$7.11	\$7.11	\$8.38	\$8.38	\$8.43	\$8.48	\$8.53	\$3.86	\$3.90				

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	Future Half-Time Base Values (US\$ Million)													
No.	141	142	143	144	145	146	147	148	149	150				
Aircraft Type	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER				
Serial Number	29239	30024	30025	29240	30026	29241	29242	29243	30028	33466				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$10.87	\$11.33	\$11.53	\$11.67	\$11.81	\$12.01	\$12.23	\$12.53	\$13.14	\$14.54				
2021	\$9.64	\$10.07	\$10.25	\$10.38	\$10.50	\$10.70	\$10.90	\$11.17	\$11.74	\$13.02				
2022	\$8.53	\$8.94	\$9.09	\$9.21	\$9.32	\$9.52	\$9.69	\$9.93	\$10.46	\$11.63				
2023	\$7.53	\$7.91	\$8.05	\$8.15	\$8.24	\$8.44	\$8.60	\$8.81	\$9.31	\$10.37				
2024	\$6.64	\$6.98	\$7.11	\$7.19	\$7.28	\$7.47	\$7.61	\$7.80	\$8.25	\$9.22				
2025	\$5.83	\$6.15	\$6.26	\$6.33	\$6.41	\$6.60	\$6.72	\$6.88	\$7.30	\$8.18				
2026	\$5.11	\$5.40	\$5.50	\$5.57	\$5.63	\$5.81	\$5.92	\$6.06	\$6.45	\$7.24				
2027	\$4.47	\$4.74	\$4.82	\$4.88	\$4.94	\$5.11	\$5.20	\$5.33	\$5.68	\$6.39				
2028	\$3.90	\$4.14	\$4.21	\$4.27	\$4.32	\$4.48	\$4.56	\$4.67	\$4.99	\$5.63				

	Future Half-Time Base Values												
	(US\$ Million)												
No.	151	152	153	154	155	156	157	158	159	160			
Aircraft Type	767- 300ER	767- 300ER	767- 400ER										
Serial Number	33467	33468	29446	29447	29448	29451	29452	29453	29454	29455			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$14.71	\$14.88	\$13.26	\$13.35	\$13.45	\$14.25	\$14.97	\$14.97	\$15.08	\$15.08			
2021	\$13.17	\$13.36	\$11.82	\$11.90	\$11.99	\$12.73	\$13.41	\$13.41	\$13.51	\$13.51			
2022	\$11.77	\$11.96	\$10.51	\$10.58	\$10.66	\$11.35	\$11.98	\$11.98	\$12.07	\$12.07			
2023	\$10.49	\$10.69	\$9.32	\$9.39	\$9.46	\$10.09	\$10.68	\$10.68	\$10.76	\$10.76			
2024	\$9.33	\$9.53	\$8.25	\$8.31	\$8.37	\$8.95	\$9.49	\$9.49	\$9.56	\$9.56			
2025	\$8.28	\$8.47	\$7.28	\$7.33	\$7.39	\$7.92	\$8.42	\$8.42	\$8.48	\$8.48			
2026	\$7.32	\$7.52	\$6.42	\$6.46	\$6.51	\$6.99	\$7.45	\$7.45	\$7.51	\$7.51			
2027	\$6.47	\$6.65	\$5.64	\$5.68	\$5.72	\$6.16	\$6.58	\$6.58	\$6.63	\$6.63			
2028	\$5.69	\$5.87	\$4.94	\$4.97	\$5.01	\$5.41	\$5.80	\$5.80	\$5.84	\$5.84			

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	Future Half-Time Base Values												
(US\$ Million)													
No.	161	162	163	164	165	166	167	168	169	170			
Aircraft Type	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	777-200	777-200	777-200	777-200			
Serial Number	29456	29457	29458	29459	29460	29461	30216	30221	26919	26921			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$15.19	\$15.19	\$15.31	\$15.31	\$15.42	\$15.42	\$10.89	\$11.23	\$8.55	\$8.55			
2021	\$13.60	\$13.60	\$13.71	\$13.71	\$13.81	\$13.81	\$9.98	\$10.29	\$7.75	\$7.75			
2022	\$12.16	\$12.16	\$12.25	\$12.25	\$12.34	\$12.34	\$9.12	\$9.40	\$7.01	\$7.01			
2023	\$10.83	\$10.83	\$10.92	\$10.92	\$11.00	\$11.00	\$8.32	\$8.58	\$6.32	\$6.32			
2024	\$9.63	\$9.63	\$9.71	\$9.71	\$9.78	\$9.78	\$7.57	\$7.80	\$5.69	\$5.69			
2025	\$8.55	\$8.55	\$8.61	\$8.61	\$8.68	\$8.68	\$6.87	\$7.08	\$5.11	\$5.11			
2026	\$7.56	\$7.56	\$7.62	\$7.62	\$7.68	\$7.68	\$6.22	\$6.41	\$4.58	\$4.58			
2027	\$6.68	\$6.68	\$6.73	\$6.73	\$6.78	\$6.78	\$5.61	\$5.79	\$4.09	\$4.09			
2028	\$5.88	\$5.88	\$5.93	\$5.93	\$5.97	\$5.97	\$5.06	\$5.22	\$3.65	\$3.65			

	Future Half Life Base Values US\$ Million												
No.	171	172	173	174	175	176	177	178	179	180			
Aircraft Type	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200			
Serial Number	26932	26930	26929	26936	26947	26937	26916	26940	26941	26944			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$8.74	\$8.67	\$8.82	\$8.90	\$8.82	\$8.94	\$8.51	\$9.06	\$9.06	\$9.10			
2021	\$7.92	\$7.86	\$8.01	\$8.09	\$8.01	\$8.12	\$7.71	\$8.23	\$8.23	\$8.27			
2022	\$7.17	\$7.11	\$7.26	\$7.33	\$7.26	\$7.36	\$6.98	\$7.46	\$7.46	\$7.49			
2023	\$6.47	\$6.41	\$6.57	\$6.63	\$6.57	\$6.66	\$6.30	\$6.74	\$6.74	\$6.77			
2024	\$5.82	\$5.77	\$5.92	\$5.98	\$5.92	\$6.00	\$5.67	\$6.08	\$6.08	\$6.11			
2025	\$5.23	\$5.18	\$5.33	\$5.38	\$5.33	\$5.40	\$5.09	\$5.47	\$5.47	\$5.50			
2026	\$4.68	\$4.64	\$4.78	\$4.83	\$4.78	\$4.85	\$4.56	\$4.91	\$4.91	\$4.94			
2027	\$4.18	\$4.15	\$4.28	\$4.32	\$4.28	\$4.34	\$4.07	\$4.40	\$4.40	\$4.42			
2028	\$3.73	\$3.70	\$3.83	\$3.86	\$3.83	\$3.88	\$3.63	\$3.93	\$3.93	\$3.95			

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Future Half-Time Base Values												
				(US\$ Milli	on)							
No.	181	182	183	184	185	186	187	188	189	190		
Aircraft Type	777-200	777-	777-	777-	777-	777-	777-	777-	777-	777-		
All Clair Type	777-200	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER		
Serial Number	26945	27577	27578	27579	27580	27581	29476	29477	29478	29479		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$9.14	\$16.05	\$16.05	\$16.27	\$16.27	\$16.38	\$16.38	\$16.61	\$16.73	\$16.85		
2021	\$8.30	\$14.58	\$14.58	\$14.78	\$14.78	\$14.88	\$14.88	\$15.12	\$15.23	\$15.34		
2022	\$7.53	\$13.22	\$13.22	\$13.40	\$13.40	\$13.49	\$13.49	\$13.73	\$13.83	\$13.93		
2023	\$6.80	\$11.95	\$11.95	\$12.11	\$12.11	\$12.20	\$12.20	\$12.44	\$12.53	\$12.62		
2024	\$6.14	\$10.78	\$10.78	\$10.93	\$10.93	\$11.00	\$11.00	\$11.24	\$11.32	\$11.40		
2025	\$5.52	\$9.70	\$9.70	\$9.83	\$9.83	\$9.90	\$9.90	\$10.13	\$10.20	\$10.28		
2026	\$4.96	\$8.71	\$8.71	\$8.83	\$8.83	\$8.89	\$8.89	\$9.11	\$9.18	\$9.24		
2027	\$4.44	\$7.80	\$7.80	\$7.90	\$7.90	\$7.96	\$7.96	\$8.18	\$8.23	\$8.29		
2028	\$3.97	\$6.97	\$6.97	\$7.06	\$7.06	\$7.11	\$7.11	\$7.32	\$7.37	\$7.42		

	Future Half-Time Base Values													
				(US\$ Mil	lion)									
No.	191	192	193	194	195	196	197	198	199	200				
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	777-				
Alleran Type	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER				
Serial Number	29480	29859	29861	28678	28679	31679	31680	35547	31687	39776				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$16.96	\$17.08	\$17.44	\$18.30	\$18.42	\$21.43	\$21.59	\$32.41	\$32.64	\$42.72				
2021	\$15.44	\$15.55	\$15.87	\$16.69	\$16.80	\$19.61	\$19.76	\$29.94	\$30.15	\$39.69				
2022	\$14.02	\$14.12	\$14.41	\$15.18	\$15.28	\$17.91	\$18.04	\$27.59	\$27.79	\$36.78				
2023	\$12.70	\$12.79	\$13.06	\$13.78	\$13.87	\$16.31	\$16.44	\$25.37	\$25.55	\$34.01				
2024	\$11.47	\$11.56	\$11.80	\$12.47	\$12.56	\$14.83	\$14.94	\$23.27	\$23.44	\$31.36				
2025	\$10.34	\$10.42	\$10.64	\$11.27	\$11.34	\$13.44	\$13.54	\$21.29	\$21.44	\$28.86				
2026	\$9.30	\$9.37	\$9.57	\$10.15	\$10.22	\$12.16	\$12.25	\$19.44	\$19.58	\$26.49				
2027	\$8.35	\$8.41	\$8.58	\$9.13	\$9.19	\$10.97	\$11.05	\$17.70	\$17.83	\$24.26				
2028	\$7.47	\$7.53	\$7.68	\$8.18	\$8.24	\$9.87	\$9.95	\$16.08	\$16.20	\$22.16				

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Future Half-Time Base Values														
	(US\$ Million)													
No.	201	202	203	204	205	206	207	208	209	210				
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	777-				
All Clait Type	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER				
Serial Number	39777	28713	30212	30215	30222	30551	30223	30552	30553	30225				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$42.72	\$16.51	\$16.86	\$17.69	\$19.34	\$19.34	\$19.90	\$20.04	\$20.18	\$20.88				
2021	\$39.69	\$15.03	\$15.35	\$16.10	\$17.67	\$17.67	\$18.18	\$18.31	\$18.44	\$19.08				
2022	\$36.78	\$13.65	\$13.93	\$14.62	\$16.10	\$16.10	\$16.57	\$16.69	\$16.80	\$17.39				
2023	\$34.01	\$12.36	\$12.62	\$13.24	\$14.64	\$14.64	\$15.07	\$15.17	\$15.28	\$15.81				
2024	\$31.36	\$11.17	\$11.41	\$11.97	\$13.28	\$13.28	\$13.67	\$13.76	\$13.86	\$14.34				
2025	\$28.86	\$10.07	\$10.28	\$10.79	\$12.02	\$12.02	\$12.37	\$12.45	\$12.54	\$12.97				
2026	\$26.49	\$9.06	\$9.25	\$9.70	\$10.85	\$10.85	\$11.16	\$11.24	\$11.32	\$11.71				
2027	\$24.26	\$8.13	\$8.30	\$8.71	\$9.77	\$9.77	\$10.05	\$10.12	\$10.19	\$10.55				
2028	\$22.16	\$7.27	\$7.43	\$7.79	\$8.78	\$8.78	\$9.03	\$9.10	\$9.16	\$9.48				

	Future Half-Time Base Values													
				(US\$ Mil	lion)									
No.	211	212	213	214	215	216	217	218	219	220				
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	777-				
	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER				
Serial Number	30554	30226	30555	26948	26950	26951	26954	26938	26939	26942				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$20.88	\$21.02	\$21.02	\$14.07	\$14.07	\$14.17	\$14.27	\$14.17	\$14.37	\$14.48				
2021	\$19.08	\$19.24	\$19.24	\$12.76	\$12.76	\$12.85	\$12.94	\$12.85	\$13.03	\$13.13				
2022	\$17.39	\$17.57	\$17.57	\$11.54	\$11.54	\$11.62	\$11.71	\$11.62	\$11.79	\$11.88				
2023	\$15.81	\$16.00	\$16.00	\$10.42	\$10.42	\$10.49	\$10.57	\$10.49	\$10.64	\$10.72				
2024	\$14.34	\$14.54	\$14.54	\$9.38	\$9.38	\$9.45	\$9.51	\$9.45	\$9.58	\$9.65				
2025	\$12.97	\$13.18	\$13.18	\$8.42	\$8.42	\$8.48	\$8.54	\$8.48	\$8.60	\$8.67				
2026	\$11.71	\$11.92	\$11.92	\$7.55	\$7.55	\$7.60	\$7.66	\$7.60	\$7.71	\$7.77				
2027	\$10.55	\$10.76	\$10.76	\$6.75	\$6.75	\$6.80	\$6.84	\$6.80	\$6.89	\$6.94				
2028	\$9.48	\$9.68	\$9.68	\$6.02	\$6.02	\$6.06	\$6.10	\$6.06	\$6.15	\$6.19				

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Future Half-Time Base Values														
	(US\$ Million)													
No.	221	222	223	224	225	226	227	228	229	230				
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	A319-				
All Clait Type	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	100				
Serial Number	26933	26934	26946	26953	26927	26931	26924	26928	26926	686				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$14.58	\$14.68	\$14.78	\$14.88	\$14.98	\$15.08	\$15.19	\$15.19	\$15.52	\$6.64				
2021	\$13.22	\$13.31	\$13.40	\$13.49	\$13.58	\$13.70	\$13.80	\$13.80	\$14.10	\$5.99				
2022	\$11.96	\$12.04	\$12.12	\$12.21	\$12.29	\$12.42	\$12.51	\$12.51	\$12.78	\$5.40				
2023	\$10.79	\$10.87	\$10.94	\$11.02	\$11.09	\$11.23	\$11.31	\$11.31	\$11.55	\$4.84				
2024	\$9.72	\$9.79	\$9.85	\$9.92	\$9.99	\$10.13	\$10.20	\$10.20	\$10.42	\$4.33				
2025	\$8.73	\$8.79	\$8.85	\$8.91	\$8.97	\$9.11	\$9.18	\$9.18	\$9.38	\$3.87				
2026	\$7.82	\$7.88	\$7.93	\$7.98	\$8.04	\$8.18	\$8.24	\$8.24	\$8.42	\$3.44				
2027	\$6.99	\$7.04	\$7.09	\$7.14	\$7.18	\$7.33	\$7.38	\$7.38	\$7.54	\$3.05				
2028	\$6.24	\$6.28	\$6.32	\$6.36	\$6.41	\$6.55	\$6.59	\$6.59	\$6.74	\$2.70				

	Future Half Life Base Values												
				US\$ Mil	lion								
No.	231	232	233	234	235	236	237	238	239	240			
Aircraft Type	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100			
Serial Number	690	0748	0759	0783	0788	0798	0804	0825	0843	0847			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$6.64	\$6.86	\$6.90	\$6.99	\$6.99	\$7.03	\$7.03	\$7.12	\$7.17	\$7.22			
2021	\$5.99	\$6.19	\$6.23	\$6.33	\$6.33	\$6.37	\$6.37	\$6.45	\$6.49	\$6.54			
2022	\$5.40	\$5.57	\$5.61	\$5.71	\$5.71	\$5.75	\$5.75	\$5.82	\$5.86	\$5.90			
2023	\$4.84	\$5.00	\$5.03	\$5.14	\$5.14	\$5.17	\$5.17	\$5.24	\$5.28	\$5.31			
2024	\$4.33	\$4.48	\$4.50	\$4.62	\$4.62	\$4.64	\$4.64	\$4.70	\$4.73	\$4.77			
2025	\$3.87	\$3.99	\$4.02	\$4.13	\$4.13	\$4.15	\$4.15	\$4.21	\$4.24	\$4.27			
2026	\$3.44	\$3.55	\$3.57	\$3.68	\$3.68	\$3.71	\$3.71	\$3.75	\$3.78	\$3.81			
2027	\$3.05	\$3.15	\$3.17	\$3.28	\$3.28	\$3.30	\$3.30	\$3.34	\$3.36	\$3.39			
2028	\$2.70	\$2.79	\$2.80	\$2.91	\$2.91	\$2.92	\$2.92	\$2.96	\$2.98	\$3.00			

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			Future I	Half-Time	Base Va	alues				
				(US\$ Mil	lion)					
No.	241	242	243	244	245	246	247	248	249	250
Aircraft Type	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-
All Clait Type	100	100	100	100	100	100	100	100	100	100
Serial Number	0850	0858	0862	0867	0871	0873	0882	0893	0898	0944
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$7.22	\$7.22	\$7.26	\$7.26	\$7.31	\$7.31	\$7.35	\$7.35	\$7.35	\$7.49
2021	\$6.54	\$6.54	\$6.57	\$6.57	\$6.62	\$6.62	\$6.66	\$6.66	\$6.66	\$6.80
2022	\$5.90	\$5.90	\$5.93	\$5.93	\$5.98	\$5.98	\$6.01	\$6.01	\$6.01	\$6.16
2023	\$5.31	\$5.31	\$5.34	\$5.34	\$5.38	\$5.38	\$5.41	\$5.41	\$5.41	\$5.56
2024	\$4.77	\$4.77	\$4.79	\$4.79	\$4.83	\$4.83	\$4.85	\$4.85	\$4.85	\$5.01
2025	\$4.27	\$4.27	\$4.29	\$4.29	\$4.32	\$4.32	\$4.34	\$4.34	\$4.34	\$4.49
2026	\$3.81	\$3.81	\$3.83	\$3.83	\$3.85	\$3.85	\$3.87	\$3.87	\$3.87	\$4.02
2027	\$3.39	\$3.39	\$3.40	\$3.40	\$3.43	\$3.43	\$3.45	\$3.45	\$3.45	\$3.59
2028	\$3.00	\$3.00	\$3.02	\$3.02	\$3.04	\$3.04	\$3.06	\$3.06	\$3.06	\$3.19

