

Aviation Asset Management Inc

Equipment Asset Management and Financial Appraisal Services

Accredited Senior Appraisers

Daniel H. Rausch, ASA
Gary A. Webster, ASA



Monarch Professional Centre



An Appraisal of One 1999 Hawker 800XP Aircraft Serial Number 258418 Registration Number N516TH

As of March 21, 2016

Prepared For

CGM Capital



Prepared By

Aviation Asset Management Inc

March 23, 2016



Index

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[Redacted]

March 23, 2016

CMG Capital
C/O Shawn Chemtov
[Redacted]

Dear Mr. Chemtov,

In response to your request, Aviation Asset Management, Inc. (AAMI) is pleased to provide a Full Appraisal and our opinion of the Current Fair Market Value (CFMV) of one 1999 Hawker 800XP aircraft, S/N 258418, Registration N516TH registered to South Aviation Inc, [Redacted].

This appraisal is based on information provided by L&L International, along with publicly available data as of March 21, 2016. No consideration has been given to any liens or encumbrances which may be held against the asset appraised. No investigation of legal fee or title to the property has been made and the claim to the property is assumed to be valid. No additional values or appraisals have been made regarding such intangibles as patents, rights to manufacture, trademarks, goodwill, customer lists, etc.

This appraisal has been developed and is being submitted in conformance with the Uniform Standards of Professional Appraisal Practice (USPAP), as promulgated by the Appraisal Standards Board of the American Society of Appraisers.



Aviation Asset Management Inc

Aviation Asset Management Inc. is not a manufacturer or engaged in the sale or distribution of the aircraft that comprises this appraisal. AAMI makes no representations or warranties, expressed or implied, with respect to the merchantability or fitness for a particular purpose of the aircraft.

This appraisal represents the opinion of AAMI, as an independent and disinterested party to the transaction as well as the known parties thereto. It is not given for or as an inducement for any financial transaction and, further is prepared for the exclusive use of CMG Capital, our client, and shall not be provided to other parties without the consent of CMG Capital.

It is assumed that the Current Fair Market Value stated in this appraisal is to be obtained in an arms-length transaction between an informed and willing buyer and an informed and willing seller without undue pressure on either the buyer or the seller.

Sincerely,
Aviation Asset Management, Inc.

Daniel H Rausch

Daniel H. Rausch, President
Accredited Senior Appraiser
America Society of Appraisers
Certified Appraiser
International Society of Transport
Aircraft Trading

Appraisal Report Options

There are two USPAP-approved appraisal report options used in presenting appraisal data:

1. Appraisal Report.
2. Restricted Appraisal Report.

The Restricted Appraisal Report is limited in information and can only be used when the report is to be used by the client and will not be relied upon by anyone else. The essential difference among the two report options is in the content and level of information provided.

This Appraisal Report was prepared in accordance with USPAP Standards Rule 2-2(a).

This is a Full Appraisal Report, which contains sufficient information to explain the appraisal process and includes a physical inspection or on-site audit of the aircraft, but not the records which were not available during the physical inspection. The purpose of this appraisal is to determine the Current Fair Market Value (CFMV) of one Hawker 800XP aircraft. The use of this appraisal is for valuation of the aircraft for support of financing. Our client is CMG Capital and an intended user of this report is L&L International Ltd.. All data gathered in support of our CFMV opinion used in the compilation of this appraisal is available in our workfile for your inspection for a period of five years.

APPROACHES TO VALUE

There are three recognized approaches utilized to determine value which may be used in appraising, described briefly as follows:

COST APPROACH: This approach begins with the determination of the current cost to reproduce the asset (Reproduction Cost New) or replace the utility (Replacement Cost New) of the subject property as of the valuation date. From the more appropriate of these two costs all forms of depreciation, physical deterioration, functional and economic obsolescence are deducted resulting in a value estimate by the *Cost Approach*. This approach is not widely used in aircraft appraisals.

INCOME APPROACH: In this approach, the future income stream, associated with the item is first estimated. From this potential income, all expenses involved in the exchange or overhaul of the item is deducted yielding net income which is the money an investor could expect to receive from the item. This data is then processed into value either by means of a capitalization rate embodying consideration of capital cost, remaining economic life and degree of risk involved, or by means of a discounted cash flow analysis over an appropriate economic life.

The *Income Approach* is typically not used in the aerospace industry. It is very difficult to separate and allocate the portion of the operating income attributable to specific aircraft. Consequently it is not used in this analysis.

SALES COMPARISON APPROACH: In this approach, sales of comparable parts or equipment are analyzed. If detailed information is available, the individual sales are adjusted for various aspects of similarity to the subject. The resultant adjusted sales prices are correlated and a value estimate for the subject is derived from them.

The *Sales Comparison Approach* is an appropriate method to estimate the value of the subject aircraft by using appropriate comparable sales, however all details concerning the status and condition of the comparables must be known. If sufficient details are not known about the comparables, then using references sources which list average sales values during a given time period, would be more appropriate.

In the analysis of the subject aircraft, the *Sales Comparison Approach*, using reference sources of sales prices and current market information was utilized.

Value Considerations

AAMI follows the traditional industry standards for market evaluations, which are based on half-life (time) of life-limited parts and time between overhaul (TBO) on the aircraft high-cost maintenance items. The following parameters and assumptions are utilized for purposes of standardized comparisons; namely that the aircraft has half-life remaining on the time-controlled components to its next scheduled major overhaul or shop visit; is under an approved maintenance program and in compliance with all Airworthiness Directives (ADs), and applicable Service Bulletins (SBs). It has traceability of life-limited and time-controlled parts; all repairs and modifications accomplished are approved and signed off with full documentation; is in standard configuration; has no damage history, and is sold for a cash transaction.

This, moreover, assumes the aircraft is equipped with standard part/components and options of the types and models generally accepted and utilized in the industry, and that it is one of the standard or widely used configurations utilized in domestic or international operations in private or commercial operations. Additional factors, including date of delivery, total and ratio of hours to cycles and modifications, are considered when making adjustments for a specific aircraft.

Changes in the aforementioned parameters, assumptions and standards can increase or decrease the market price.

Conversely, market values, as well as actual appraised values are detrimentally affected on aircraft that have been out of service for prolonged periods or not currently certified as airworthy. Deterioration in value will also apply to aircraft, which have disproportionately high cycle-to-hour ratios relative to the average achieved by the industry in operating the specific types of aircraft, or to aircraft that have a damage history. No accident, incident, or damage history was reported to us and none was found in a search of the FAA and NTSB databases for this aircraft.

Forced liquidation and bankruptcy sales can cause prices to fall as much as 30% or more below current market prices during certain market trends. Sales by non-operating entities that do not include the benefits of in-house financing usually bring lower prices on a cash or cash equivalent basis.

Additionally, market values are also based on knowledge of asking, offered and transaction prices similar, competitive, and alternative equipment.

The analysis contained in this report, although acknowledging immediate effects, excludes extremely short-term market stimulants and depressants from both present base values and forecasted values, when it is determined that they are transient in nature. It is expected that short-term situations tend only to affect availability temporarily, rather than cause consequential price changes. This is due to the long-term economic consequences of price considerations outweighing the short-term consequences of reduced or high availability caused by these temporary problems. The pressures on the manufacturers to overcome major problems promptly as they arise lessen the chance of the values of their product lines being affected detrimentally in the long-term.

Conversely, the implementation requirements of high cost Airworthiness Directives, mandatory Service Bulletins, and high time/cycle special maintenance requirements, are treated as long term impact items for applicable engines and aircraft.

There were 475 total Hawker 800s built between 1995-2006 They are no longer in production. There are 469 of these aircraft remaining, 307 of which are operated in North America, and 160 in other regions. Total time ranges from 68 hours to 12,958 hours. There are 54 of these aircraft for sale and none offered for lease. Average asking price is \$2.3M and the average days on the market is 314. The average total time on the aircraft that are currently listed for sale is 5,586 hours. In 2016 so far there have been 22 transactions on this model. In 2015 there were 108 transactions.