Future Half-Time Base Values														
	(US\$ Million)													
No.	251	252	253	254	255	256	257	258	259	260				
Aircraft Type	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-				
All Clait Type	100	100	100	100	100	100	100	100	100	100				
Serial Number	0948	0952	0965	0980	0989	1022	1031	1211	1243	1291				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$7.54	\$7.54	\$7.54	\$7.59	\$7.59	\$7.69	\$7.74	\$8.24	\$8.34	\$8.45				
2021	\$6.85	\$6.85	\$6.85	\$6.89	\$6.89	\$6.98	\$7.03	\$7.51	\$7.60	\$7.70				
2022	\$6.20	\$6.20	\$6.20	\$6.24	\$6.24	\$6.32	\$6.37	\$6.82	\$6.90	\$6.99				
2023	\$5.60	\$5.60	\$5.60	\$5.64	\$5.64	\$5.71	\$5.75	\$6.17	\$6.25	\$6.33				
2024	\$5.04	\$5.04	\$5.04	\$5.07	\$5.07	\$5.14	\$5.17	\$5.57	\$5.64	\$5.71				
2025	\$4.52	\$4.52	\$4.52	\$4.55	\$4.55	\$4.61	\$4.64	\$5.02	\$5.08	\$5.14				
2026	\$4.05	\$4.05	\$4.05	\$4.07	\$4.07	\$4.13	\$4.15	\$4.50	\$4.56	\$4.62				
2027	\$3.61	\$3.61	\$3.61	\$3.63	\$3.63	\$3.68	\$3.71	\$4.03	\$4.08	\$4.13				
2028	\$3.21	\$3.21	\$3.21	\$3.23	\$3.23	\$3.27	\$3.30	\$3.59	\$3.64	\$3.69				

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Future Half-Time Base Values														
	(US\$ Million)													
No.	261	262	263	264	265	266	267	268	269	270				
Aircraft Type	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-				
All clait Type	100	100	100	100	100	100	100	100	100	100				
Serial Number	1321	1401	1420	1426	1460	1474	1477	1507	1522	1545				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$8.50	\$8.72	\$8.78	\$8.78	\$8.84	\$8.89	\$8.89	\$8.95	\$9.01	\$9.07				
2021	\$7.74	\$7.97	\$8.02	\$8.02	\$8.08	\$8.12	\$8.12	\$8.18	\$8.23	\$8.29				
2022	\$7.03	\$7.26	\$7.31	\$7.31	\$7.36	\$7.40	\$7.40	\$7.45	\$7.50	\$7.55				
2023	\$6.37	\$6.59	\$6.64	\$6.64	\$6.68	\$6.72	\$6.72	\$6.76	\$6.81	\$6.86				
2024	\$5.75	\$5.97	\$6.01	\$6.01	\$6.05	\$6.08	\$6.08	\$6.13	\$6.17	\$6.21				
2025	\$5.17	\$5.39	\$5.42	\$5.42	\$5.46	\$5.49	\$5.49	\$5.53	\$5.57	\$5.60				
2026	\$4.64	\$4.85	\$4.88	\$4.88	\$4.92	\$4.94	\$4.94	\$4.98	\$5.01	\$5.04				
2027	\$4.16	\$4.35	\$4.38	\$4.38	\$4.41	\$4.44	\$4.44	\$4.47	\$4.50	\$4.53				
2028	\$3.71	\$3.89	\$3.92	\$3.92	\$3.95	\$3.97	\$3.97	\$4.00	\$4.02	\$4.05				

Future Half-Time Base Values												
				(US\$ Mil	lion)							
No.	271	272	273	274	275	276	277	278	279	280		
Aircraft Type	A319- 100											
Serial Number	1569	1573	1581	1585	1600	1627	1647	1649	1653	1664		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$9.18	\$9.12	\$9.30	\$9.30	\$9.30	\$9.30	\$9.41	\$9.47	\$9.47	\$9.53		
2021	\$8.39	\$8.33	\$8.50	\$8.50	\$8.50	\$8.50	\$8.62	\$8.68	\$8.68	\$8.73		
2022	\$7.64	\$7.59	\$7.74	\$7.74	\$7.74	\$7.74	\$7.88	\$7.93	\$7.93	\$7.98		
2023	\$6.94	\$6.89	\$7.03	\$7.03	\$7.03	\$7.03	\$7.18	\$7.22	\$7.22	\$7.27		
2024	\$6.28	\$6.24	\$6.36	\$6.36	\$6.36	\$6.36	\$6.52	\$6.56	\$6.56	\$6.60		
2025	\$5.67	\$5.63	\$5.75	\$5.75	\$5.75	\$5.75	\$5.90	\$5.94	\$5.94	\$5.98		
2026	\$5.11	\$5.07	\$5.17	\$5.17	\$5.17	\$5.17	\$5.33	\$5.36	\$5.36	\$5.40		
2027	\$4.58	\$4.55	\$4.64	\$4.64	\$4.64	\$4.64	\$4.80	\$4.83	\$4.83	\$4.86		
2028	\$4.10	\$4.07	\$4.15	\$4.15	\$4.15	\$4.15	\$4.30	\$4.33	\$4.33	\$4.36		

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Future Half-Time Base Values												
				(US\$ Mil	lion)							
No.	281	282	283	284	285	286	287	288	289	290		
Aircraft Type	A319-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-		
All Clait Type	100	200	200	200	200	200	200	200	200	200		
Serial Number	1671	2714	504	506	508	510	512	523	539	568		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$9.53	\$15.74	\$6.88	\$6.88	\$6.92	\$6.92	\$6.97	\$7.01	\$7.06	\$7.43		
2021	\$8.73	\$14.56	\$6.16	\$6.16	\$6.20	\$6.20	\$6.24	\$6.28	\$6.32	\$6.67		
2022	\$7.98	\$13.43	\$5.50	\$5.50	\$5.53	\$5.53	\$5.57	\$5.60	\$5.64	\$5.97		
2023	\$7.27	\$12.35	\$4.89	\$4.89	\$4.92	\$4.92	\$4.96	\$4.99	\$5.02	\$5.33		
2024	\$6.60	\$11.32	\$4.34	\$4.34	\$4.37	\$4.37	\$4.40	\$4.42	\$4.45	\$4.74		
2025	\$5.98	\$10.35	\$3.84	\$3.84	\$3.86	\$3.86	\$3.89	\$3.91	\$3.94	\$4.21		
2026	\$5.40	\$9.43	\$3.39	\$3.39	\$3.41	\$3.41	\$3.43	\$3.45	\$3.48	\$3.72		
2027	\$4.86	\$8.57	\$2.98	\$2.98	\$3.00	\$3.00	\$3.02	\$3.04	\$3.06	\$3.28		
2028	\$4.36	\$7.76	\$2.61	\$2.61	\$2.63	\$2.63	\$2.65	\$2.66	\$2.68	\$2.89		

	Future Half Life Base Values												
				US\$ Mil	lion								
No.	291	292	293	294	295	296	297	298	299	300			
Aircraft Type	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200			
Serial Number	571	587	589	592	613	638	655	678	683	702			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$7.48	\$7.57	\$7.62	\$7.62	\$7.77	\$7.91	\$8.01	\$8.17	\$8.22	\$8.27			
2021	\$6.72	\$6.80	\$6.84	\$6.84	\$6.98	\$7.10	\$7.21	\$7.36	\$7.40	\$7.45			
2022	\$6.01	\$6.09	\$6.13	\$6.13	\$6.25	\$6.36	\$6.48	\$6.61	\$6.65	\$6.69			
2023	\$5.37	\$5.43	\$5.47	\$5.47	\$5.58	\$5.68	\$5.80	\$5.91	\$5.95	\$5.99			
2024	\$4.78	\$4.83	\$4.87	\$4.87	\$4.96	\$5.05	\$5.18	\$5.28	\$5.31	\$5.34			
2025	\$4.24	\$4.29	\$4.32	\$4.32	\$4.40	\$4.48	\$4.61	\$4.70	\$4.73	\$4.76			
2026	\$3.75	\$3.79	\$3.82	\$3.82	\$3.89	\$3.96	\$4.09	\$4.17	\$4.19	\$4.22			
2027	\$3.31	\$3.35	\$3.37	\$3.37	\$3.44	\$3.50	\$3.62	\$3.69	\$3.71	\$3.73			
2028	\$2.91	\$2.94	\$2.96	\$2.96	\$3.02	\$3.08	\$3.19	\$3.25	\$3.27	\$3.29			

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			Future I	Half-Time	Base Va	lues				
				(US\$ Mil	lion)					
No.	301	302	303	304	305	306	307	308	309	310
Aircraft Type	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-
All Clait Type	200	200	200	200	200	200	200	200	200	200
Serial Number	751	780	820	824	826	834	836	842	851	865
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$8.53	\$8.64	\$8.81	\$8.81	\$8.86	\$8.86	\$8.92	\$8.92	\$8.92	\$9.03
2021	\$7.68	\$7.80	\$7.96	\$7.96	\$8.00	\$8.00	\$8.06	\$8.06	\$8.06	\$8.16
2022	\$6.90	\$7.03	\$7.17	\$7.17	\$7.21	\$7.21	\$7.26	\$7.26	\$7.26	\$7.35
2023	\$6.18	\$6.31	\$6.44	\$6.44	\$6.47	\$6.47	\$6.52	\$6.52	\$6.52	\$6.60
2024	\$5.51	\$5.65	\$5.76	\$5.76	\$5.79	\$5.79	\$5.83	\$5.83	\$5.83	\$5.90
2025	\$4.91	\$5.04	\$5.14	\$5.14	\$5.17	\$5.17	\$5.21	\$5.21	\$5.21	\$5.27
2026	\$4.35	\$4.49	\$4.58	\$4.58	\$4.60	\$4.60	\$4.63	\$4.63	\$4.63	\$4.69
2027	\$3.85	\$3.98	\$4.06	\$4.06	\$4.08	\$4.08	\$4.11	\$4.11	\$4.11	\$4.16
2028	\$3.40	\$3.52	\$3.59	\$3.59	\$3.61	\$3.61	\$3.64	\$3.64	\$3.64	\$3.68

			Future I		Base Va	alues				
				(US\$ Mil	llion)					
No.	311	312	313	314	315	316	317	318	319	320
Aircraft Type	A320- 200									
Serial Number	0955	1001	1104	1105	1128	1146	1163	1192	1248	1266
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$9.38	\$9.44	\$9.86	\$9.86	\$9.92	\$9.98	\$10.05	\$10.18	\$10.31	\$10.37
2021	\$8.50	\$8.55	\$8.93	\$8.93	\$8.99	\$9.07	\$9.13	\$9.25	\$9.37	\$9.42
2022	\$7.68	\$7.73	\$8.07	\$8.07	\$8.12	\$8.22	\$8.27	\$8.38	\$8.49	\$8.54
2023	\$6.91	\$6.96	\$7.27	\$7.27	\$7.31	\$7.42	\$7.47	\$7.57	\$7.67	\$7.71
2024	\$6.21	\$6.25	\$6.52	\$6.52	\$6.56	\$6.68	\$6.73	\$6.82	\$6.90	\$6.94
2025	\$5.56	\$5.59	\$5.84	\$5.84	\$5.88	\$6.00	\$6.04	\$6.12	\$6.20	\$6.24
2026	\$4.96	\$4.99	\$5.21	\$5.21	\$5.25	\$5.37	\$5.41	\$5.48	\$5.55	\$5.58
2027	\$4.41	\$4.44	\$4.64	\$4.64	\$4.67	\$4.80	\$4.83	\$4.89	\$4.95	\$4.98
2028	\$3.92	\$3.94	\$4.12	\$4.12	\$4.14	\$4.27	\$4.30	\$4.35	\$4.41	\$4.43

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			Futi	ure Half-T	$\Gamma$ ime Bas $\epsilon$	e Values				
				(US	\$ Million)					
No.	321	322	323	324	325	326	327	328	329	330
Aircraft	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-
Type	200	200	200	200	200	200	200	200	200	200
Serial	1272	1282	1200	1241	1242	1359	1363	1409	1427	1.422
Number	1272	1282	1290	1341	1343	1359	1303	1409	1427	1432
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$10.37	\$10.44	\$10.44	\$10.63	\$10.63	\$10.70	\$10.70	\$10.83	\$10.90	\$10.90
2021	\$9.42	\$9.49	\$9.49	\$9.66	\$9.66	\$9.72	\$9.72	\$9.87	\$9.93	\$9.93
2022	\$8.54	\$8.59	\$8.59	\$8.75	\$8.75	\$8.81	\$8.81	\$8.97	\$9.03	\$9.03
2023	\$7.71	\$7.76	\$7.76	\$7.90	\$7.90	\$7.96	\$7.96	\$8.13	\$8.18	\$8.18
2024	\$6.94	\$6.99	\$6.99	\$7.12	\$7.12	\$7.17	\$7.17	\$7.34	\$7.39	\$7.39
2025	\$6.24	\$6.28	\$6.28	\$6.39	\$6.39	\$6.43	\$6.43	\$6.61	\$6.65	\$6.65
2026	\$5.58	\$5.62	\$5.62	\$5.72	\$5.72	\$5.76	\$5.76	\$5.93	\$5.97	\$5.97
2027	\$4.98	\$5.02	\$5.02	\$5.11	\$5.11	\$5.14	\$5.14	\$5.31	\$5.35	\$5.35
2028	\$4.43	\$4.46	\$4.46	\$4.55	\$4.55	\$4.58	\$4.58	\$4.74	\$4.77	\$4.77

			Fut		ime Base \$ Million)	e Values				
No.	331	332	333	334	335	336	337	338	339	340
Aircraft Type	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200
Serial Number	1435	1469	1475	1495	1508	1514	1533	1538	1555	1620
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$10.97	\$11.04	\$11.04	\$11.11	\$11.18	\$11.18	\$11.25	\$11.25	\$11.32	\$11.53
2021	\$10.00	\$10.06	\$10.06	\$10.13	\$10.19	\$10.19	\$10.25	\$10.25	\$10.32	\$10.51
2022	\$9.08	\$9.14	\$9.14	\$9.20	\$9.26	\$9.26	\$9.32	\$9.32	\$9.37	\$9.55
2023	\$8.23	\$8.28	\$8.28	\$8.34	\$8.39	\$8.39	\$8.44	\$8.44	\$8.49	\$8.65
2024	\$7.43	\$7.48	\$7.48	\$7.53	\$7.58	\$7.58	\$7.62	\$7.62	\$7.67	\$7.81
2025	\$6.70	\$6.74	\$6.74	\$6.78	\$6.82	\$6.82	\$6.87	\$6.87	\$6.91	\$7.04
2026	\$6.01	\$6.05	\$6.05	\$6.09	\$6.13	\$6.13	\$6.17	\$6.17	\$6.20	\$6.32
2027	\$5.38	\$5.42	\$5.42	\$5.45	\$5.49	\$5.49	\$5.52	\$5.52	\$5.55	\$5.66
2028	\$4.80	\$4.83	\$4.83	\$4.87	\$4.90	\$4.90	\$4.93	\$4.93	\$4.96	\$5.05

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	Future Half-Time Base Values (US\$ Million)													
No.	341	342	343	344	345	346	347	348	349	350				
Aircraft Type	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200				
Serial Number	1669	1680	2680	1728	1741	1755	1821	1840	1842	1845				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$11.60	\$11.68	\$15.74	\$11.83	\$11.83	\$11.83	\$12.05	\$12.20	\$12.13	\$12.20				
2021	\$10.60	\$10.68	\$14.56	\$10.81	\$10.81	\$10.81	\$11.01	\$11.15	\$11.09	\$11.15				
2022	\$9.66	\$9.73	\$13.43	\$9.86	\$9.86	\$9.86	\$10.04	\$10.16	\$10.11	\$10.16				
2023	\$8.78	\$8.84	\$12.35	\$8.96	\$8.96	\$8.96	\$9.12	\$9.24	\$9.18	\$9.24				
2024	\$7.96	\$8.01	\$11.32	\$8.11	\$8.11	\$8.11	\$8.26	\$8.37	\$8.32	\$8.37				
2025	\$7.19	\$7.24	\$10.35	\$7.33	\$7.33	\$7.33	\$7.46	\$7.56	\$7.51	\$7.56				
2026	\$6.47	\$6.52	\$9.43	\$6.60	\$6.60	\$6.60	\$6.72	\$6.81	\$6.77	\$6.81				
2027	\$5.81	\$5.85	\$8.57	\$5.93	\$5.93	\$5.93	\$6.04	\$6.11	\$6.08	\$6.11				
2028	\$5.20	\$5.24	\$7.76	\$5.31	\$5.31	\$5.31	\$5.40	\$5.47	\$5.44	\$5.47				

				Future F	Half Life Ba US\$ Million					
No.	351	352	353	354	355	356	357	358	359	360
Aircraft	A320-	A320-	CF6-	CF6-	CF6-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-
Туре	200	200	80C2B8F	80C2B8F	80C2B8F	7B26	7B26	7B26	7B26	7B24
Serial Number	1847	1865	706368	706439	706323	890202	890307	890418	890436	874219
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$12.20	\$12.28	\$2.50	\$2.50	\$2.50	\$6.15	\$6.15	\$6.15	\$6.15	\$5.79
2021	\$11.15	\$11.22	\$2.50	\$2.50	\$2.50	\$6.19	\$6.19	\$6.19	\$6.19	\$5.83
2022	\$10.16	\$10.23	\$2.37	\$2.37	\$2.37	\$6.27	\$6.27	\$6.27	\$6.27	\$5.91
2023	\$9.24	\$9.30	\$2.14	\$2.14	\$2.14	\$6.38	\$6.38	\$6.38	\$6.38	\$6.01
2024	\$8.37	\$8.42	\$1.83	\$1.83	\$1.83	\$6.51	\$6.51	\$6.51	\$6.51	\$6.13
2025	\$7.56	\$7.61	\$1.49	\$1.49	\$1.49	\$6.67	\$6.67	\$6.67	\$6.67	\$6.28
2026	\$6.81	\$6.85	\$1.15	\$1.15	\$1.15	\$6.73	\$6.73	\$6.73	\$6.73	\$6.33
2027	\$6.11	\$6.15	\$0.84	\$0.84	\$0.84	\$6.68	\$6.68	\$6.68	\$6.68	\$6.29
2028	\$5.47	\$5.51	\$0.59	\$0.59	\$0.59	\$6.47	\$6.47	\$6.47	\$6.47	\$6.09

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				Future Ha	alf-Time B	ase Values	S			
No.	361	362	363	364	365	366	367	368	369	370
Aircraft Type	CFM56- 7B26	CFM56- 7B26	CFM56- 7B26	CFM56- 7B24	CFM56- 7B26	CFM56- 7B26	CFM56- 7B26	CFM56- 7B24	CFM56- 7B26	CFM56- 7B26
Serial Number	874792	876266	876563	889320	890452	890516	890612	890652	890684	890775
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$6.15	\$6.15	\$6.15	\$5.79	\$6.15	\$6.15	\$6.15	\$5.79	\$6.15	\$6.15
2021	\$6.19	\$6.19	\$6.19	\$5.83	\$6.19	\$6.19	\$6.19	\$5.83	\$6.19	\$6.19
2022	\$6.27	\$6.27	\$6.27	\$5.91	\$6.27	\$6.27	\$6.27	\$5.91	\$6.27	\$6.27
2023	\$6.38	\$6.38	\$6.38	\$6.01	\$6.38	\$6.38	\$6.38	\$6.01	\$6.38	\$6.38
2024	\$6.51	\$6.51	\$6.51	\$6.13	\$6.51	\$6.51	\$6.51	\$6.13	\$6.51	\$6.51
2025	\$6.67	\$6.67	\$6.67	\$6.28	\$6.67	\$6.67	\$6.67	\$6.28	\$6.67	\$6.67
2026	\$6.73	\$6.73	\$6.73	\$6.33	\$6.73	\$6.73	\$6.73	\$6.33	\$6.73	\$6.73
2027	\$6.68	\$6.68	\$6.68	\$6.29	\$6.68	\$6.68	\$6.68	\$6.29	\$6.68	\$6.68
2028	\$6.47	\$6.47	\$6.47	\$6.09	\$6.47	\$6.47	\$6.47	\$6.09	\$6.47	\$6.47

				Future Ha	alf-Time B		5			
No.	371	372	373	374	375	376	377	378	379	380
Aircraft	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-
Туре	7B26	7B26	7B26	7B24	7B24	7B26	7B26E	7B26E	7B26/3	7B26E
Serial Number	874336	876213	876633	888436	888868	890339	660372	862250	862937	660119
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$6.15	\$6.15	\$6.15	\$5.79	\$5.79	\$6.15	\$6.42	\$6.42	\$6.33	\$6.42
2021	\$6.19	\$6.19	\$6.19	\$5.83	\$5.83	\$6.19	\$6.46	\$6.46	\$6.37	\$6.46
2022	\$6.27	\$6.27	\$6.27	\$5.91	\$5.91	\$6.27	\$6.55	\$6.55	\$6.46	\$6.55
2023	\$6.38	\$6.38	\$6.38	\$6.01	\$6.01	\$6.38	\$6.66	\$6.66	\$6.57	\$6.66
2024	\$6.51	\$6.51	\$6.51	\$6.13	\$6.13	\$6.51	\$6.80	\$6.80	\$6.70	\$6.80
2025	\$6.67	\$6.67	\$6.67	\$6.28	\$6.28	\$6.67	\$6.96	\$6.96	\$6.86	\$6.96
2026	\$6.73	\$6.73	\$6.73	\$6.33	\$6.33	\$6.73	\$7.02	\$7.02	\$6.92	\$7.02
2027	\$6.68	\$6.68	\$6.68	\$6.29	\$6.29	\$6.68	\$6.97	\$6.97	\$6.87	\$6.97
2028	\$6.47	\$6.47	\$6.47	\$6.09	\$6.09	\$6.47	\$6.75	\$6.75	\$6.65	\$6.75

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	Future Half-Time Base Values (US\$ Million)													
No.	381	382	383	384	385	386	387	388	389	390				
Aircraft Type	CFM56- 7B26E	GE90- 115B	GE90- 115B	GE90- 115B	GE90- 90B	GE90- 90B	GE90- 90B	GE90- 90B	GE90- 90B	GE90- 90B				
Serial Number	660170	901480	901096	901281	900272	900352	900361	900392	900242	900325				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$6.42	\$20.40	\$20.40	\$20.40	\$6.15	\$6.15	\$6.15	\$6.15	\$6.15	\$6.15				
2021	\$6.46	\$20.79	\$20.79	\$20.79	\$5.82	\$5.82	\$5.82	\$5.82	\$5.82	\$5.82				
2022	\$6.55	\$21.59	\$21.59	\$21.59	\$5.22	\$5.22	\$5.22	\$5.22	\$5.22	\$5.22				
2023	\$6.66	\$22.46	\$22.46	\$22.46	\$4.43	\$4.43	\$4.43	\$4.43	\$4.43	\$4.43				
2024	\$6.80	\$23.41	\$23.41	\$23.41	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56				
2025	\$6.96	\$24.04	\$24.04	\$24.04	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71				
2026	\$7.02	\$24.31	\$24.31	\$24.31	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95				
2027	\$6.97	\$24.22	\$24.22	\$24.22	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17				
2028	\$6.75	\$23.77	\$23.77	\$23.77	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58	\$0.58				

	Future Half-Time Base Values (US\$ Million)													
No.	391	392	393	394	395	396	397	398	399	400				
Aircraft Type	GEnx- 1B74	GEnx- 1B70	GEnx- 1B74	GEnx- 1B76	GEnx- 1B70	GEnx- 1B70	GEnx- 1B74	GEnx- 1B74	GEnx- 1B70	LEAP- 1B28				
Serial Number	956883	956912	958090	958338	958576	956295	956322	956515	956679	603331				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$21.57	\$17.06	\$21.57	\$22.82	\$17.06	\$17.06	\$21.57	\$21.57	\$17.06	\$12.40				
2021	\$22.04	\$17.44	\$22.04	\$23.32	\$17.44	\$17.44	\$22.04	\$22.04	\$17.44	\$12.51				
2022	\$23.02	\$18.22	\$23.02	\$24.36	\$18.22	\$18.22	\$23.02	\$23.02	\$18.22	\$12.73				
2023	\$24.57	\$19.45	\$24.57	\$26.00	\$19.45	\$19.45	\$24.57	\$24.57	\$19.45	\$13.07				
2024	\$26.52	\$20.99	\$26.52	\$28.06	\$20.99	\$20.99	\$26.52	\$26.52	\$20.99	\$13.53				
2025	\$28.94	\$22.90	\$28.94	\$30.62	\$22.90	\$22.90	\$28.94	\$28.94	\$22.90	\$14.13				
2026	\$31.92	\$25.26	\$31.92	\$33.78	\$25.26	\$25.26	\$31.92	\$31.92	\$25.26	\$14.89				
2027	\$35.60	\$28.17	\$35.60	\$37.67	\$28.17	\$28.17	\$35.60	\$35.60	\$28.17	\$15.83				
2028	\$40.14	\$31.76	\$40.14	\$42.47	\$31.76	\$31.76	\$40.14	\$40.14	\$31.76	\$16.97				

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					_ ,	, .				
			Future	Half-Tim		alues				
				(US\$ Mi	llion)					
No.	401	402	403	404	405	406	407	408	409	410
Aircraft Type	LEAP- 1B28	LEAP- 1B28	PW4056	PW4056	PW4056	PW4077	PW4077	PW4077	PW4077	PW4077
Serial Number	602853	602518	727787	727948	727569	P222309	P222310	P222311	222258	777067
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$12.40	\$12.40	\$2.55	\$2.55	\$2.55	\$3.60	\$3.60	\$3.60	\$3.60	\$3.60
2021	\$12.51	\$12.51	\$2.55	\$2.55	\$2.55	\$3.60	\$3.60	\$3.60	\$3.60	\$3.60
2022	\$12.73	\$12.73	\$2.42	\$2.42	\$2.42	\$3.42	\$3.42	\$3.42	\$3.42	\$3.42
2023	\$13.07	\$13.07	\$2.18	\$2.18	\$2.18	\$3.08	\$3.08	\$3.08	\$3.08	\$3.08
2024	\$13.53	\$13.53	\$1.87	\$1.87	\$1.87	\$2.64	\$2.64	\$2.64	\$2.64	\$2.64
2025	\$14.13	\$14.13	\$1.52	\$1.52	\$1.52	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
2026	\$14.89	\$14.89	\$1.18	\$1.18	\$1.18	\$1.66	\$1.66	\$1.66	\$1.66	\$1.66
2027	\$15.83	\$15.83	\$0.87	\$0.87	\$0.87	\$1.22	\$1.22	\$1.22	\$1.22	\$1.22
2028	\$16.97	\$16.97	\$0.61	\$0.61	\$0.61	\$0.85	\$0.85	\$0.85	\$0.85	\$0.85

			Fut		Life Base \$ Million	Values				
No.	411	412	413	414	415	416	417	418	419	420
Aircraft Type	PW4077	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090
Serial Number	P222308	222067	222068	222099	222108	222182	222215	222225	222254	222022
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$3.60	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80
2021	\$3.60	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70
2022	\$3.42	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51
2023	\$3.08	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24
2024	\$2.64	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91
2025	\$2.15	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53
2026	\$1.66	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13
2027	\$1.22	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36
2028	\$0.85	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51

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Future Half-Time Base Values (US\$ Million)													
No.	421	422	423	424	425	426	427	428	429	430			
Aircraft Type	PW4090	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B									
Serial Number	222025	222035	222036	222037	222043	222048	222056	31572	E31620	31655			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$4.80	\$2.52	\$2.52	\$2.52			
2021	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$4.70	\$2.39	\$2.39	\$2.39			
2022	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$2.16	\$2.16	\$2.16			
2023	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$4.24	\$1.85	\$1.85	\$1.85			
2024	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$3.91	\$1.32	\$1.32	\$1.32			
2025	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$3.53	\$0.78	\$0.78	\$0.78			
2026	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$0.38	\$0.38	\$0.38			
2027	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$0.15	\$0.15	\$0.15			
2028	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$0.05	\$0.05	\$0.05			

	Future Half-Time Base Values (US\$ Million)													
No.	431	432	433	434	435	436	437	438	439	440				
Aircraft Type	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B	RB211- 535E4B	V2527- A5	V2527- A5	V2522- A5				
Serial Number	31849	31884	31900	31378	31379	31412	31515	V10327	V10824	V11050				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$2.52	\$2.52	\$2.52	\$2.52	\$2.52	\$2.52	\$2.52	\$6.21	\$6.21	\$4.82				
2021	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$6.27	\$6.27	\$4.87				
2022	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$6.39	\$6.39	\$4.96				
2023	\$1.85	\$1.85	\$1.85	\$1.85	\$1.85	\$1.85	\$1.85	\$6.53	\$6.53	\$5.07				
2024	\$1.32	\$1.32	\$1.32	\$1.32	\$1.32	\$1.32	\$1.32	\$6.70	\$6.70	\$5.20				
2025	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$0.78	\$6.89	\$6.89	\$5.35				
2026	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$6.95	\$6.95	\$5.40				
2027	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$6.88	\$6.88	\$5.35				
2028	\$0.05	\$0.05	\$0.05	\$0.05	\$0.05	\$0.05	\$0.05	\$6.61	\$6.61	\$5.14				

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			Fu	ture Half	-Time B	ase Valu	ies				
				(L	JS\$ Millior	1)					
No.	441	442	443	444	445	446	447	448	449	450	451
Aircraft Type	V2522-	V2527-	V2524-	V2527-	V2524-	V2527-	V2527-	V2527-	V2527-	V2527-	V2524-
All Clait Type	A5	A5	A5	A5	A5	A5	A5	A5	A5	A5	A5
Serial Number	V10232	V10316	V12173	V11807	V11395	V12083	V12169	V12521	V10167	V10372	V11394
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$4.82	\$6.21	\$5.13	\$6.21	\$5.13	\$6.21	\$6.21	\$6.21	\$6.21	\$6.21	\$5.13
2021	\$4.87	\$6.27	\$5.18	\$6.27	\$5.18	\$6.27	\$6.27	\$6.27	\$6.27	\$6.27	\$5.18
2022	\$4.96	\$6.39	\$5.28	\$6.39	\$5.28	\$6.39	\$6.39	\$6.39	\$6.39	\$6.39	\$5.28
2023	\$5.07	\$6.53	\$5.40	\$6.53	\$5.40	\$6.53	\$6.53	\$6.53	\$6.53	\$6.53	\$5.40
2024	\$5.20	\$6.70	\$5.54	\$6.70	\$5.54	\$6.70	\$6.70	\$6.70	\$6.70	\$6.70	\$5.54
2025	\$5.35	\$6.89	\$5.70	\$6.89	\$5.70	\$6.89	\$6.89	\$6.89	\$6.89	\$6.89	\$5.70
2026	\$5.40	\$6.95	\$5.75	\$6.95	\$5.75	\$6.95	\$6.95	\$6.95	\$6.95	\$6.95	\$5.75
2027	\$5.35	\$6.88	\$5.70	\$6.88	\$5.70	\$6.88	\$6.88	\$6.88	\$6.88	\$6.88	\$5.70
2028	\$5.14	\$6.61	\$5.48	\$6.61	\$5.48	\$6.61	\$6.61	\$6.61	\$6.61	\$6.61	\$5.48

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Future Maintenance Adjusted Base Values at 2.0% Inflation

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	1	2	3	4	5	6	7	8	9	10		
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700		
Serial Number	28766	28767	28768	28769	28779	28780	28782	28783	28785	28786		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$6.09	\$4.88	\$8.30	\$8.30	\$6.96	\$10.36	\$9.64	\$5.98	\$4.44	\$8.43		
2021	\$7.04	\$7.78	\$6.33	\$5.99	\$6.72	\$8.11	\$7.69	\$7.68	\$5.87	\$7.94		
2022	\$7.32	\$6.77	\$3.95	\$3.58	\$6.23	\$5.76	\$5.34	\$9.11	\$7.19	\$7.49		
2023	\$4.88	\$4.48	\$5.34	\$7.23	\$3.72	\$7.64	\$7.13	\$6.95	\$4.64	\$5.86		
2024	\$4.22	\$3.82	\$4.68	\$6.57	\$3.05	\$6.97	\$6.28	\$6.12	\$3.79	\$4.86		
2025	\$3.61	\$3.21	\$4.07	\$5.96	\$2.43	\$6.35	\$5.66	\$5.50	\$3.17	\$4.24		
2026	\$3.05	\$2.65	\$3.51	\$5.40	\$2.00	\$5.79	\$5.09	\$4.93	\$2.60	\$3.67		
2027	\$2.55	\$2.15	\$3.01	\$4.89	\$2.00	\$5.27	\$4.57	\$4.41	\$2.08	\$3.15		
2028	\$2.09	\$2.00	\$2.55	\$4.43	\$2.00	\$4.80	\$4.10	\$3.94	\$2.00	\$2.67		

	Future Maintenance Adjusted Base Values												
				(US	\$ Million)								
No.	11	12	13	14	15	16	17	18	19	20			
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700			
Serial Number	28787	28936	28937	28938	28939	28940	28789	28790	28944	28945			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$6.12	\$8.21	\$5.44	\$4.51	\$8.09	\$5.80	\$10.50	\$5.74	\$6.80	\$5.85			
2021	\$5.83	\$8.02	\$6.99	\$5.74	\$7.62	\$5.56	\$8.56	\$7.33	\$8.04	\$6.98			
2022	\$5.27	\$7.56	\$8.43	\$7.41	\$7.19	\$8.34	\$6.19	\$8.80	\$9.45	\$8.28			
2023	\$6.10	\$5.09	\$6.04	\$4.88	\$5.29	\$4.82	\$6.59	\$6.74	\$7.42	\$5.97			
2024	\$4.69	\$3.56	\$4.46	\$3.15	\$7.31	\$2.26	\$3.96	\$4.87	\$4.93	\$3.21			
2025	\$4.06	\$2.93	\$3.83	\$2.52	\$6.70	\$2.00	\$3.33	\$4.24	\$4.28	\$2.56			
2026	\$3.48	\$2.36	\$3.26	\$2.00	\$6.15	\$2.00	\$2.74	\$3.65	\$3.69	\$2.00			
2027	\$2.96	\$2.00	\$2.73	\$2.00	\$5.64	\$2.00	\$2.21	\$3.12	\$3.15	\$2.00			
2028	\$2.48	\$2.00	\$2.25	\$2.00	\$5.18	\$2.00	\$2.00	\$2.63	\$2.65	\$2.00			

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		F	uture Ma	iintenanc	e Adjuste	ed Base V	'alues			
				(US	\$ Million)					
No.	21	22	23	24	25	26	27	28	29	30
Aircraft Type	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700	737-700
Serial Number	28799	28948	28800	28949	28950	28803	29047	29048	32679	32653
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$7.44	\$6.72	\$7.93	\$7.29	\$9.82	\$7.44	\$5.13	\$6.17	\$18.71	\$18.02
2021	\$6.86	\$7.98	\$7.36	\$6.74	\$9.31	\$6.92	\$8.13	\$9.00	\$16.70	\$15.77
2022	\$6.31	\$9.39	\$7.17	\$6.22	\$8.83	\$6.42	\$7.73	\$8.61	\$14.62	\$13.42
2023	\$7.74	\$7.41	\$8.06	\$4.03	\$6.73	\$4.24	\$5.02	\$5.91	\$12.85	\$11.40
2024	\$4.97	\$4.79	\$4.94	\$4.69	\$4.12	\$4.63	\$2.96	\$3.51	\$10.71	\$8.99
2025	\$4.32	\$4.14	\$4.28	\$3.88	\$3.32	\$3.77	\$2.35	\$2.89	\$8.53	\$6.51
2026	\$3.73	\$3.55	\$3.68	\$3.30	\$2.74	\$3.19	\$2.00	\$2.33	\$7.70	\$5.02
2027	\$3.18	\$3.00	\$3.13	\$2.77	\$2.21	\$2.66	\$2.00	\$2.00	\$5.47	\$10.31
2028	\$2.68	\$2.50	\$2.63	\$2.29	\$2.00	\$2.18	\$2.00	\$2.00	\$3.18	\$8.29

	Future Maintenance Adjusted Base Values (US\$ Million)												
No.	31	32	33	34	35	36	37	38	39	40			
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800			
Serial Number	28958	30581	28770	28771	28772	28773	28774	28775	28776	28777			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$11.99	\$10.09	\$9.00	\$8.49	\$14.21	\$11.90	\$10.26	\$8.81	\$10.63	\$11.32			
2021	\$12.67	\$9.18	\$10.01	\$9.98	\$12.13	\$11.24	\$9.51	\$7.85	\$9.93	\$11.01			
2022	\$11.94	\$8.28	\$7.21	\$11.18	\$9.58	\$10.61	\$8.80	\$10.12	\$12.50	\$10.22			
2023	\$9.25	\$9.15	\$7.50	\$9.12	\$7.28	\$9.35	\$7.46	\$8.25	\$11.01	\$7.66			
2024	\$6.72	\$5.78	\$6.64	\$8.26	\$6.42	\$8.48	\$6.59	\$7.38	\$10.14	\$6.79			
2025	\$7.63	\$2.29	\$5.85	\$7.47	\$5.63	\$7.68	\$5.79	\$6.58	\$9.34	\$5.99			
2026	\$6.86	\$2.20	\$5.12	\$6.74	\$4.90	\$6.95	\$5.06	\$5.84	\$8.60	\$5.26			
2027	\$6.16	\$2.20	\$4.46	\$6.08	\$4.24	\$6.29	\$4.40	\$5.17	\$7.93	\$4.60			
2028	\$5.52	\$2.20	\$3.86	\$5.48	\$3.64	\$5.68	\$3.79	\$4.57	\$7.33	\$3.99			