Value Calculations

A. Current Fair Market Value (CFMV) (Half-life)

Current Fair Market Value (Half-Life) is a base-line value that assumes its physical condition is average for an aircraft of its type and age, and its maintenance time status is at mid-life, mid-time (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be). It also assumes that the aircraft is equipped with the manufacturer's standard compliment of equipment. It is the starting point for making maintenance and other adjustments to arrive at the adjusted CFMV.

When reliable actual sales data is available, it is preferable to use those actual sales values of recent sales for comparison purposes to establish a Base Value. We were able to ascertain current asking prices of similar aircraft currently on the market. We also subscribe to aircraft pricing services that report values based on actual sales comparables. In addition, we had a discussion with a number of owners, previous owners, and brokers concerning recent offerings and transactions. We considered all values in addition to a broad knowledge about the current executive aviation marketplace. AAMI considered numerous reference sources for the Half-Life CFMV starting point. We have used a mid-life CFMV of 2,200,000. This is the point from which we make our maintenance adjustments.

A. Airframe Time:

Adjustments for Airframe Total Time are based on the fleet average of all of the 1999 Hawker 800XP aircraft. According to the Blue Book, the average airframe time for a 1999 Hawker 800XP is 410 hours per year. N516TH has an average of 277 hours per year 68% of the average.

B. Airframe Maintenance:

The airframe major check is the 48-month airframe check at an average cost of \$75,000.

C. APU

There is an adjustment of \$15.50 per hour for hours more or less than half life (5,000 hours).

D. Engines:

The engines are maintained in accordance with the manufacturer's maintenance program. The condition of the engines is a very important element in determining the value of the aircraft. There is no Adjustment for Time Remaining on the Engine Refurbishment on the engines as the engines are on a Maintenance Service Plan (MSP Gold) and are considered at Half Life

E. Current Fair Market Value (Adjusted):

Is the Appraiser's opinion of the most likely trading price that may be generated for a property under the market circumstances that are perceived to exist at the time in question.

The term assumes that the property 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. It is synonymous with Market Value, and likewise Current Fair Market Value is synonymous with Current Market Value because the criteria typically used in those documents that use the term "Fair" reflect the same criteria set forth in the above definition of Market Value. By itself, the term "Fair" does not bring any additional qualifications to the appraised value, but it is a term sometimes used in leases, sales contracts, tax regulations and legal documents, and is sometimes accompanied with a specific definition to which the contracting parties have agreed.

1999 Hawker 800XP
Serial Number 258418, N516TH
Value Summary as of March 22, 2016

Current Half-Life Market Value of a (Base 1999) HAWKER 800XP	\$2,200,000
Adjustment for Fresh New Paint & Interior, March 2016 (interior assumes complete re-rag, refurbished ceiling and sidewall panels, and new carpet.	+ 150,000
CURRENT HALF-LIFE VALUE of this 1999 HAWKER 800XP Serial Number 258418, N516TH	<u>\$2,350,000</u>
Adjustment for 32% fewer hours than average. This is a low-time aircraft	+ 82,100
Adjustment for Fresh 12, 24 and 48-Month inspections as of March 2016	+ 85,000
Adjustment for the 21 months more than half life remaining on the 144-Month Landing Gear Restoration at \$194,000 per restoration	+ 28,287
No Adjustment for Time Remaining on the Engine Refurbishment on Engine #1 as the engine is on a MSP Gold maintenance plan and is considered at Half Life	+/- 0
No Adjustment for Time Remaining on the Engine Refurbishment on Engine #2 as the engine is on a MSP Gold maintenance plan and is considered at Half Life	+/- 0
Adjustment for 1,329 hours more than half life (5,000 hours) remaining on the APU overhaul @ \$175,000 per O/H or \$15.50 per hour	+ 20,600
CURRENT FAIR MARKET VALUE of 1999 Hawker 800XP, Serial Number 258418, N516TH	<u>\$2,565,987</u>

BASE AVG = Full complement of electronics, dual systems, color radar, dual air data, HF com, CVR, RVSM, Eng MSP, Maintenance and Inspections Half-Life unless specified, Paint and interior rated 8+, ADs SBs complied with, Avg AFTT, No Damage History, Complete Logbooks since new