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Future Maintenance Adjusted Base Values (US\$ Million)												
No.	41	42	43	44	45	46	47	48	49	50		
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800		
Serial Number	28778	28781	28929	28930	28931	28932	28788	28792	28942	28946		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$16.22	\$12.17	\$10.47	\$12.57	\$9.32	\$11.00	\$10.37	\$10.09	\$11.35	\$14.15		
2021	\$13.85	\$9.65	\$9.30	\$10.27	\$8.43	\$10.23	\$9.98	\$9.25	\$8.81	\$11.62		
2022	\$11.35	\$7.37	\$8.49	\$10.97	\$11.16	\$9.84	\$9.28	\$8.79	\$9.77	\$9.34		
2023	\$9.89	\$7.78	\$5.00	\$7.05	\$8.27	\$10.74	\$10.12	\$9.48	\$10.27	\$6.68		
2024	\$9.02	\$6.91	\$3.65	\$5.41	\$6.66	\$9.17	\$8.47	\$5.61	\$7.67	\$6.91		
2025	\$8.22	\$6.11	\$2.84	\$4.59	\$5.84	\$8.35	\$7.66	\$4.78	\$6.86	\$6.07		
2026	\$7.48	\$5.37	\$2.20	\$3.84	\$5.09	\$7.60	\$6.92	\$4.02	\$6.11	\$5.29		
2027	\$6.81	\$4.70	\$2.20	\$3.16	\$4.41	\$6.92	\$6.24	\$3.32	\$5.43	\$4.58		
2028	\$6.21	\$4.10	\$2.20	\$2.54	\$3.79	\$6.30	\$5.62	\$2.68	\$4.81	\$3.93		

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	51	52	53	54	55	56	57	58	59	60		
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800		
Serial Number	28947	28801	28802	28952	28806	28955	28957	30583	30584	30779		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$14.56	\$9.78	\$12.58	\$11.08	\$11.93	\$11.31	\$9.77	\$14.00	\$11.15	\$11.11		
2021	\$12.10	\$8.90	\$11.84	\$11.83	\$11.20	\$12.27	\$10.66	\$13.15	\$10.22	\$11.90		
2022	\$12.75	\$8.05	\$11.12	\$8.67	\$10.32	\$13.42	\$11.73	\$12.32	\$12.89	\$12.86		
2023	\$10.35	\$5.48	\$9.03	\$9.28	\$7.84	\$11.32	\$9.38	\$9.94	\$10.33	\$10.41		
2024	\$7.52	\$5.73	\$6.43	\$5.83	\$8.23	\$8.60	\$6.41	\$7.02	\$7.22	\$7.32		
2025	\$6.70	\$4.60	\$5.43	\$4.58	\$6.94	\$7.42	\$4.84	\$4.02	\$4.03	\$4.10		
2026	\$5.95	\$3.84	\$4.65	\$3.81	\$6.16	\$6.63	\$4.05	\$3.02	\$3.01	\$3.08		
2027	\$5.26	\$3.14	\$3.94	\$3.12	\$5.44	\$5.91	\$3.32	\$2.26	\$2.25	\$2.32		
2028	\$4.63	\$2.51	\$3.29	\$2.48	\$4.79	\$5.25	\$2.66	\$2.20	\$2.20	\$2.20		

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Future Maintenance Adjusted Base Values (US\$ Million)												
No.	61	62	63	64	65	66	67	68	69	70		
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800		
Serial Number	30802	30855	32403	31590	31594	31595	31596	31597	31598	31599		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$17.14	\$18.90	\$13.26	\$17.15	\$10.94	\$18.25	\$17.70	\$17.34	\$14.31	\$15.06		
2021	\$14.62	\$16.80	\$12.69	\$14.95	\$10.10	\$16.09	\$16.79	\$16.58	\$13.28	\$12.24		
2022	\$11.97	\$15.18	\$12.71	\$13.23	\$9.66	\$13.44	\$16.24	\$16.03	\$12.61	\$14.26		
2023	\$9.70	\$13.20	\$10.53	\$11.15	\$11.23	\$11.83	\$13.98	\$13.36	\$14.75	\$11.43		
2024	\$7.02	\$10.60	\$7.63	\$8.45	\$8.66	\$9.78	\$11.09	\$10.86	\$11.89	\$13.98		
2025	\$4.31	\$8.39	\$4.99	\$6.14	\$5.39	\$7.08	\$9.83	\$9.00	\$10.06	\$12.38		
2026	\$3.04	\$6.04	\$4.90	\$10.44	\$6.44	\$8.49	\$7.06	\$6.73	\$7.83	\$10.32		
2027	\$2.27	\$5.25	\$4.10	\$9.18	\$4.28	\$10.39	\$4.09	\$7.54	\$4.96	\$7.57		
2028	\$2.20	\$4.53	\$3.37	\$8.43	\$3.52	\$9.63	\$8.68	\$8.63	\$6.39	\$5.21		

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	71	72	73	74	75	76	77	78	79	80		
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800		
Serial Number	31600	31636	33451	31607	31601	33455	34001	34002	31602	31603		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$12.52	\$13.06	\$20.96	\$15.39	\$16.89	\$17.87	\$17.82	\$16.03	\$15.57	\$17.56		
2021	\$12.15	\$14.87	\$18.31	\$12.54	\$14.07	\$15.99	\$21.32	\$15.50	\$15.55	\$17.44		
2022	\$17.84	\$16.76	\$15.53	\$14.79	\$17.03	\$17.56	\$19.25	\$15.12	\$16.38	\$18.18		
2023	\$15.60	\$14.62	\$13.12	\$17.09	\$14.61	\$14.87	\$16.46	\$17.04	\$19.97	\$15.51		
2024	\$13.17	\$12.17	\$10.70	\$14.77	\$12.07	\$12.43	\$14.03	\$14.52	\$17.18	\$12.54		
2025	\$10.27	\$9.22	\$11.64	\$12.03	\$9.36	\$9.98	\$11.19	\$12.05	\$14.73	\$15.05		
2026	\$9.03	\$7.80	\$10.50	\$10.40	\$11.42	\$7.10	\$8.73	\$9.11	\$12.33	\$12.64		
2027	\$6.24	\$5.08	\$7.41	\$8.29	\$9.04	\$9.87	\$10.20	\$6.52	\$9.45	\$9.73		
2028	\$7.18	\$10.07	\$8.04	\$5.47	\$5.90	\$6.73	\$8.56	\$8.99	\$8.23	\$8.48		

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Future Maintenance Adjusted Base Values (US\$ Million)												
No.	81	82	83	84	85	86	87	88	89	90		
Aircraft Type	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800	737-800		
Serial Number	33461	31604	32834	32832	30132	31658	31662	31660	37101	31642		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$17.80	\$19.42	\$16.49	\$18.86	\$21.73	\$23.65	\$21.55	\$21.47	\$21.46	\$21.69		
2021	\$17.85	\$18.55	\$16.32	\$18.90	\$27.08	\$23.27	\$26.39	\$23.85	\$23.85	\$29.04		
2022	\$18.81	\$18.47	\$17.04	\$18.86	\$28.17	\$24.22	\$27.47	\$26.17	\$27.57	\$25.91		
2023	\$16.21	\$15.74	\$14.34	\$17.19	\$25.36	\$21.28	\$24.67	\$24.93	\$25.04	\$24.31		
2024	\$13.27	\$12.79	\$17.51	\$14.33	\$22.21	\$24.58	\$21.49	\$21.88	\$21.87	\$21.12		
2025	\$10.68	\$10.18	\$15.03	\$11.37	\$19.39	\$21.84	\$18.64	\$18.66	\$18.99	\$17.88		
2026	\$13.52	\$12.95	\$12.60	\$8.76	\$16.18	\$18.70	\$15.40	\$15.74	\$15.79	\$15.01		
2027	\$10.65	\$10.07	\$9.69	\$11.81	\$12.90	\$15.49	\$12.08	\$12.50	\$12.48	\$11.68		
2028	\$9.46	\$8.84	\$8.44	\$8.90	\$10.69	\$13.37	\$9.88	\$9.12	\$10.18	\$19.43		

		Future	Maintenar	nce Adju	sted Ba	se Value	S			
			(1	US\$ Millio	n)					
No.	91	92	93	94	95	96	97	98	99	100
Aircraft Type	737-800	737-800	737-800	737-	737-	737-	737-	737-	737-	737-
0	04650	00700	00704	900ER	900ER	900ER	900ER	900ER	900ER	900ER
Serial Number	31659	38700	38701	37094	31620	33528	33534	33535	30131	33536
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$21.96	\$21.45	\$21.87	\$23.37	\$18.96	\$19.69	\$21.11	\$21.36	\$21.06	\$21.11
2021	\$29.86	\$23.83	\$29.72	\$23.38	\$21.39	\$23.09	\$23.58	\$23.79	\$23.63	\$23.68
2022	\$26.76	\$27.56	\$26.61	\$22.96	\$24.09	\$26.45	\$26.01	\$26.17	\$26.16	\$26.21
2023	\$25.17	\$25.02	\$25.03	\$19.94	\$21.40	\$23.79	\$23.56	\$23.71	\$23.70	\$23.74
2024	\$22.02	\$21.85	\$21.87	\$17.62	\$18.12	\$20.78	\$20.28	\$20.45	\$20.42	\$20.47
2025	\$18.81	\$18.98	\$18.66	\$14.35	\$15.76	\$17.45	\$16.89	\$17.06	\$17.03	\$17.08
2026	\$15.98	\$15.78	\$15.83	\$10.94	\$12.55	\$14.00	\$14.43	\$14.61	\$14.57	\$14.62
2027	\$12.69	\$12.46	\$12.53	\$13.91	\$9.12	\$11.50	\$11.10	\$11.29	\$11.23	\$11.29
2028	\$14.90	\$10.16	\$14.73	\$16.29	\$17.39	\$19.26	\$18.88	\$19.32	\$18.96	\$19.02

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			Luture Ma	intenanc	e Adiuste	ed Base V	/alues			
			atare me		\$ Million)	a Dasc v	aiacs			
No.	101	102	103	104	105	106	107	108	109	110
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200
Serial Number	27298	27299	27300	27301	27302	27555	27556	27558	27559	27560
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$9.90	\$11.23	\$6.60	\$5.97	\$8.84	\$6.59	\$6.41	\$8.16	\$6.69	\$6.36
2021	\$8.64	\$10.12	\$5.36	\$4.72	\$8.74	\$5.82	\$5.71	\$6.80	\$5.14	\$6.33
2022	\$8.03	\$9.51	\$4.75	\$4.11	\$8.13	\$5.21	\$5.09	\$6.16	\$4.50	\$4.48
2023	\$7.47	\$8.95	\$4.19	\$3.55	\$7.57	\$4.64	\$4.51	\$5.56	\$3.90	\$3.85
2024	\$6.94	\$8.42	\$3.66	\$3.02	\$7.04	\$4.11	\$3.97	\$5.01	\$3.35	\$3.27
2025	\$6.46	\$7.94	\$3.18	\$2.54	\$6.56	\$3.62	\$3.47	\$4.49	\$2.83	\$2.73
2026	\$6.02	\$7.49	\$2.73	\$2.09	\$6.11	\$3.17	\$3.01	\$4.02	\$2.35	\$2.22
2027	\$5.61	\$7.08	\$2.32	\$1.68	\$5.70	\$2.75	\$2.59	\$3.58	\$1.91	\$1.76
2028	\$5.23	\$6.70	\$1.94	\$1.30	\$5.32	\$2.36	\$2.20	\$3.17	\$1.50	\$1.33

	Future Maintenance Adjusted Base Values												
				(US	\$ Million)								
No.	111	112	113	114	115	116	117	118	119	120			
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200			
Serial Number	27561	27562	27563	27564	27566	28968	27567	28969	28970	28971			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$4.54	\$7.36	\$5.40	\$4.91	\$11.43	\$5.20	\$13.91	\$5.73	\$7.16	\$4.04			
2021	\$7.14	\$10.01	\$10.60	\$4.90	\$9.38	\$2.97	\$14.05	\$5.72	\$4.97	\$6.53			
2022	\$7.22	\$10.19	\$8.11	\$7.44	\$9.23	\$2.41	\$11.50	\$7.76	\$4.47	\$12.05			
2023	\$6.59	\$9.56	\$7.48	\$6.80	\$7.59	\$5.96	\$9.78	\$4.65	\$7.66	\$9.61			
2024	\$6.00	\$8.97	\$6.88	\$6.20	\$6.98	\$5.35	\$9.16	\$4.03	\$7.04	\$8.99			
2025	\$5.45	\$8.41	\$6.33	\$5.64	\$6.41	\$4.78	\$8.59	\$3.46	\$6.46	\$8.41			
2026	\$4.94	\$7.90	\$5.81	\$5.13	\$5.88	\$4.25	\$8.06	\$2.93	\$5.93	\$7.87			
2027	\$4.47	\$7.43	\$5.34	\$4.65	\$5.39	\$3.76	\$7.57	\$2.44	\$5.43	\$7.37			
2028	\$4.04	\$6.99	\$4.90	\$4.21	\$4.94	\$3.31	\$7.11	\$1.98	\$4.97	\$6.90			

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		F	uture Ma		e Adjuste \$ Million)	ed Base V	alues/			
No.	121	122	123	124	125	126	127	128	129	130
Aircraft Type	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-200	757-300
Serial Number	29281	29283	29284	29285	30229	30351	30352	30353	30354	32810
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$11.44	\$9.04	\$6.05	\$7.59	\$13.46	\$11.22	\$9.40	\$11.62	\$16.55	\$12.73
2021	\$9.38	\$6.88	\$8.95	\$5.38	\$11.37	\$8.94	\$12.11	\$9.47	\$14.52	\$12.59
2022	\$8.99	\$6.41	\$8.52	\$5.06	\$8.67	\$5.96	\$8.37	\$6.69	\$11.88	\$12.91
2023	\$6.71	\$9.67	\$6.33	\$7.76	\$8.74	\$5.74	\$7.47	\$6.64	\$9.73	\$9.89
2024	\$6.09	\$8.22	\$4.68	\$5.77	\$6.18	\$2.93	\$3.94	\$4.02	\$9.59	\$6.79
2025	\$5.51	\$7.62	\$4.08	\$5.17	\$5.08	\$7.33	\$8.04	\$2.31	\$7.38	\$8.78
2026	\$4.97	\$7.07	\$3.53	\$4.61	\$4.50	\$6.74	\$7.45	\$1.72	\$6.77	\$7.27
2027	\$4.47	\$6.55	\$3.01	\$4.08	\$3.95	\$6.19	\$6.90	\$1.17	\$6.21	\$5.42
2028	\$4.00	\$6.06	\$2.52	\$3.60	\$3.45	\$5.68	\$6.39	\$0.95	\$5.69	\$4.75

	Future Maintenance Adjusted Base Values (US\$ Million)													
No.	131	132	133	134	135	136	137	138	139	140				
Aircraft Type	757-300	757-300	757-300	757-300	757-300	757-300	757-300	757-300	767- 300ER	767- 300ER				
Serial Number	32811	32812	32813	32814	32815	32816	32817	32818	29236	29238				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$11.83	\$12.36	\$10.48	\$20.65	\$16.90	\$17.27	\$16.33	\$17.61	\$5.04	\$4.90				
2021	\$11.63	\$12.07	\$19.91	\$17.89	\$14.02	\$14.36	\$13.25	\$14.72	\$1.54	\$4.55				
2022	\$11.29	\$11.57	\$17.14	\$16.93	\$12.87	\$13.23	\$18.55	\$13.65	\$1.40	\$3.48				
2023	\$8.45	\$14.27	\$14.46	\$13.53	\$9.35	\$9.66	\$14.93	\$10.13	\$1.40	\$1.40				
2024	\$11.14	\$11.03	\$11.14	\$10.06	\$11.28	\$11.74	\$11.21	\$12.21	\$1.40	\$1.40				
2025	\$7.65	\$7.89	\$8.34	\$7.13	\$13.80	\$8.60	\$8.06	\$14.94	\$1.40	\$1.40				
2026	\$5.90	\$6.53	\$7.33	\$9.33	\$9.49	\$10.60	\$10.22	\$10.79	\$1.40	\$1.40				
2027	\$4.06	\$4.48	\$5.19	\$11.56	\$5.68	\$7.15	\$6.40	\$6.52	\$1.40	\$1.40				
2028	\$3.39	\$3.80	\$4.51	\$11.28	\$3.92	\$5.75	\$5.65	\$5.54	\$1.40	\$1.40				

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			Future N		ce Adjuste S\$ Million)	ed Base V	alues			
No.	141	142	143	144	145	146	147	148	149	150
Aircraft Type	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER	767- 300ER
Serial Number	29239	30024	30025	29240	30026	29241	29242	29243	30028	33466
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$4.80	\$1.40	\$1.40	\$3.41	\$4.02	\$1.72	\$6.99	\$5.48	\$2.27	\$7.83
2021	\$5.07	\$6.31	\$1.94	\$1.40	\$3.97	\$1.40	\$7.17	\$4.07	\$4.79	\$6.66
2022	\$5.01	\$5.04	\$3.96	\$1.75	\$3.32	\$6.11	\$8.06	\$3.06	\$7.10	\$6.53
2023	\$1.40	\$2.00	\$1.40	\$1.40	\$1.40	\$1.40	\$4.95	\$1.40	\$1.95	\$9.78
2024	\$1.40	\$1.40	\$2.41	\$1.40	\$1.40	\$2.61	\$1.61	\$1.40	\$1.40	\$4.80
2025	\$1.40	\$1.40	\$1.56	\$1.40	\$1.40	\$1.40	\$1.40	\$3.64	\$1.40	\$1.90
2026	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$2.82	\$1.40	\$1.40
2027	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$2.09	\$1.40	\$1.40
2028	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40	\$1.43	\$1.40	\$1.40

			Future M	laintenand (U:	ce Adjuste S\$ Million)	ed Base V	alues			
No.	151	152	153	154	155	156	157	158	159	160
Aircraft Type	767- 300ER	767- 300ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER
Serial Number	33467	33468	29446	29447	29448	29451	29452	29453	29454	29455
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$12.48	\$11.93	\$17.24	\$12.34	\$8.28	\$14.00	\$12.52	\$18.03	\$12.42	\$15.63
2021	\$8.03	\$7.49	\$15.95	\$13.87	\$9.20	\$13.06	\$11.47	\$16.60	\$10.81	\$14.15
2022	\$3.67	\$10.55	\$12.83	\$13.88	\$9.63	\$9.75	\$8.05	\$13.29	\$7.38	\$10.78
2023	\$1.40	\$6.29	\$7.33	\$8.87	\$14.68	\$10.75	\$15.78	\$10.03	\$10.87	\$7.43
2024	\$1.97	\$1.40	\$4.30	\$10.24	\$9.31	\$15.00	\$13.20	\$4.29	\$12.19	\$15.45
2025	\$5.87	\$1.40	\$5.80	\$4.45	\$3.73	\$9.49	\$7.57	\$5.61	\$6.53	\$10.20
2026	\$1.40	\$1.40	\$4.94	\$3.13	\$2.47	\$4.61	\$1.79	\$7.89	\$1.47	\$5.21
2027	\$1.40	\$1.40	\$4.16	\$2.35	\$1.68	\$3.78	\$1.40	\$4.93	\$1.40	\$2.19
2028	\$1.40	\$1.40	\$3.46	\$1.64	\$1.40	\$3.03	\$1.40	\$4.15	\$1.40	\$1.40

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		Ft	uture Maint	enance Ad (US\$ Mill		se Values				
No.	161	162	163	164	165	166	167	168	169	170
Aircraft Type	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	767- 400ER	777- 200	777- 200	777- 200	777- 200
Serial Number	29456	29457	29458	29459	29460	29461	30216	30221	26919	26921
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$15.43	\$11.45	\$17.32	\$19.59	\$14.37	\$14.32	\$1.50	\$1.50	\$1.50	\$10.20
2021	\$13.91	\$12.23	\$19.34	\$18.11	\$15.21	\$12.66	\$1.50	\$1.50	\$1.50	\$9.40
2022	\$10.58	\$13.15	\$19.86	\$15.41	\$16.69	\$16.34	\$12.72	\$1.50	\$1.50	\$8.66
2023	\$4.87	\$18.10	\$15.83	\$9.78	\$12.54	\$10.84	\$5.63	\$7.92	\$1.50	\$7.97
2024	\$15.67	\$12.67	\$12.77	\$6.70	\$6.87	\$7.73	\$1.50	\$1.50	\$1.50	\$7.34
2025	\$10.30	\$7.03	\$7.32	\$8.18	\$10.71	\$1.89	\$1.50	\$1.50	\$1.50	\$6.76
2026	\$4.61	\$1.87	\$8.95	\$9.79	\$5.16	\$3.09	\$1.50	\$1.50	\$1.50	\$6.23
2027	\$1.54	\$1.40	\$5.25	\$6.42	\$8.13	\$5.56	\$1.50	\$1.50	\$1.50	\$5.74
2028	\$1.40	\$1.40	\$4.45	\$5.62	\$7.32	\$4.75	\$1.50	\$1.50	\$1.50	\$5.30

		F	uture Ma	intenanc		ed Base V	alues			
				(US	\$ Million)					
No.	171	172	173	174	175	176	177	178	179	180
Aircraft Type	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200	777-200
Serial Number	26932	26930	26929	26936	26947	26937	26916	26940	26941	26944
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$1.50	\$1.50	\$1.50	\$1.57	\$3.15	\$2.17	\$1.50	\$5.54	\$1.80	\$1.50
2021	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.98	\$1.50	\$2.21
2022	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2023	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2024	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2025	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2026	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2027	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
2028	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50

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	Future Maintenance Adjusted Base Values (US\$ Million)												
No.	181	182	183	184	185	186	187	188	189	190			
Aircraft Type	777-200	777- 200ER											
Serial Number	26945	27577	27578	27579	27580	27581	29476	29477	29478	29479			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$1.55	\$15.33	\$22.55	\$15.70	\$16.07	\$14.31	\$19.55	\$25.78	\$18.59	\$18.60			
2021	\$3.21	\$13.02	\$22.12	\$12.50	\$21.99	\$20.17	\$26.33	\$26.53	\$19.11	\$18.31			
2022	\$2.62	\$20.53	\$15.94	\$6.80	\$23.96	\$22.08	\$28.38	\$20.40	\$26.26	\$11.93			
2023	\$1.89	\$14.45	\$9.31	\$13.68	\$18.31	\$16.36	\$22.84	\$13.85	\$19.80	\$18.94			
2024	\$1.50	\$12.88	\$7.69	\$24.81	\$15.75	\$13.33	\$19.81	\$9.91	\$15.97	\$14.14			
2025	\$1.50	\$11.80	\$6.61	\$23.71	\$14.65	\$12.23	\$18.71	\$8.80	\$14.85	\$13.02			
2026	\$1.50	\$10.81	\$5.62	\$22.71	\$13.65	\$11.22	\$17.70	\$7.78	\$13.83	\$11.98			
2027	\$1.50	\$9.90	\$4.71	\$21.78	\$12.72	\$10.29	\$16.77	\$6.85	\$12.88	\$11.03			
2028	\$1.50	\$9.07	\$3.88	\$20.94	\$11.88	\$9.44	\$15.92	\$5.99	\$12.02	\$10.16			

	Future Maintenance Adjusted Base Values (US\$ Million)												
No.	191	192	193	194	195	196	197	198	199	200			
Aircraft Type	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER	777- 200ER			
Serial Number	29480	29859	29861	28678	28679	31679	31680	35547	31687	39776			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$18.95	\$17.84	\$24.16	\$18.77	\$22.02	\$25.15	\$23.31	\$47.63	\$40.90	\$53.54			
2021	\$15.81	\$27.42	\$21.08	\$15.45	\$18.83	\$21.73	\$26.17	\$46.73	\$39.57	\$52.02			
2022	\$13.28	\$24.63	\$18.72	\$25.74	\$15.45	\$15.06	\$27.73	\$39.83	\$45.63	\$45.34			
2023	\$20.16	\$18.16	\$25.97	\$19.86	\$9.54	\$8.74	\$22.43	\$32.53	\$38.88	\$37.42			
2024	\$15.18	\$12.43	\$19.47	\$12.90	\$16.74	\$15.63	\$15.60	\$25.88	\$32.39	\$30.14			
2025	\$14.05	\$11.29	\$17.84	\$7.75	\$26.42	\$22.26	\$8.47	\$18.26	\$24.93	\$36.55			
2026	\$13.01	\$10.24	\$16.77	\$6.63	\$25.30	\$17.54	\$20.25	\$10.45	\$17.30	\$28.53			
2027	\$12.06	\$9.28	\$15.78	\$5.61	\$24.27	\$11.54	\$15.25	\$36.63	\$13.32	\$39.15			
2028	\$11.18	\$8.40	\$14.88	\$4.66	\$23.32	\$10.44	\$14.15	\$29.25	\$21.12	\$31.22			

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		Futu	re Mainte	enance A	djusted I	Base Valı	ues			
				(US\$ Mi	illion)					
No.	201	202	203	204	205	206	207	208	209	210
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	777-
All Clait Type	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER
Serial	39777	28713	30212	30215	30222	30551	30223	30552	30553	30225
Number	39777	28/13	30212	30215	30222	30331	30223	30552	30553	30225
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$47.04	\$9.89	\$6.98	\$4.16	\$5.42	\$3.81	\$8.26	\$19.14	\$15.16	\$13.86
2021	\$42.49	\$9.37	\$15.24	\$10.25	\$6.80	\$15.14	\$9.67	\$16.30	\$12.28	\$14.71
2022	\$38.55	\$12.07	\$7.74	\$18.39	\$16.58	\$15.64	\$9.24	\$9.74	\$15.77	\$14.58
2023	\$30.47	\$3.97	\$1.50	\$13.60	\$9.67	\$8.47	\$14.11	\$3.07	\$9.39	\$7.68
2024	\$50.69	\$1.50	\$14.18	\$7.10	\$4.75	\$3.03	\$9.87	\$8.66	\$5.19	\$11.58
2025	\$43.82	\$1.50	\$13.05	\$4.02	\$1.50	\$6.15	\$2.64	\$1.50	\$1.50	\$7.26
2026	\$35.98	\$1.50	\$12.02	\$2.93	\$4.88	\$2.59	\$1.50	\$6.18	\$1.50	\$1.50
2027	\$27.96	\$1.50	\$11.07	\$1.94	\$3.80	\$1.51	\$1.50	\$5.06	\$1.50	\$1.50
2028	\$23.36	\$1.50	\$10.20	\$1.50	\$2.81	\$1.50	\$1.50	\$4.04	\$1.50	\$1.50

Future Maintenance Adjusted Base Values (US\$ Million)													
No.	211	212	213	214	215	216	217	218	219	220			
Aircraft Type	777- 200ER												
Serial Number	30554	30226	30555	26948	26950	26951	26954	26938	26939	26942			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$9.01	\$7.94	\$7.14	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$2.29	\$4.63			
2021	\$9.78	\$13.28	\$12.33	\$2.95	\$5.24	\$6.08	\$7.58	\$3.17	\$4.19	\$2.06			
2022	\$19.63	\$19.63	\$18.54	\$11.99	\$7.90	\$9.62	\$11.93	\$2.57	\$13.44	\$5.70			
2023	\$12.98	\$14.37	\$12.48	\$10.87	\$6.78	\$8.49	\$10.79	\$1.50	\$12.29	\$4.54			
2024	\$5.04	\$7.02	\$4.10	\$9.83	\$5.74	\$7.45	\$9.73	\$1.50	\$11.23	\$3.47			
2025	\$1.50	\$2.37	\$1.50	\$8.87	\$4.78	\$6.48	\$8.76	\$1.50	\$10.25	\$2.49			
2026	\$4.61	\$1.50	\$2.82	\$8.00	\$3.91	\$5.60	\$7.88	\$1.50	\$9.36	\$1.59			
2027	\$1.53	\$1.50	\$11.28	\$7.20	\$3.11	\$4.80	\$7.06	\$1.50	\$8.54	\$1.50			
2028	\$1.50	\$1.50	\$10.20	\$6.47	\$2.38	\$4.06	\$6.32	\$1.50	\$7.80	\$1.50			

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		Future	e Mainter	nance Ad	ljusted B	ase Valu	es			
				(US\$ Mil	lion)					
No.	221	222	223	224	225	226	227	228	229	230
Aircraft Type	777-	777-	777-	777-	777-	777-	777-	777-	777-	A319-
All Clait Type	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	200ER	100
Serial Number	26933	26934	26946	26953	26927	26931	26924	26928	26926	686
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$1.92	\$5.21	\$1.53	\$5.55	\$2.36	\$4.21	\$4.56	\$6.13	\$1.50	\$5.42
2021	\$7.69	\$1.99	\$7.14	\$2.34	\$3.47	\$6.10	\$5.84	\$7.41	\$8.57	\$4.87
2022	\$14.47	\$5.61	\$13.75	\$15.66	\$12.76	\$6.10	\$15.45	\$7.37	\$14.65	\$5.83
2023	\$13.30	\$3.42	\$12.83	\$12.97	\$10.33	\$13.17	\$12.27	\$3.89	\$10.67	\$5.27
2024	\$12.23	\$2.34	\$11.74	\$11.87	\$9.23	\$12.07	\$11.16	\$2.78	\$9.54	\$4.76
2025	\$11.24	\$1.50	\$10.74	\$10.86	\$8.21	\$11.05	\$10.14	\$1.76	\$8.50	\$4.30
2026	\$10.33	\$1.50	\$9.82	\$9.93	\$7.28	\$10.12	\$9.20	\$1.50	\$7.54	\$3.87
2027	\$9.50	\$1.50	\$8.98	\$9.09	\$6.42	\$9.27	\$8.34	\$1.50	\$6.66	\$3.48
2028	\$8.75	\$1.50	\$8.21	\$8.31	\$5.65	\$8.49	\$7.55	\$1.50	\$5.86	\$3.13

Future Maintenance Adjusted Base Values (US\$ Million)													
No.	231	232	233	234	235	236	237	238	239	240			
Aircraft Type	A319- 100												
Serial Number	690	0748	0759	0783	0788	0798	0804	0825	0843	0847			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$6.02	\$2.85	\$3.96	\$6.07	\$6.09	\$6.78	\$4.95	\$3.49	\$6.07	\$8.57			
2021	\$5.50	\$4.16	\$3.66	\$7.55	\$4.51	\$5.13	\$3.29	\$2.93	\$4.08	\$6.65			
2022	\$3.42	\$4.48	\$4.24	\$6.69	\$3.61	\$4.07	\$2.00	\$5.72	\$4.84	\$4.73			
2023	\$2.86	\$2.69	\$3.01	\$5.23	\$2.07	\$2.29	\$3.26	\$1.99	\$6.02	\$2.62			
2024	\$2.35	\$2.17	\$2.48	\$4.71	\$1.55	\$1.76	\$2.73	\$1.45	\$5.47	\$2.08			
2025	\$1.89	\$1.68	\$2.00	\$4.22	\$1.40	\$1.40	\$2.24	\$1.40	\$4.98	\$1.58			
2026	\$1.46	\$1.40	\$1.55	\$3.77	\$1.40	\$1.40	\$1.80	\$1.40	\$4.52	\$1.40			
2027	\$1.40	\$1.40	\$1.40	\$3.37	\$1.40	\$1.40	\$1.40	\$1.40	\$4.10	\$1.40			
2028	\$1.40	\$1.40	\$1.40	\$3.00	\$1.40	\$1.40	\$1.40	\$1.40	\$3.72	\$1.40			

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	Future Maintenance Adjusted Base Values (US\$ Million)													
No.	241	242	243	244	245	246	247	248	249	250				
Aircraft Type	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100	A319- 100				
Serial Number	0850	0858	0862	0867	0871	0873	0882	0893	0898	0944				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$4.64	\$5.24	\$5.81	\$5.88	\$7.66	\$7.28	\$8.30	\$3.97	\$6.64	\$9.62				
2021	\$5.66	\$5.20	\$7.12	\$4.26	\$6.10	\$7.16	\$6.73	\$3.58	\$5.04	\$8.03				
2022	\$5.30	\$4.64	\$3.92	\$3.30	\$3.74	\$6.51	\$4.34	\$2.65	\$2.64	\$5.57				
2023	\$1.87	\$4.10	\$1.40	\$4.01	\$1.74	\$4.16	\$3.61	\$1.98	\$1.40	\$6.00				
2024	\$1.40	\$3.56	\$1.40	\$3.46	\$1.40	\$3.41	\$2.90	\$1.40	\$4.24	\$4.15				
2025	\$1.40	\$3.06	\$1.40	\$2.96	\$1.40	\$2.90	\$2.39	\$1.40	\$3.73	\$3.63				
2026	\$1.40	\$2.60	\$1.40	\$2.50	\$1.40	\$2.43	\$1.92	\$1.40	\$3.26	\$3.16				
2027	\$1.40	\$2.18	\$1.40	\$2.07	\$1.40	\$2.01	\$1.50	\$1.40	\$2.84	\$2.73				
2028	\$1.40	\$1.79	\$1.40	\$1.69	\$1.40	\$1.62	\$1.40	\$1.40	\$2.45	\$2.33				

	Future Maintenance Adjusted Base Values (US\$ Million)													
No.	251	252	253	254	255	256	257	258	259	260				
Aircraft	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-				
Туре	100	100	100	100	100	100	100	100	100	100				
Serial Number	0948	0952	0965	0980	0989	1022	1031	1211	1243	1291				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$6.80	\$7.69	\$8.80	\$8.31	\$5.50	\$7.16	\$7.87	\$7.86	\$6.82	\$8.06				
2021	\$5.22	\$6.15	\$7.34	\$6.36	\$6.34	\$6.58	\$6.29	\$6.25	\$5.17	\$6.49				
2022	\$5.66	\$3.77	\$5.07	\$4.42	\$7.13	\$6.27	\$3.90	\$6.81	\$8.67	\$7.19				
2023	\$3.31	\$4.75	\$6.26	\$5.06	\$4.03	\$6.35	\$1.87	\$7.53	\$5.96	\$5.04				
2024	\$1.74	\$6.07	\$4.46	\$5.64	\$2.38	\$3.45	\$4.96	\$3.82	\$2.66	\$5.49				
2025	\$1.40	\$5.55	\$3.94	\$5.12	\$1.86	\$2.92	\$4.43	\$1.40	\$1.40	\$3.29				
2026	\$1.40	\$5.08	\$3.47	\$4.64	\$1.40	\$2.44	\$3.94	\$1.40	\$1.40	\$2.77				
2027	\$1.40	\$4.64	\$3.03	\$4.20	\$1.40	\$1.99	\$3.50	\$1.40	\$1.40	\$2.28				
2028	\$1.40	\$4.24	\$2.63	\$3.80	\$1.40	\$1.58	\$3.09	\$1.40	\$1.40	\$1.84				

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		Fı	ıture Mainte	enance A	ldjusted Ba	se Value	S						
	(US\$ Million)												
No.	261	262	263	264	265	266	267	268	269	270			
Aircraft	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-			
Туре	100	100	100	100	100	100	100	100	100	100			
Serial	1321	1401	1420	1426	1460	1474	1477	1507	1522	1545			
Number	1321	1401	1420	1420	1400	1474	14//	1307	1322	1343			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$8.63	\$10.74	\$11.44	\$7.15	\$10.10	\$9.12	\$8.94	\$8.53	\$7.20	\$7.91			
2021	\$6.54	\$8.79	\$9.48	\$8.44	\$8.09	\$8.53	\$8.42	\$6.94	\$9.40	\$7.20			
2022	\$7.57	\$6.83	\$7.54	\$9.65	\$6.08	\$6.10	\$6.08	\$8.00	\$7.08	\$4.71			
2023	\$7.84	\$4.38	\$5.10	\$6.84	\$3.56	\$7.16	\$4.11	\$8.58	\$5.01	\$8.70			
2024	\$5.08	\$2.31	\$3.04	\$4.41	\$4.62	\$4.68	\$4.60	\$6.20	\$5.50	\$5.81			
2025	\$1.73	\$4.88	\$3.74	\$1.42	\$4.84	\$2.54	\$5.17	\$3.26	\$3.01	\$3.31			
2026	\$1.40	\$3.02	\$5.92	\$1.40	\$2.69	\$1.40	\$2.15	\$1.40	\$1.40	\$1.40			
2027	\$1.40	\$2.52	\$5.42	\$1.40	\$2.18	\$1.40	\$1.65	\$1.40	\$1.40	\$1.40			
2028	\$1.40	\$2.06	\$4.96	\$1.40	\$1.72	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40			