Specifications

As of December 8, 2015

1999 HAWKER 800 XP
S/N 258418

Airframe: 4,702.6 hrs.2,665 Landings

Engines: Garrett TFE731-5BR-1H

RH: P107377	TT 4,702.6	TC 2,665
LH: P107376	TT 4,702.6	TC 2,665

ON MSP GOLD

APU: P-461 GRT GTCP36-150W3,300 TT 3,671.0

Avionics: Honeywell SPZ 8000 IFCS/Primus II
Dual RCZ 850 Comms with 8.33 spacing

Dual RNZ 850Navs

Dual DF 850 ADF

Dual DM 850 DME

Dual KHF 950 HF

Honeywell LSZ-850 Stormscope

Honeywell SPZ 8000 Flight Director

Dual Honeywell FMZ-2000 w 5.2 software and & dual GPS.

Honeywell Primus 880

Dual Honeywell FZ-800 FGC

Five tube EFIS

Features: Exxon Mobil previous owner

TCAS 2000-II with change 7

Teledyne angle of attack

Allied Signal Mark VII EGPWS

No damage history

Flight Display Airshow

On CAMP

Interior: New 8 place interior. Forward club and aft 3 place divan.

Exterior: New 850 XP paint scheme.

**Physical Inspection
1999 Hawker 800XP**

Serial Number 258418 Registration N516TH

The aircraft was inspected at the Ft Lauderdale International airport on March 23, 2016 at Jetscapes. It is currently undergoing installation of a new interior. I did not observe the new seats or other interior pieces, so I can only assume it is getting the typical re-rag on the seats, refurbished sidewalls and ceiling panels and new carpet. They just completed a complete fresh paint job in the 850XP paint scheme. The fuselage is in good condition with no skin patches or dents. The passenger windows and pilot's windows are also in good condition.

There are no oil or Skydrol leaks evident, as one would expect following a fresh paint job. No fuel leaks are evident, which can be a problem on these aircraft. They also just completed the 12, 24, and 48-Month airframe maintenance checks and brought all ADs and SBs up to date. The repairs will continue into next week.

The aircraft has been operating under FAA FAR Part 91 rules, and a non-commercial maintenance program. In addition, routine maintenance, minor issues are being corrected as they are found. This aircraft was previously operated under the FAR 135 regulations.

The records for the aircraft were viewed and no problems were apparent. There were numerous large airframe log books plus engine and APU logs. All Airworthiness Directives and all Service Bulletins have been complied with. The information in these log books stops after March 2014, but the records are being kept in a separate large binder and John Taylor is in the process of cleaning up the record books and putting all of the service items in the binders.

There is no history of damage. Both engines are on a pre-paid maintenance service program (MSP) called MSP Gold which covers all routine maintenance. The engines are operated "on condition" which means they fly until there is something needing routine maintenance or repair, then the item is repaired. The airframe is on a computerized aircraft maintenance system (CAMS) which tracks all maintenance items.

The Airworthiness Certificate and Registration certificates were inaccessible due to work being accomplished on the interior.

Pictures of the aircraft follow:



N516TH at Ft Lauderdale, FL



Ceiling Panel Being Installed



Nose Gear



Nose



RH Forward Fuselage



RH Wing Fairing



Right Hand Wing



LH Forward Fuselage

Right Side



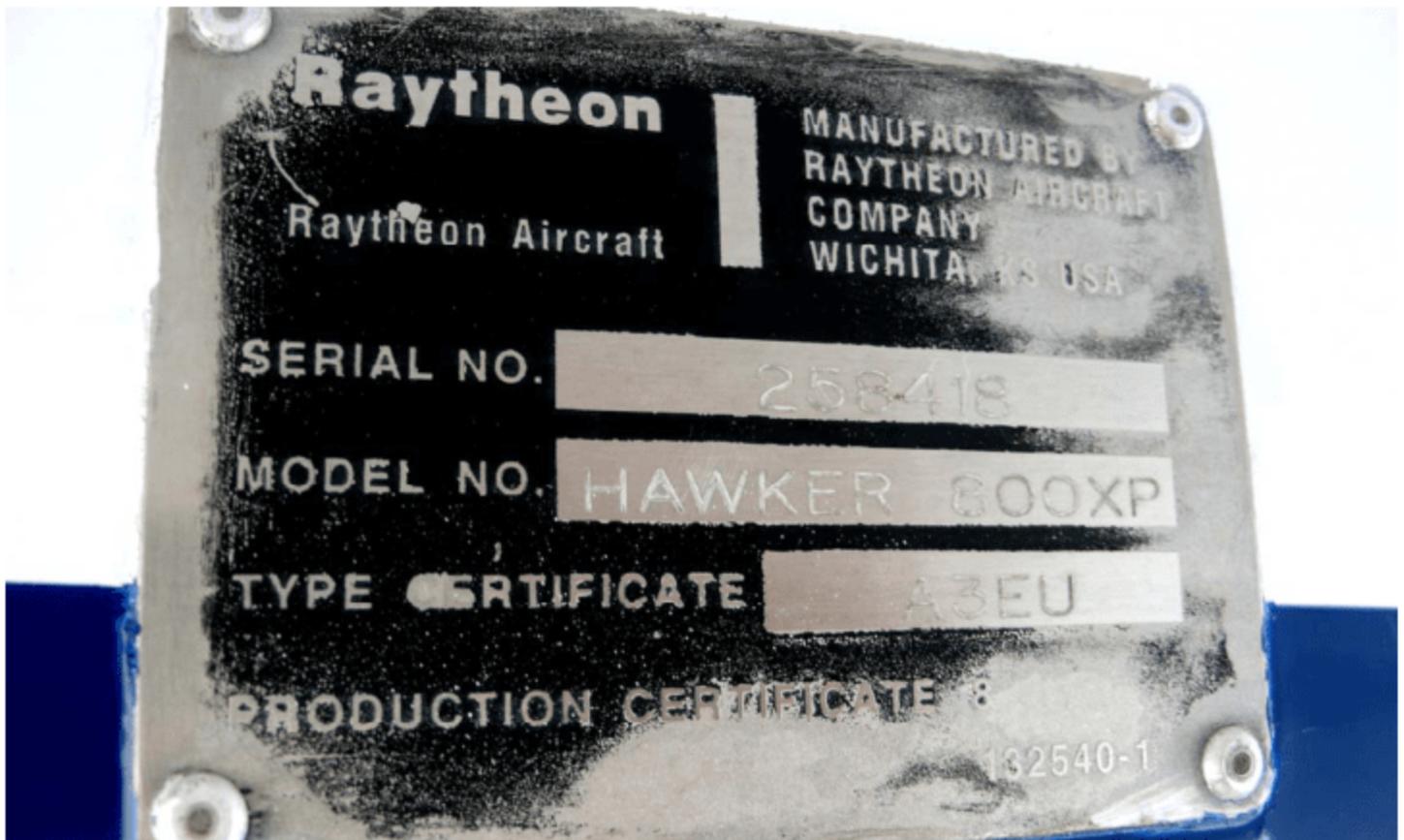
Right Main Gear



Rear View



Tail Section



Aircraft Data Plate



Left Wing



Interior Removed for Refurbishment



Cockpit Overhead



Instrument Panel

Hawker 800XP



INTRODUCTION

The Hawker 800 is a derivative of the de Havilland 125. The British Aerospace Board sanctioned the program to improve the, then current and strongly selling, BAe 125 700 series in April 1981. By May 1983 the new aircraft was ready for its first test flight.

The 800 series has a number of modifications and changes over the 700; most noticeable was the redesigned cockpit windscreen. Accompanying this are a modified rear fuselage fairing as well as a glass cockpit and uprated (from 3,700 to 4,300 lb) Garrett TFE731-5R-1H engines. British Aerospace also improved the wing by incorporating new outer wing sections. This helped to reduce drag and improve aerodynamic efficiency.

The launch of the Raytheon Hawker 800XP extended performance mid-size business jet was announced in 1995. The aircraft is in service both as a business / VIP jet and also in special mission versions. The XP features uprated engine, enhanced aerodynamics, increased weight and system upgrades.