	Future Maintenance Adjusted Base Values												
				(	US\$ Million)								
No.	271	272	273	274	275	276	277	278	279	280			
Aircraft	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-	A319-			
Type	100	100	100	100	100	100	100	100	100	100			
Serial Number	1569	1573	1581	1585	1600	1627	1647	1649	1653	1664			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$10.34	\$8.45	\$9.20	\$13.50	\$10.54	\$9.03	\$9.49	\$12.04	\$10.37	\$11.10			
2021	\$9.24	\$7.41	\$8.00	\$12.39	\$9.39	\$7.86	\$9.74	\$10.98	\$9.19	\$9.98			
2022	\$7.38	\$8.49	\$9.08	\$10.50	\$7.43	\$8.89	\$9.54	\$9.08	\$7.24	\$8.01			
2023	\$5.43	\$6.49	\$7.02	\$8.51	\$8.88	\$6.88	\$7.16	\$7.08	\$8.19	\$5.94			
2024	\$6.17	\$3.92	\$7.80	\$6.02	\$6.37	\$4.30	\$4.14	\$7.80	\$5.45	\$6.63			
2025	\$3.95	\$4.27	\$5.37	\$3.94	\$4.27	\$5.06	\$8.30	\$5.81	\$3.11	\$4.17			
2026	\$3.51	\$1.40	\$2.36	\$3.86	\$1.61	\$1.72	\$5.42	\$6.65	\$3.63	\$3.79			
2027	\$2.98	\$1.40	\$1.40	\$2.52	\$4.06	\$1.40	\$4.30	\$5.09	\$2.37	\$1.40			
2028	\$2.50	\$1.40	\$1.40	\$2.03	\$3.57	\$1.40	\$3.80	\$4.59	\$1.87	\$1.40			

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		Forteres	Maintan	0 -1	:tl.D.	\/-				
		Future	Mainten			ase Value	es			
				(US\$ Mill	ion)					
No.	281	282	283	284	285	286	287	288	289	290
Aircraft	A319-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-
Туре	100	200	200	200	200	200	200	200	200	200
Serial	1671	2714	504	506	508	510	512	523	539	568
Number	1071	2114	304	300	300	310	312	323	559	308
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$8.83	\$20.42	\$7.72	\$7.87	\$6.49	\$6.49	\$3.81	\$8.01	\$4.56	\$5.29
2021	\$10.94	\$18.28	\$7.75	\$6.93	\$5.61	\$5.62	\$3.29	\$7.25	\$3.82	\$5.77
2022	\$9.07	\$15.04	\$7.09	\$6.27	\$4.94	\$4.95	\$2.62	\$6.57	\$3.14	\$5.07
2023	\$7.10	\$12.15	\$6.48	\$5.66	\$4.33	\$4.34	\$2.01	\$5.96	\$2.52	\$4.43
2024	\$4.63	\$8.72	\$5.93	\$5.11	\$3.78	\$3.79	\$1.63	\$5.39	\$1.95	\$3.84
2025	\$2.55	\$16.55	\$5.43	\$4.61	\$3.27	\$3.28	\$1.63	\$4.88	\$1.63	\$3.31
2026	\$3.46	\$13.77	\$4.98	\$4.16	\$2.82	\$2.83	\$1.63	\$4.42	\$1.63	\$2.82
2027	\$1.40	\$10.90	\$4.57	\$3.75	\$2.41	\$2.42	\$1.63	\$4.01	\$1.63	\$2.38
2028	\$1.40	\$7.41	\$4.20	\$3.38	\$2.04	\$2.05	\$1.63	\$3.63	\$1.63	\$1.99

	Future Maintenance Adjusted Base Values (US\$ Million)												
No.	291	292	293	294	295	296	297	298	299	300			
Aircraft Type	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200			
Serial Number	571	587	589	592	613	638	655	678	683	702			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$3.62	\$7.11	\$7.16	\$5.24	\$7.23	\$3.83	\$4.45	\$2.67	\$6.35	\$4.58			
2021	\$3.87	\$7.09	\$6.98	\$6.16	\$8.51	\$6.30	\$9.24	\$3.84	\$5.59	\$7.82			
2022	\$3.16	\$6.38	\$6.27	\$5.45	\$7.78	\$6.34	\$8.51	\$7.25	\$2.89	\$4.41			
2023	\$2.52	\$5.72	\$5.61	\$4.79	\$7.11	\$5.66	\$7.83	\$6.55	\$2.19	\$3.71			
2024	\$1.93	\$5.12	\$5.01	\$4.19	\$6.49	\$5.03	\$7.21	\$5.92	\$1.63	\$3.06			
2025	\$1.63	\$4.58	\$4.46	\$3.64	\$5.93	\$4.46	\$6.64	\$5.34	\$1.63	\$2.48			
2026	\$1.63	\$4.08	\$3.96	\$3.14	\$5.42	\$3.94	\$6.12	\$4.81	\$1.63	\$1.94			
2027	\$1.63	\$3.64	\$3.51	\$2.69	\$4.97	\$3.48	\$5.65	\$4.33	\$1.63	\$1.63			
2028	\$1.63	\$3.23	\$3.10	\$2.28	\$4.55	\$3.06	\$5.22	\$3.89	\$1.63	\$1.63			

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	Future Maintenance Adjusted Base Values (US\$ Million)													
No.	301	302	303	304	305	306	307	308	309	310				
Aircraft Type	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200	A320- 200				
Serial Number	751	780	820	824	826	834	836	842	851	865				
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%				
2020	\$5.85	\$5.09	\$4.84	\$6.43	\$6.79	\$7.58	\$3.93	\$4.14	\$5.67	\$6.47				
2021	\$6.22	\$4.81	\$4.88	\$4.31	\$8.39	\$6.09	\$5.55	\$9.88	\$5.70	\$4.70				
2022	\$7.54	\$5.62	\$9.71	\$3.53	\$5.46	\$4.39	\$6.98	\$4.49	\$5.22	\$8.86				
2023	\$6.43	\$3.52	\$6.64	\$1.63	\$4.15	\$6.80	\$5.12	\$1.76	\$4.02	\$5.41				
2024	\$5.76	\$2.86	\$5.96	\$1.63	\$3.47	\$6.12	\$4.43	\$1.63	\$3.33	\$4.71				
2025	\$5.16	\$2.25	\$5.34	\$1.63	\$2.85	\$5.50	\$3.81	\$1.63	\$2.71	\$4.08				
2026	\$4.60	\$1.70	\$4.78	\$1.63	\$2.28	\$4.93	\$3.23	\$1.63	\$2.13	\$3.50				
2027	\$4.10	\$1.63	\$4.26	\$1.63	\$1.76	\$4.41	\$2.71	\$1.63	\$1.63	\$2.97				
2028	\$3.65	\$1.63	\$3.79	\$1.63	\$1.63	\$3.94	\$2.24	\$1.63	\$1.63	\$2.49				

	Future Maintenance Adjusted Base Values												
					US\$ Millio	n)							
No.	311	312	313	314	315	316	317	318	319	320			
Aircraft	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-			
Type	200	200	200	200	200	200	200	200	200	200			
Serial Number	0955	1001	1104	1105	1128	1146	1163	1192	1248	1266			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$9.63	\$9.57	\$9.35	\$11.39	\$5.94	\$9.52	\$7.30	\$9.61	\$11.30	\$9.88			
2021	\$7.28	\$7.19	\$7.47	\$9.77	\$8.03	\$7.51	\$7.34	\$7.61	\$9.35	\$8.35			
2022	\$4.65	\$8.73	\$8.68	\$7.32	\$9.95	\$8.59	\$6.73	\$8.65	\$6.25	\$5.21			
2023	\$9.25	\$5.53	\$6.00	\$5.24	\$7.59	\$9.87	\$8.51	\$10.06	\$7.49	\$10.81			
2024	\$6.55	\$3.57	\$2.78	\$6.38	\$4.39	\$5.40	\$5.05	\$6.26	\$7.28	\$7.02			
2025	\$5.90	\$2.91	\$5.90	\$5.64	\$3.27	\$3.60	\$3.32	\$3.71	\$3.70	\$3.91			
2026	\$5.30	\$2.31	\$5.27	\$5.01	\$2.64	\$2.97	\$2.69	\$3.07	\$3.05	\$3.25			
2027	\$4.75	\$1.76	\$4.70	\$4.44	\$2.06	\$2.40	\$2.11	\$2.48	\$2.45	\$2.65			
2028	\$4.26	\$1.63	\$4.18	\$3.92	\$1.63	\$1.87	\$1.63	\$1.94	\$1.91	\$2.10			

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			Future I	Maintanay	a Adius	ad Daga \	/alusa			
			Future			ted Base \	alues			
				(\	JS\$ Million)					
No.	321	322	323	324	325	326	327	328	329	330
Aircraft	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-
Type	200	200	200	200	200	200	200	200	200	200
Serial Number	1272	1282	1290	1341	1343	1359	1363	1409	1427	1432
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$9.84	\$9.42	\$10.74	\$10.47	\$12.00	\$10.03	\$10.33	\$7.29	\$10.33	\$13.67
2021	\$8.17	\$8.04	\$8.93	\$8.20	\$9.92	\$10.28	\$10.42	\$10.97	\$9.84	\$11.31
2022	\$9.15	\$8.72	\$6.09	\$9.75	\$7.77	\$10.02	\$9.87	\$10.50	\$9.50	\$8.70
2023	\$10.37	\$9.90	\$10.98	\$6.56	\$5.13	\$7.82	\$7.36	\$7.77	\$10.75	\$9.72
2024	\$6.58	\$6.07	\$7.16	\$7.53	\$6.24	\$4.96	\$8.40	\$4.90	\$7.45	\$11.24
2025	\$3.47	\$2.65	\$3.66	\$3.95	\$7.16	\$5.20	\$5.30	\$1.63	\$8.34	\$6.60
2026	\$2.81	\$1.99	\$3.00	\$3.08	\$5.56	\$3.13	\$3.68	\$3.95	\$5.37	\$3.82
2027	\$2.21	\$1.63	\$2.40	\$2.47	\$4.95	\$2.51	\$3.06	\$3.33	\$4.75	\$3.20
2028	\$1.66	\$1.63	\$1.84	\$1.91	\$4.39	\$1.95	\$2.50	\$2.76	\$4.17	\$2.62

	Future Maintenance Adjusted Base Values (US\$ Million)											
No.	331	332	333	334	335	336	337	338	339	340		
Aircraft	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-		
Туре	200	200	200	200	200	200	200	200	200	200		
Serial Number	1435	1469	1475	1495	1508	1514	1533	1538	1555	1620		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$9.31	\$11.77	\$8.58	\$9.93	\$12.70	\$9.27	\$8.57	\$10.27	\$9.25	\$11.02		
2021	\$10.75	\$9.99	\$11.60	\$10.53	\$11.76	\$10.05	\$9.40	\$10.86	\$9.84	\$9.60		
2022	\$12.23	\$7.59	\$12.68	\$9.87	\$8.67	\$9.73	\$12.56	\$10.21	\$9.82	\$11.28		
2023	\$9.38	\$8.98	\$10.02	\$11.46	\$10.20	\$10.79	\$9.38	\$7.53	\$10.18	\$8.55		
2024	\$6.61	\$9.77	\$6.82	\$8.13	\$11.04	\$7.31	\$5.30	\$8.63	\$6.94	\$9.49		
2025	\$2.99	\$6.11	\$4.04	\$5.10	\$7.54	\$4.14	\$6.36	\$5.35	\$7.86	\$6.41		
2026	\$1.63	\$2.93	\$1.63	\$2.06	\$3.61	\$1.63	\$2.52	\$1.63	\$4.10	\$2.73		
2027	\$1.63	\$2.30	\$1.63	\$1.63	\$2.97	\$1.63	\$1.87	\$1.63	\$3.18	\$1.63		
2028	\$1.63	\$1.71	\$1.63	\$1.63	\$2.38	\$1.63	\$1.63	\$1.63	\$2.59	\$1.63		

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Future Maintenance Adjusted Dage Values													
	Future Maintenance Adjusted Base Values												
				(US\$ N	/lillion)								
No.	341	342	343	344	345	346	347	348	349	350			
Aircraft Type	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-	A320-			
All Clait Type	200	200	200	200	200	200	200	200	200	200			
Serial Number	1669	1680	2680	1728	1741	1755	1821	1840	1842	1845			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$14.06	\$10.10	\$20.26	\$11.26	\$10.89	\$11.71	\$11.44	\$11.74	\$10.04	\$14.88			
2021	\$12.90	\$10.80	\$18.12	\$9.84	\$11.45	\$10.29	\$14.02	\$12.32	\$12.09	\$13.56			
2022	\$10.56	\$10.85	\$14.88	\$11.41	\$11.23	\$11.99	\$11.39	\$12.09	\$10.47	\$15.28			
2023	\$8.12	\$8.15	\$11.99	\$8.75	\$8.30	\$9.26	\$8.63	\$9.20	\$11.98	\$12.63			
2024	\$9.03	\$4.75	\$8.56	\$9.90	\$9.08	\$10.42	\$9.51	\$5.57	\$9.24	\$9.44			
2025	\$10.47	\$5.06	\$16.28	\$7.14	\$5.49	\$7.35	\$6.39	\$6.56	\$5.94	\$6.66			
2026	\$6.36	\$4.72	\$12.94	\$3.79	\$6.26	\$3.67	\$2.68	\$7.34	\$3.07	\$3.31			
2027	\$4.19	\$1.72	\$10.04	\$1.63	\$3.78	\$1.63	\$1.63	\$3.74	\$1.63	\$5.15			
2028	\$3.58	\$1.63	\$6.52	\$1.63	\$3.16	\$1.63	\$1.63	\$3.10	\$1.63	\$4.29			

	Future Maintenance Adjusted Base Values (US\$ Million)													
No.	351	352	353	354	355	356	357	358	359	360				
Aircraft Type	A320-	A320-	CF6-	CF6-	CF6-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-				
Aircraft Type	200	200	80C2B8F	80C2B8F	80C2B8F	7B26	7B26	7B26	7B26	7B24				
Serial Number	1847	1865	706368	706439	706323	890202	890307	890418	890436	874219				
Inflation														
2020	\$12.13	\$12.46	\$0.58	\$0.58	\$2.85	\$4.22	\$5.66	\$6.85	\$4.02	\$3.88				
2021	\$10.69	\$15.27	\$2.15	\$1.99	\$3.06	\$3.82	\$5.32	\$8.71	\$8.06	\$6.73				
2022	\$7.95	\$12.65	\$4.43	\$4.26	\$2.36	\$8.76	\$4.67	\$8.18	\$7.38	\$6.12				
2023	\$14.04	\$9.91	\$3.85	\$3.67	\$0.58	\$8.24	\$8.65	\$7.65	\$6.69	\$5.99				
2024	\$10.87	\$6.62	\$1.95	\$1.77	\$0.58	\$7.69	\$7.84	\$7.09	\$5.96	\$6.11				
2025	\$8.11	\$8.20	\$0.58	\$0.58	\$2.27	\$7.13	\$7.00	\$6.52	\$5.21	\$6.26				
2026	\$4.79	\$4.19	\$0.58	\$0.58	\$0.64	\$6.42	\$6.00	\$5.80	\$4.31	\$6.31				
2027	\$1.87	\$1.63	\$0.58	\$0.58	\$0.58	\$5.62	\$4.82	\$4.92	\$6.80	\$6.27				
2028	\$1.63	\$4.05	\$0.58	\$0.58	\$0.58	\$5.41	\$4.52	\$8.04	\$5.26	\$6.07				

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Future Maintenance Adjusted Dage Volume												
Future Maintenance Adjusted Base Values (US\$ Million)												
				(US\$ N	/lillion)							
No.	361	362	363	364	365	366	367	368	369	370		
Aircraft Type	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-	CFM56-		
All Clait Type	7B26	7B26	7B26	7B24	7B26	7B26	7B26	7B24	7B26	7B26		
Serial Number	874792	876266	876563	889320	890452	890516	890612	890652	890684	890775		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$5.05	\$6.55	\$6.68	\$5.54	\$6.78	\$4.27	\$5.07	\$5.12	\$3.83	\$6.77		
2021	\$6.55	\$6.24	\$8.00	\$5.21	\$8.43	\$3.88	\$6.56	\$4.78	\$9.21	\$8.40		
2022	\$8.00	\$5.64	\$7.45	\$4.58	\$7.90	\$8.71	\$8.00	\$4.13	\$8.69	\$7.88		
2023	\$7.61	\$5.03	\$6.89	\$7.40	\$7.36	\$8.18	\$7.58	\$8.19	\$8.17	\$7.34		
2024	\$7.28	\$7.80	\$6.30	\$6.68	\$6.80	\$7.63	\$6.97	\$7.64	\$7.62	\$6.78		
2025	\$7.44	\$7.48	\$5.70	\$5.76	\$6.22	\$7.07	\$6.34	\$7.08	\$7.06	\$6.21		
2026	\$7.50	\$7.54	\$5.76	\$4.68	\$5.50	\$6.36	\$5.56	\$6.37	\$6.35	\$5.49		
2027	\$7.45	\$7.49	\$5.71	\$4.64	\$8.34	\$5.49	\$4.62	\$5.52	\$5.48	\$8.27		
2028	\$7.24	\$7.28	\$5.50	\$4.44	\$7.31	\$4.61	\$7.43	\$4.46	\$8.36	\$7.06		

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	371	372	373	374	375	376	377	378	379	380		
Aircraft Type	CFM56-	CFM56-	CFM56-	CFM56-								
All Clait Type	7B26	7B26	7B26	7B24	7B24	7B26	7B26E	7B26E	7B26/3	7B26E		
Serial Number	874336	876213	876633	888436	888888	890339	660372	862250	862937	660119		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$6.73	\$6.56	\$6.62	\$6.50	\$6.32	\$3.74	\$6.56	\$6.67	\$6.65	\$6.64		
2021	\$8.21	\$7.51	\$7.75	\$8.40	\$7.64	\$4.77	\$6.27	\$7.17	\$7.35	\$6.36		
2022	\$7.67	\$6.94	\$7.19	\$7.87	\$7.09	\$5.88	\$5.73	\$6.66	\$6.85	\$5.82		
2023	\$7.23	\$6.36	\$6.62	\$7.33	\$6.52	\$4.43	\$5.17	\$6.13	\$6.33	\$5.26		
2024	\$7.36	\$5.76	\$6.02	\$6.76	\$5.93	\$9.15	\$10.67	\$5.58	\$5.78	\$10.80		
2025	\$7.52	\$5.73	\$5.40	\$6.18	\$5.32	\$8.44	\$10.13	\$5.02	\$5.23	\$10.27		
2026	\$7.58	\$5.79	\$5.46	\$5.71	\$4.56	\$7.58	\$9.44	\$10.74	\$11.00	\$9.58		
2027	\$7.53	\$5.74	\$5.41	\$5.67	\$7.94	\$6.55	\$8.59	\$9.93	\$10.20	\$8.74		
2028	\$7.32	\$5.53	\$5.20	\$5.47	\$7.74	\$6.08	\$7.53	\$8.90	\$9.19	\$7.68		