In December 2006, Raytheon announced the sale of Raytheon Aircraft to GS Capital Partners. The new company is called Hawker Beechcraft Inc and the sale was completed in March 2007.

The Hawker 800XP business jet is derived from the design of the UK-built de Havilland / Hawker Siddely and British Aerospace 125, first built in 1962, which evolved into the Series 400 to 800 produced up to the early 1990s. Raytheon purchased the Series 800 program in 1993 and the aircraft took the name Hawker 800.

There were 475 total Hawker 800s built between 1995-2006 They are no longer in production.

In November 2005, Raytheon introduced the Hawker 850XP, a successor to the Hawker 800XPi. The aircraft has composite, outwardly canted winglets, a range increased by 4% (an additional 185km) and 8% improvement in time to climb. The 850XP has the same Rockwell Collins Pro Line 21 avionics Airshow 21 cabin management system as the 800XPi. The Hawker 850XP received certification in March 2006 and is the current production model, superseding the 800XP.

The aircraft is powered by two rear-mounted Honeywell TFE731-5BR-1H turbofan engines each rated at 20.73kN. The engines, fitted with Dee Howard thrust reversers, are mounted in Northrop Grumman pods on either side of the rear fuselage. The engines are fitted with BCF engine fire extinguishers and engine bleed air ice protection.

SPECIFICATIONS

TYPE:	mid-size business jet	
POWERPLANTS:	Two rear-mounted Honeywell TFE731-5BR-1H turbofan engines each rated at 20.73kN.	
FUEL CAPACITY:	1,273 gal	
ACCOMODATION:	Flight Crew:	2
	Passengers:	between eight to 15 passengers
	Baggage Compartment:	29.6 cu ft
DIMENSIONS, EXTERNAL:	Wing Span:	15.66m (51ft 3in)
	Length Overall:	15.59m (51ft 1in)
	Maximum Height:	5.36m (17ft 5in)
	Fuselage Diameter:	1.93m (6 ft 3 in)
	Wing Area:	34.75 sq m (374 sq ft)

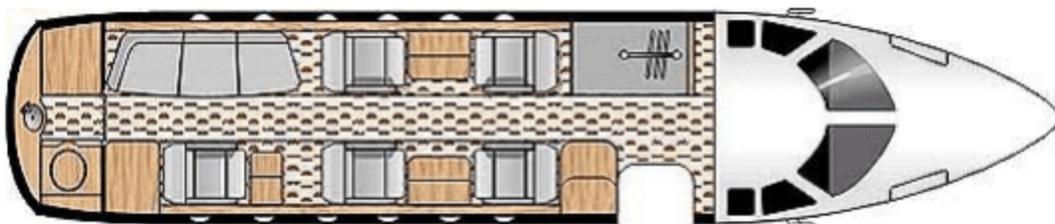
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DIMENSIONS, INTERNAL: Total Cabin Length: 6.50m (21 ft 3 in)
Maximum Width: 1.83m (6 ft 0 in)
Maximum Height: 1.75m (5 ft 7 in)
Cabin Volume: 17.1 cu m (604 cu ft)
Baggage Volume: 2.46 cu m

WEIGHTS: Empty Operating Weight: 7,303 kg (16,100 lb)
MTOW: 12,701 kg (28,000 lb)
Max Ramp Weight: 12,755 kg (28,120 lb)
Max Zero-Fuel Weight: 8,369 kg (18,450 lb)
Max Landing Weight: 10,591 kg (23,350 lb)
Max Payload: 989 kg (2,180 lb)

PERFORMANCE: Maximum Speed: 845km/h (456 kt)
Service Ceiling: 13,100m
Take-Off Field Length: 1,640m (5,380 ft)
Landing Run From 15m: 1,372m (4,182 ft)
Range: 4,222km (2,280 nm)

PRODUCTION: Since it's introduction, there have been just over 470 800XPs built.



Honeywell TFE-731



INTRODUCTION

The TFE731 was based on the core of the TSCP700, which was specifically developed for use as the auxiliary power unit (APU) on the McDonnell Douglas DC-10. The design featured two important factors, low fuel consumption, and low noise profiles which met the newly established U.S. noise abatement regulations.