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Future Maintenance Adjusted Base Values													
	(US\$ Million)												
No.	381	382	383	384	385	386	387	388	389	390			
Aircraft Type	CFM56-	GE90-	GE90-	GE90-									
All Clair Type	7B26E	115B	115B	115B	90B	90B	90B	90B	90B	90B			
Serial Number	660170	901480	901096	901281	900272	900352	900361	900392	900242	900325			
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%			
2020	\$7.05	\$29.87	\$26.59	\$26.77	\$8.10	\$7.70	\$2.31	\$4.62	\$7.87	\$8.32			
2021	\$8.64	\$28.87	\$25.49	\$25.68	\$10.86	\$5.33	\$7.12	\$15.11	\$8.30	\$5.94			
2022	\$8.04	\$28.05	\$24.58	\$24.79	\$8.03	\$2.41	\$11.92	\$12.63	\$5.44	\$3.01			
2023	\$7.41	\$27.22	\$23.65	\$23.86	\$4.89	\$13.03	\$9.56	\$9.65	\$2.46	\$0.50			
2024	\$6.77	\$26.36	\$22.69	\$22.91	\$3.41	\$9.93	\$6.35	\$6.47	\$1.59	\$10.57			
2025	\$6.09	\$25.08	\$21.30	\$21.53	\$2.56	\$6.72	\$3.02	\$3.17	\$0.74	\$8.88			
2026	\$5.27	\$23.32	\$33.92	\$34.17	\$1.80	\$3.45	\$0.50	\$0.50	\$0.50	\$8.12			
2027	\$11.22	\$21.10	\$31.30	\$31.56	\$1.02	\$2.67	\$0.50	\$0.50	\$0.50	\$7.34			
2028	\$10.23	\$33.49	\$28.17	\$28.44	\$0.50	\$2.08	\$0.50	\$0.50	\$0.50	\$6.75			

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	391	392	393	394	395	396	397	398	399	400		
Aircraft Type	GEnx-	LEAP-										
All Clait Type	1B74	1B70	1B74	1B76	1B70	1B70	1B74	1B74	1B70	1B28		
Serial Number	956883	956912	958090	958338	958576	956295	956322	956515	956679	603331		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$26.34	\$22.41	\$26.99	\$29.68	\$25.20	\$19.06	\$22.56	\$24.54	\$21.69	\$16.25		
2021	\$25.68	\$21.68	\$26.24	\$29.02	\$24.55	\$18.22	\$21.66	\$23.71	\$20.92	\$15.70		
2022	\$25.36	\$21.16	\$25.81	\$28.70	\$24.12	\$17.60	\$34.32	\$23.19	\$20.36	\$15.15		
2023	\$25.52	\$21.02	\$25.86	\$28.88	\$24.07	\$28.41	\$33.73	\$23.14	\$20.17	\$14.65		
2024	\$25.98	\$21.09	\$26.21	\$29.39	\$24.23	\$27.79	\$33.41	\$37.10	\$20.19	\$14.22		
2025	\$38.53	\$33.77	\$39.11	\$30.30	\$24.68	\$27.40	\$33.42	\$37.22	\$32.94	\$13.87		
2026	\$39.23	\$34.10	\$42.82	\$31.69	\$25.48	\$27.32	\$33.83	\$37.76	\$33.01	\$13.61		
2027	\$40.49	\$34.64	\$44.07	\$49.20	\$26.73	\$27.65	\$34.79	\$38.83	\$33.48	\$13.45		
2028	\$42.47	\$35.70	\$46.02	\$51.51	\$41.69	\$28.49	\$36.44	\$40.61	\$34.49	\$21.86		

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Future Maintenance Adjusted Base Values												
			Future M	aintenan:	ce Adjust	ed Base $ackslash$	/alues					
	(US\$ Million)											
No.	401	402	403	404	405	406	407	408	409	410		
Aiveneft Time	LEAP-	LEAP-	DWAGEC	DIAMAGEC	DIAMAGEC	DW/4077	D)4/4077	D)4/4077	D\4/4077	DW/4077		
Aircraft Type	1B28	1B28	PW4056	PW4056	PW4056	PW4077	PW4077	PW4077	PW4077	PW4077		
Serial Number	602853	602518	727787	727948	727569	P222309	P222310	P222311	222258	777067		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$16.25	\$16.25	\$0.50	\$0.50	\$0.50	\$2.72	\$2.35	\$2.39	\$0.50	\$0.96		
2021	\$15.70	\$15.70	\$0.50	\$0.50	\$0.50	\$2.21	\$1.82	\$1.86	\$1.84	\$0.50		
2022	\$15.15	\$15.15	\$1.06	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$4.83	\$0.50		
2023	\$14.65	\$14.65	\$0.50	\$1.65	\$0.50	\$0.50	\$9.52	\$9.52	\$3.21	\$0.50		
2024	\$14.22	\$14.22	\$0.50	\$0.50	\$0.50	\$8.14	\$7.56	\$7.70	\$0.99	\$0.50		
2025	\$13.87	\$13.87	\$0.50	\$0.50	\$0.50	\$6.05	\$5.46	\$5.61	\$0.50	\$0.50		
2026	\$13.61	\$13.61	\$0.50	\$0.50	\$0.50	\$3.88	\$3.27	\$3.42	\$0.50	\$0.50		
2027	\$13.45	\$13.45	\$0.50	\$0.50	\$0.50	\$1.66	\$1.03	\$1.19	\$4.28	\$0.50		
2028	\$21.86	\$21.86	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$2.19	\$0.50		

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	411	412	413	414	415	416	417	418	419	420		
Aircraft Type	PW4077	PW4090	PW4090									
Serial Number	P222308	222067	222068	222099	222108	222182	222215	222225	222254	222022		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$2.15	\$4.37	\$3.89	\$3.66	\$0.50	\$0.50	\$0.50	\$1.61	\$2.23	\$3.73		
2021	\$1.62	\$5.56	\$4.10	\$3.56	\$2.33	\$2.93	\$2.57	\$1.22	\$1.87	\$3.41		
2022	\$0.50	\$3.79	\$2.30	\$1.73	\$5.36	\$6.08	\$5.67	\$0.50	\$0.50	\$1.59		
2023	\$9.52	\$2.02	\$0.50	\$0.50	\$2.66	\$4.59	\$3.75	\$9.39	\$10.03	\$0.50		
2024	\$7.56	\$1.69	\$0.50	\$0.50	\$0.50	\$2.25	\$0.84	\$7.26	\$7.92	\$9.90		
2025	\$5.46	\$1.31	\$0.50	\$0.50	\$9.72	\$0.50	\$0.50	\$4.98	\$5.66	\$7.69		
2026	\$3.27	\$0.91	\$0.50	\$0.50	\$7.45	\$0.50	\$9.54	\$2.57	\$3.27	\$5.36		
2027	\$1.03	\$0.50	\$0.50	\$0.50	\$4.69	\$0.50	\$6.84	\$8.50	\$0.50	\$2.55		
2028	\$0.50	\$0.50	\$0.50	\$0.50	\$1.75	\$0.50	\$3.95	\$5.64	\$6.38	\$0.50		

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		F	uture Mai	ntenance	Adjusted	l Base Va	lues							
	(US\$ Million)													
No.	421	422	423	424	425	426	427	428	429	430				
Aircraft Type	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090	PW4090	RB211-	RB211-	RB211-				
All Clait Type	P VV4090	P VV4090	P VV4090	P VV4090	P VV4090	P VV4090	P VV4090	535E4B	535E4B	535E4B				
Serial Number														
Inflation														
2020	\$0.50	\$0.50	\$0.50	\$1.48	\$0.50	\$3.37	\$0.50	\$2.95	\$0.89	\$2.08				
2021	\$2.52	\$2.68	\$2.80	\$1.09	\$2.85	\$2.77	\$2.25	\$2.74	\$2.43	\$1.65				
2022	\$4.49	\$5.80	\$5.94	\$0.50	\$6.00	\$0.93	\$5.25	\$1.72	\$3.94	\$0.61				
2023	\$4.22	\$4.10	\$4.45	\$9.39	\$4.99	\$0.50	\$4.33	\$0.79	\$2.67	\$0.05				
2024	\$3.89	\$1.49	\$2.10	\$7.26	\$4.66	\$0.50	\$4.00	\$0.26	\$1.72	\$2.59				
2025	\$3.51	\$0.50	\$0.50	\$4.98	\$4.28	\$0.50	\$3.62	\$0.05	\$1.18	\$2.05				
2026	\$3.11	\$10.23	\$0.50	\$2.57	\$3.88	\$0.50	\$3.22	\$0.05	\$0.78	\$1.65				
2027	\$2.34	\$7.73	\$8.99	\$8.50	\$3.11	\$0.50	\$2.45	\$0.05	\$0.55	\$1.42				
2028	\$1.49	\$4.87	\$6.16	\$5.64	\$2.26	\$0.50	\$1.60	\$0.05	\$0.45	\$1.32				

Future Maintenance Adjusted Base Values (US\$ Million)												
No.	431	432	433	434	435	436	437	438	439	440		
Aircraft Type	RB211- 535E4B	V2527-A5	V2527-A5	V2522-A5								
Serial Number	31849	31884	31900	31378	31379	31412	31515	V10327	V10824	V11050		
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
2020	\$1.38	\$1.90	\$4.03	\$3.41	\$0.39	\$1.32	\$4.17	\$6.42	\$6.61	\$5.64		
2021	\$0.93	\$1.46	\$4.40	\$3.28	\$0.26	\$1.06	\$4.63	\$6.84	\$7.66	\$5.42		
2022	\$4.18	\$0.43	\$3.44	\$3.05	\$0.05	\$0.83	\$3.68	\$6.24	\$7.16	\$4.74		
2023	\$3.11	\$3.80	\$2.37	\$2.74	\$0.05	\$0.52	\$3.30	\$5.93	\$6.63	\$4.02		
2024	\$1.70	\$2.48	\$1.04	\$2.21	\$0.05	\$0.05	\$2.77	\$6.10	\$6.08	\$6.28		
2025	\$0.23	\$1.12	\$0.05	\$1.67	\$0.05	\$0.05	\$2.23	\$6.29	\$5.50	\$5.01		
2026	\$0.05	\$0.05	\$0.05	\$1.27	\$0.05	\$0.05	\$1.83	\$6.35	\$8.49	\$3.56		
2027	\$0.05	\$0.05	\$2.11	\$1.04	\$0.05	\$0.05	\$1.60	\$6.28	\$8.42	\$3.51		
2028	\$0.05	\$0.05	\$1.05	\$0.94	\$0.05	\$0.05	\$1.50	\$6.01	\$8.15	\$3.30		

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Future Maintenance Adjusted Base Values											
(US\$ Million)  No. 441 442 443 444 445 446 447 448 449 450								451			
Aircraft Type	V2522- A5	V2527- A5	V2524- A5	V2527- A5	V2524- A5	V2527- A5	V2527- A5	V2527- A5	V2527- A5	V2527- A5	V2524- A5
Serial Number	V10232	V10316	V12173	V11807	V11395	V12083	V12169	V12521	V10167	V10372	V11394
Inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020	\$4.06	\$6.41	\$5.80	\$6.65	\$5.82	\$2.68	\$2.81	\$6.61	\$5.31	\$5.90	\$4.77
2021	\$3.83	\$6.82	\$7.63	\$7.76	\$5.68	\$3.98	\$4.03	\$7.59	\$5.22	\$5.61	\$4.48
2022	\$3.32	\$6.24	\$6.94	\$7.06	\$5.19	\$4.10	\$5.38	\$6.84	\$5.34	\$4.78	\$3.65
2023	\$3.43	\$6.01	\$6.20	\$6.31	\$4.65	\$4.24	\$2.90	\$6.03	\$5.48	\$4.13	\$9.29
2024	\$3.56	\$6.18	\$5.43	\$5.54	\$4.10	\$4.41	\$10.73	\$9.42	\$5.65	\$4.30	\$8.56
2025	\$3.71	\$6.37	\$4.62	\$11.85	\$10.23	\$4.60	\$10.03	\$8.82	\$5.84	\$4.49	\$7.79
2026	\$3.76	\$6.43	\$3.64	\$11.25	\$9.37	\$4.66	\$9.13	\$7.86	\$5.90	\$4.55	\$6.85
2027	\$3.71	\$6.36	\$10.33	\$10.29	\$8.34	\$4.59	\$8.04	\$6.70	\$5.83	\$4.48	\$5.75
2028	\$3.50	\$6.09	\$9.20	\$9.06	\$7.09	\$4.32	\$6.69	\$5.27	\$5.56	\$4.21	\$4.41

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#### V. Covenants

This Report has been prepared for the exclusive use of United Airlines, Inc. and shall not be provided to other parties by mba without the express consent of United Airlines, Inc. mba certifies that this report has been independently prepared and that it fully and accurately reflects mba's and the signatory's opinion of the values of the Subject Assets as requested. mba further certifies that it does not have and does not expect to have any financial or other interest in the Subject Assets. Neither mba nor the signatory has provided the OEMs of the airframe or engines with pro bono or paid consulting or advice in the design or development of the assets valued herein.

This Report represents the opinion of mba of the values of the Subject Assets as requested and is intended to be advisory only. Therefore, mba assumes no responsibility or legal liability for any actions taken or not taken by United Airlines, Inc. or any other party with regard to the Subject Assets and engines. By accepting this Report, all parties agree that mba shall bear no such responsibility or legal liability.

October 13, 2020

HALF TIME AIRCRAFT & ENGINE VALUES PREPARED BY:

MAINTENANCE ADJUSTMENTS PREPARED BY:

Lindsey Singleton Analyst – Asset Valuations mba Aviation Natasha Sidhu, CVA Manager – Forecasting & Modeling mba Aviation

REVIEWED BY:

REVIEWED BY:

Lindsey Webster
VP – Asset Valuations
mba Aviation
ISTAT Certified Appraiser

Anne Correa, CVA VP – Forecasting & Modeling mba Aviation

Alex Cosaro

Director – Asset Valuations mba Aviation ISTAT Certified Appraiser

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## APPENDIX III—LOAN TO COLLATERAL VALUE RATIOS BY COLLATERAL GROUP

The following tables set forth LTVs with respect to the Spares Collateral Group, the Tier 1 Aircraft Collateral Group and the Tier II Aircraft Collateral Group for the Certificates as of the Issuance Date and as of each Regular Distribution Date thereafter. The table should not be considered a forecast or prediction of expected or likely LTVs but simply a mathematical calculation based on one set of assumptions. See "Risk Factors—Risk Factors Relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value".

		Spares 0		
<u>D</u> ate	Spares Assumed Value(1)	Outstanding Balance(2)	Scheduled Payments of Principal	Loan to Value Ratio(3)
At Issuance	\$ 1,941,922,368.71	\$ 1,171,000,000.00	_	60.3%
January 15, 2021	1,952,344,603.29	1,156,362,500.00	14,637,500.00	59.2%
April 15, 2021	1,962,766,837.87	1,141,725,000.00	14,637,500.00	58.2%
July 15, 2021	1,973,189,072.44	1,127,087,500.00	14,637,500.00	57.1%
October 15, 2021	1,983,611,307.02	1,112,450,000.00	14,637,500.00	56.1%
January 15, 2022	1,979,169,549.78	1,097,812,500.00	14,637,500.00	55.5%
April 15, 2022	1,974,727,792.54	1,083,175,000.00	14,637,500.00	54.9%
July 15, 2022	1,970,286,035.29	1,068,537,500.00	14,637,500.00	54.2%
October 15, 2022	1,965,844,278.05	1,053,900,000.00	14,637,500.00	53.6%
January 15, 2023	1,964,580,172.12	1,039,262,500.00	14,637,500.00	52.9%
April 15, 2023	1,963,316,066.19	1,024,625,000.00	14,637,500.00	52.2%
July 15, 2023	1,962,051,960.26	1,009,987,500.00	14,637,500.00	51.5%
October 15, 2023	1,960,787,854.33	995,350,000.00	14,637,500.00	50.8%
January 15, 2024	1,952,327,689.69	980,712,500.00	14,637,500.00	50.2%
April 15, 2024	1,943,867,525.04	966,075,000.00	14,637,500.00	49.7%
July 15, 2024	1,935,407,360.40	951,437,500.00	14,637,500.00	49.2%
October 15, 2024	1,926,947,195.75	936,800,000.00	14,637,500.00	48.6%
January 15, 2025	1,918,544,454.29	914,843,750.00	21,956,250.00	47.7%
April 15, 2025	1,910,141,712.83	892,887,500.00	21,956,250.00	46.7%
July 15, 2025	1,901,738,971.37	870,931,250.00	21,956,250.00	45.8%
October 15, 2025	1,893,336,229.91	848,975,000.00	21,956,250.00	44.8%
January 15, 2026	1,884,598,467.14	827,018,750.00	21,956,250.00	43.9%
April 15, 2026	1,875,860,704.37	805,062,500.00	21,956,250.00	42.9%
July 15, 2026	1,867,122,941.59	783,106,250.00	21,956,250.00	41.9%
October 15, 2026	1,858,385,178.82	761,150,000.00	21,956,250.00	41.0%
January 15, 2027	1,853,047,033.02	739,193,750.00	21,956,250.00	39.9%
April 15, 2027	1,847,708,887.22	717,237,500.00	21,956,250.00	38.8%
July 15, 2027	1,842,370,741.41	695,281,250.00	21,956,250.00	37.7%
October 15, 2027	1,837,032,595.61	_	695,281,250.00	0.0%

		Tier I Aircr		
<u>Date</u>	Aircraft Assumed Value(1)	Outstanding Balance(2)	Scheduled Payments of Principal	Loan to Value Ratio(3)
At Issuance	\$ 1,712,166,496.11	\$ 856,000,000.00	_	50.0%
January 15, 2021	1,721,386,524.17	834,600,000.00	21,400,000.00	48.5%
April 15, 2021	1,730,606,552.23	813,200,000.00	21,400,000.00	47.0%
July 15, 2021	1,739,826,580.29	791,800,000.00	21,400,000.00	45.5%
October 15, 2021	1,749,046,608.35	770,400,000.00	21,400,000.00	44.0%
January 15, 2022	1,751,751,152.04	749,000,000.00	21,400,000.00	42.8%
April 15, 2022	1,754,455,695.73	727,600,000.00	21,400,000.00	41.5%
July 15, 2022	1,757,160,239.41	706,200,000.00	21,400,000.00	40.2%
October 15, 2022	1,759,864,783.10	684,800,000.00	21,400,000.00	38.9%
January 15, 2023	1,704,347,413.86	652,700,000.00	32,100,000.00	38.3%
April 15, 2023	1,648,830,044.62	620,600,000.00	32,100,000.00	37.6%
July 15, 2023	1,593,312,675.37	588,500,000.00	32,100,000.00	36.9%
October 15, 2023	1,537,795,306.13	556,400,000.00	32,100,000.00	36.2%
January 15, 2024	1,486,896,652.28	524,300,000.00	32,100,000.00	35.3%
April 15, 2024	1,435,997,998.43	492,200,000.00	32,100,000.00	34.3%
July 15, 2024	1,385,099,344.57	460,100,000.00	32,100,000.00	33.2%
October 15, 2024	1,334,200,690.72	428,000,000.00	32,100,000.00	32.1%
January 15, 2025	1,279,606,335.73	363,800,000.00	64,200,000.00	28.4%
April 15, 2025	1,225,011,980.75	299,600,000.00	64,200,000.00	24.5%
July 15, 2025	1,170,417,625.76	235,400,000.00	64,200,000.00	20.1%
October 15, 2025	1,115,823,270.77	171,200,000.00	64,200,000.00	15.3%
January 15, 2026	1,068,921,572.49	149,800,000.00	21,400,000.00	14.0%
April 15, 2026	1,022,019,874.21	128,400,000.00	21,400,000.00	12.6%
July 15, 2026	975,118,175.92	107,000,000.00	21,400,000.00	11.0%
October 15, 2026	928,216,477.64	85,600,000.00	21,400,000.00	9.2%
January 15, 2027	901,153,321.73	64,200,000.00	21,400,000.00	7.1%
April 15, 2027	874,090,165.82	42,800,000.00	21,400,000.00	4.9%
July 15, 2027	847,027,009.91	21,400,000.00	21,400,000.00	2.5%
October 15, 2027	819,963,854.00	_	21,400,000.00	0.0%

	Tier II Airc		
Aircraft Assumed Value(1)	Outstanding Balance(2)	Scheduled Payments of Principal	Loan to Value Ratio(3)
\$ 2,161,221,821.26	\$ 973,000,000.00		45.0%
2,161,911,807.17	936,512,500.00	36,487,500.00	43.3%
2,162,601,793.09	900,025,000.00	36,487,500.00	41.6%
2,163,291,779.00	863,537,500.00	36,487,500.00	39.9%
2,163,981,764.91	827,050,000.00	36,487,500.00	38.2%
2,172,496,843.17	778,400,000.00	48,650,000.00	35.8%
2,181,011,921.43	729,750,000.00	48,650,000.00	33.5%
2,189,526,999.69	681,100,000.00	48,650,000.00	31.1%
2,198,042,077.95	632,450,000.00	48,650,000.00	28.8%
2,135,736,700.83	571,637,500.00	60,812,500.00	26.8%
2,073,431,323.71	510,825,000.00	60,812,500.00	24.6%
2,011,125,946.58	450,012,500.00	60,812,500.00	22.4%
1,948,820,569.46	389,200,000.00	60,812,500.00	20.0%
1,886,088,141.46	291,900,000.00	97,300,000.00	15.5%
1,823,355,713.46	194,600,000.00	97,300,000.00	10.7%
1,760,623,285.45	97,300,000.00	97,300,000.00	5.5%
1,697,890,857.45	_	97,300,000.00	0.0%
	Assumed Value(1) \$ 2,161,221,821.26 2,161,911,807.17 2,162,601,793.09 2,163,981,764.91 2,172,496,843.17 2,181,011,921.43 2,189,526,999.69 2,198,042,077.95 2,135,736,700.83 2,073,431,323.71 2,011,125,946.58 1,948,820,569.46 1,886,088,141.46 1,823,355,713.46 1,760,623,285.45	Aircraft Assumed Value(1) \$ 2,161,221,821.26 \$ 973,000,000.00 2,161,911,807.17 2,162,601,793.09 900,025,000.00 2,163,291,779.00 863,537,500.00 2,163,981,764.91 2,172,496,843.17 778,400,000.00 2,181,011,921.43 729,750,000.00 2,189,526,999.69 681,100,000.00 2,198,042,077.95 632,450,000.00 2,135,736,700.83 571,637,500.00 2,073,431,23.71 510,825,000.00 1,948,820,569,46 389,200,000.00 1,886,088,141.46 291,900,000.00 1,823,355,713.46 194,600,000.00 1,760,623,285.45 97,300,000.00	Assumed Value(1)         Balance(2)         Principal           \$ 2,161,221,821.26         \$ 973,000,000.00         —           2,161,911,821.77         936,512,500.00         36,487,500.00           2,162,601,793.09         900,025,000.00         36,487,500.00           2,163,291,779.00         863,537,500.00         36,487,500.00           2,163,981,764.91         827,050,000.00         48,650,000.00           2,172,496,843.17         778,400,000.00         48,650,000.00           2,181,011,921.43         729,750,000.00         48,650,000.00           2,189,526,999.69         681,100,000.00         48,650,000.00           2,198,042,077.95         632,450,000.00         48,650,000.00           2,073,431,323.71         510,825,000.00         60,812,500.00           2,073,431,323.71         510,825,000.00         60,812,500.00           1,948,820,569.46         389,200,000.00         60,812,500.00           1,886,088,141.46         291,900,000.00         97,300,000.00           1,823,355,713.46         194,600,000.00         97,300,000.00           1,760,623,285.45         97,300,000.00         97,300,000.00

- (1) We have assumed that the composition of the Collateral remains the same as it was on the Issuance Date through the Final Expected Distribution Date. Assumed Value reflects the appraised values of the applicable Collateral. In the case of the Spare Parts, initial and forward appraised values reflect current market value as of August 31, 2020, as appraised by mba. We have assumed that such value does not change during the term of the Certificates. In the case of the Spare Engines and Aircraft, the initial appraised values of each Spare Engine and Aircraft reflect as of September 1, 2020 the lower of the mean and median of the base values thereof as provided by BK, ICF and mba, each as adjusted for current maintenance condition as determined by mba. Forward appraised values reflect as of September 1, 2020 the lower of the mean and median of the projected base values as appraised by BK, ICF and mba, each as adjusted for projected maintenance condition as determined by mba. See "Risk Factors—Risk Factors Relating to the Certificates and the Offering—The Appraisals are only estimates of Collateral value". United is required to provide to the Loan Trustee a semiannual appraisal of the Collateral. See "Description of the Collateral and the Appraisals—Semiannual LTV Test".
- (2) Outstanding balances as of each Regular Distribution Date are shown after giving effect to distributions expected to be made on such distribution date.
- (3) The LTVs for the Certificates were obtained for the Issuance Date and each Regular Distribution Date by dividing (i) the expected outstanding balance of such Certificates after giving effect to the distributions expected to be made on such date, by (ii) the assumed value of the Collateral on such date based on the assumptions described above.

# **United Airlines, Inc.**

Pass Through Certificates

This prospectus relates to pass through certificates to be issued by one or more trusts that United Airlines, Inc. will form, as creator of each pass through trust, with a national or state bank or trust company, as trustee. The trustee will hold all property owned by a trust for the benefit of holders of pass through certificates issued by that trust. Each pass through certificate issued by a trust will represent a beneficial interest in all property held by that trust. United Continental Holdings, Inc., the holding company of United, may provide a guarantee of certain obligations of United relating to property owned by such a trust.

We will describe the specific terms of any offering of pass through certificates in a prospectus supplement to this prospectus. You should carefully read this prospectus and the applicable prospectus supplement, together with the documents we incorporate by reference, before you invest in any pass through certificates.

This prospectus may not be used to offer or sell any pass through certificates unless accompanied by a prospectus supplement.

This prospectus may not be used to offer of sen any pass anough	ectinicates unless accompanied by a prospectuo supplement.
Investing in our pass through certificates involves r	risks. See "Risk Factors" beginning on page 2 of this prospectus.
Neither the Securities and Exchange Commission nor any sta or complete. Any representation to the contrary is a criminal offer	ate securities commission has approved or disapproved of these securities or determined if this prospectus is truthful ase.
	The data of this assessment is December 1 2017
	The date of this prospectus is December 1, 2017.

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#### ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") using the "shelf" registration process. Under the shelf registration process, we may sell the pass through certificates described in this prospectus in one or more offerings from time to time. Each time we sell pass through certificates, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus contains summaries of certain provisions contained in some of the documents described herein. Please refer to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of the documents referred to herein have been filed, or will be filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "Where You Can Find More Information."

In this prospectus, unless the context otherwise requires, the terms "we," "our," "us" and the "Company" refer to United Continental Holdings, Inc. and its subsidiaries, including United Airlines, Inc.

You should rely only on the information contained in this prospectus or in a prospectus supplement accompanying this prospectus or information incorporated by reference therein. We have not authorized anyone to provide you with different information. The distribution of this prospectus and sale of these pass through certificates in certain jurisdictions may be restricted by law. Persons in possession of this prospectus are required to inform themselves about and observe any such restrictions. We are not making an offer to sell these pass through certificates in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have changed since that date.

#### RISK FACTORS

An investment in our pass through certificates involves risk. Before you invest in our pass through certificates, you should carefully consider the risks involved. Accordingly, you should carefully consider:

- the information contained in or incorporated by reference into this prospectus;
- the information contained in or incorporated by reference into any prospectus supplement relating to specific offerings of securities;
- the risks described in the Annual Report on Form 10-K of United Continental Holdings, Inc. and United Airlines, Inc. for our most recent fiscal year and in any Quarterly Report on Form 10-Q which we have filed since our most recent Annual Report on Form 10-K, each of which is incorporated by reference into this prospectus; and
- other risks and other information that may be contained in, or incorporated by reference from, other filings we make with the SEC, including in any prospectus supplement relating to specific offerings of pass through certificates.

The discussion of risks related to our business contained in or incorporated by reference into this prospectus or into any prospectus supplement comprises material risks of which we are aware. If any of the events or developments described actually occurs, our business, financial condition or results of operations would likely suffer.

#### CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements contained in or incorporated by reference in this prospectus or any prospectus supplement delivered with this prospectus are forward-looking and thus reflect our current expectations and beliefs with respect to certain current and future events and anticipated financial and operating performance. Such forward-looking statements are and will be subject to many risks and uncertainties relating to our operations and business environment that may cause actual results to differ materially from any future results expressed or implied in such forward-looking statements. Words such as "expects," "will," "plans," "anticipates," "indicates," "believes," "forecast," "guidance," "outlook," "goals" and similar expressions are intended to identify forward-looking statements.

Additionally, forward-looking statements include statements that do not relate solely to historical facts, such as statements which identify uncertainties or trends, discuss the possible future effects of current known trends or uncertainties, or which indicate that the future effects of known trends or uncertainties cannot be predicted, guaranteed or assured. All forward-looking statements contained in or incorporated by reference in this prospectus or any prospectus supplement delivered with this prospectus are based upon information available to us on the date such statements are made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, changed circumstances or otherwise, except as required by applicable law.

Our actual results could differ materially from these forward-looking statements due to numerous factors including, without limitation, the following: our ability to comply with the terms of our various financing arrangements; the costs and availability of financing; our ability to maintain adequate liquidity; our ability to execute our operational plans and revenue-generating initiatives, including optimizing our revenue; our ability to control our costs, including realizing benefits from our resource optimization efforts, cost reduction initiatives and fleet replacement programs; costs associated with any modification or termination of our aircraft orders; our ability to utilize our net operating losses; our ability to attract and retain customers; potential reputational or other impact from adverse events in our operations; demand for transportation in the markets in which we operate; an outbreak of a disease that affects travel demand or travel behavior; demand for travel and the impact that global

economic and political conditions have on customer travel patterns; excessive taxation and the inability to offset future taxable income; general economic conditions (including interest rates, foreign currency exchange rates, investment or credit market conditions, crude oil prices, costs of aircraft fuel and energy refining capacity in relevant markets); economic and political instability and other risks of doing business globally; our ability to cost-effectively hedge against increases in the price of aircraft fuel if we decide to do so; any potential realized or unrealized gains or losses related to fuel or currency hedging programs; the effects of any hostilities, act of war or terrorist attack; the ability of other air carriers with whom we have alliances or partnerships to provide the services contemplated by the respective arrangements with such carriers; the effects of any technology failures or cybersecurity breaches; disruptions to our regional network; the costs and availability of aviation and other insurance; industry consolidation or changes in airline alliances; the success of our investments in airlines in other parts of the world; competitive pressures on pricing and on demand; our capacity decisions and the capacity decisions of our competitors; U.S. or foreign governmental legislation, regulation and other actions (including Open Skies agreements and environmental regulations); the impact of regulatory, investigative and legal proceedings and legal compliance risks; the impact of any management changes; labor costs; our ability to maintain satisfactory labor relations and the results of any collective bargaining agreement process with our union groups; any disruptions to operations due to any potential actions by our labor groups; weather conditions; and other risks and uncertainties, including those set forth in the sections entitled "Risk Factors" in this prospectus, in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, which are incorporated by re

#### THE COMPANY

United Continental Holdings, Inc. ("UAL") is a holding company, and its principal, wholly-owned subsidiary is United Airlines, Inc. ("United"), which is a commercial airline.

Each of UAL and United is a Delaware corporation. The principal executive offices of UAL and United are located at 233 S. Wacker Drive, Chicago, Illinois 60606, telephone (872) 825-4000.

UAL's website is www.unitedcontinentalholdings.com, and United's website is www.united.com. The information contained on or connected to these websites is not incorporated by reference into this prospectus and should not be considered part of this prospectus.

#### USE OF PROCEEDS

Unless otherwise indicated in an accompanying prospectus supplement, we intend to use the proceeds from the sale of the securities to finance or refinance aircraft or for general corporate purposes, which may include repayment of indebtedness, the funding of a portion of our pension liabilities and our working capital requirements.

## RATIOS OF EARNINGS TO FIXED CHARGES

The following table sets forth UAL's consolidated ratio of earnings to fixed charges for the periods indicated:

	Nine Months					
	Ended	Year Ended December 31.				
	September 30,					
	2017	2016	2015	2014	2013	2012
Ratio of earnings to fixed charges(1)	3.27x	3.74x	3.93x	1.66x	1.31x	(a)

Earnings were inadequate to cover fixed charges by \$756 million for the year ended December 31, 2012.

The following table sets forth United's consolidated ratio of earnings to fixed charges for the periods indicated:

	Nine Months Ended		Year End	ed Decembe	er 31,	L <b>,</b>	
	September 30, 2017	2016	2015	2014	2013	2012	
Ratio of earnings to fixed charges(1)	3.27x	3.75x	3.93x	1.65x	1.37x	(b)	

(b) Earnings were inadequate to cover fixed charges by \$689 million for the year ended December 31, 2012.

(1) For purposes of calculating this ratio, earnings consist of income (loss) before income taxes, plus (a) fixed charges, distributed earnings of affiliates in which UAL/United has a minority equity interest and amortization of previously capitalized interest, less (b) capitalized interest and the noncontrolling interest in earnings of affiliates in which UAL/United has a minority equity interest. Fixed charges consist of interest expense and the portion of rental expense representative of interest expense, and the amount amortized for debt discount, premium and debt issuance expense.

### WHERE YOU CAN FIND MORE INFORMATION

UAL and United file annual, quarterly and current reports and other information, and UAL files proxy statements with the SEC under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). You may read and copy this information at the Public Reference Room of the SEC, 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330.

The SEC also maintains an internet website that contains reports, proxy statements and other information about issuers, like us, who file reports electronically with the SEC. The address of that site is <a href="http://www.sec.gov">http://www.sec.gov</a>.

We have filed with the SEC a registration statement on Form S-3, which registers the securities that we may offer under this prospectus. The registration statement, including the exhibits and schedules thereto, contains additional relevant information about us and the securities offered.

### INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus, except for any information that is superseded by subsequent incorporated documents or by information that is included directly in this prospectus or any prospectus supplement.

This prospectus incorporates by reference the documents listed below that we previously have filed with the SEC (excluding any information that has been "furnished" but not "filed" for purposes of the Exchange Act) and that are not delivered with this prospectus. They contain important information about us and our financial condition.

Combined Filings by UAL and United	Date Filed
Annual Report on Form 10-K for the year ended December 31, 2016 (including those portions of UAL's Definitive Proxy	
Statement on Schedule 14A filed with the SEC on April 21, 2017 that are specifically incorporated by reference into such	
Annual Report on Form 10-K)	February 23, 2017
Quarterly Report on Form 10-Q for the quarter ended March 31, 2017	April 18, 2017
Quarterly Report on Form 10-Q for the quarter ended June 30, 2017	<u>July 19, 2017</u>
Quarterly Report on Form 10-Q for the quarter ended September 30, 2017	October 19, 2017
Current Report on Form 8-K	January 26, 2017
Current Report on Form 8-K	January 27, 2017
Current Report on Form 8-K	April 3, 2017
Current Report on Form 8-K	April 21, 2017
Current Report on Form 8-K	September 29, 2017
Current Report on Form 8-K	October 4, 2017

Filings by UAL	Date Filed
Registration Statement on Form 8-A, description of UAL's Common Stock, par	September 30, 2010, including any amendments or reports filed to
value \$0.01 per share	update such description
Current Report on Form 8-K	<u>February 24, 2017</u>
Current Report on Form 8-K	May 30, 2017

 Filings by United
 Date Filed

 Current Report on Form 8-K
 November 6, 2017

 Current Report on Form 8-K
 November 13, 2017

The SEC file number is 1-6033 for UAL and 1-10323 for United.

We incorporate by reference additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information that has been "furnished" but not "filed" for purposes of the Exchange Act) between the date of this prospectus and the termination of the offering of securities under this prospectus. These documents include our periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as our proxy statements.

You may obtain any of these incorporated documents from us without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference in such document. You may obtain documents incorporated by reference in this prospectus by requesting them from us in writing or by telephone at the following address:

United Continental Holdings, Inc.
United Airlines, Inc.
233 S. Wacker Drive
Chicago, Illinois 60606
(872) 825-4000
Attention: Secretary

### LEGAL MATTERS

Sidley Austin LLP, Chicago, Illinois will pass upon the validity of the securities being offered by this prospectus for us. Unless otherwise indicated in the applicable prospectus supplement, our counsel, Hughes Hubbard & Reed LLP, New York, New York, will pass upon the validity of the pass through certificates being offered by such prospectus supplement. The legality of the securities offered hereby and certain other matters for any underwriters, dealers or agents will be passed upon by counsel as may be specified in the applicable prospectus supplement.

#### EXPERTS

The consolidated financial statements of UAL appearing in UAL's Annual Report on Form 10-K for the year ended December 31, 2016 (including the financial statement schedule appearing therein) and the effectiveness of UAL's internal control over financial reporting as of December 31, 2016 have been audited by Ernst & Young LLP, an independent registered public accounting firm, as set forth in their reports thereon, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of United appearing in United's Annual Report on Form 10-K for the year ended December 31, 2016 (including the financial statement schedule appearing therein), have been audited by Ernst & Young LLP, an independent registered public accounting firm, as set forth in their report thereon, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

# UNITED 🔉