The first test run of the TFE731 occurred in 1970 at Garrett's plant in Torrance, California. The first production model, the TFE731-2 began rolling off the assembly line in August, 1972, and was used on the Learjet 35/36 and Dassault Falcon 10, both of which entered production in 1973.

The TFE731-3 was developed for use in the Lockheed JetStar re-engining program, and subsequent versions of it have been used on a number of aircraft, including the Learjet 55.

The -5 model was certified in 1982, and a decade later, an engine utilizing the TFE731-5 power section and a TFE731-3 fan was built and designated the TFE731-4, intended to power the Cessna Citation 650 and 750 series aircraft.

The latest TFE731-50R, has 70 improvements to this already robust engine, including improved core and LP spool technologies, new Digital Electronic Engine Control (DEEC) and a complete nacelle and thrust reverser system.

These changes resulted in greater versatility, dramatically improved temperature margins, a better lapse rate than the TFE731-5BR and, depending on altitude condition, up to 8% better SFC.

The TFE731 family of engines has a legacy of proven reliability. The first TFE731 was certified in 1972. Since that time, more than 13,000 engines have been produced, logging an astounding 100 million plus hours of service on more than 30 different aircraft applications.

SPECIFICATIONS

- TYPE: Two-shaft geared turbofan
- FUEL CONSUMPTION: 23.65 mg/Ns (0.835 lb/h/lb)
- COMPRESSOR STAGES: 1 stage fan, 4-stage low pressure axial compressor, 1 stage high pressure centrifugal compressor
- TURBINE STAGES: 1 stage high pressure turbine, 3 stage low pressure turbine
- COMBUSTION CHAMBER: annular reverse flow combustor
- DIMENSIONS & WEIGHTS:
- Max Envelope Diameter: 39.4 in.
Max Envelope Length: 51 in.
Dry Weight: 885 lb
- PERFORMANCE RATINGS:
- T-O Power Rating: 16.46 kN (3,700 lb)
Bypass Ratio: 2.80:1

<u>ENGINE VARIANT</u>	<u>TAKEOFF THRUST</u>	<u>ALTITUDE THRUST</u>	<u>ALTITUDE TSFC*</u>
TFE731-2	3500	755	0.790
TFE731-3	3700	817	0.794
TFE731-4	4080	929	0.771
TFE731-5	4304	955	0.777
TFE731-5B	4750	1050	0.735
TFE731-20	3650	870	0.719
TFE731-40	4250	1010	0.739
TFE731-60	5000	1120	0.679

(*) 40,000ft. max. cruise, .08Mm ISA

ASSUMPTIONS AND STATEMENTS OF LIMITING CONDITIONS

- ✓ The values stated in this report are based on our knowledge of the Aircraft, Engine and Spare Parts. The values stated in this report are based on our knowledge of the Aircraft, Engine and Spare Parts inventory market, current market conditions, and certain definitions and assumptions regarding the inventory condition and status, which is described in this report.
- ✓ The values stated in this report are based on the information supplied by the company that is being appraised. It has been assumed that this information along with any of management's statements relative to the topics discussed concerning the inventory, aircraft, or engines are full and complete representations that accurately depict the company, its inventory and the quality and condition of the market for the products produced and/or distributed. No warranty is given for its accuracy. Every reasonable attempt has been made to verify such information.
- ✓ Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of that party, in any event, only with proper written qualification and only in its entirety.
- ✓ Neither all nor part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of the appraiser.
- ✓ No risk or guarantees have been purchased by the owner of this report.
- ✓ All values stated in this appraisal are the appraisers considered opinions based upon the facts and data set forth in this report.
- ✓ The appraiser, by reason of this appraisal, is not required to give further consultation, testimony, or be in attendance in court with reference to the property in question unless arrangements have been made previously.

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- ✓ Aviation Asset Management, Inc. reserves the right to recall all copies of this report to correct any omissions or errors.
- ✓ No consideration has been given to any liens or encumbrances, which may be held against the assets being appraised.
- ✓ Aviation Asset Management Inc. expects the Lender or any other party, with regard to the subject-appraised inventory to conduct their own due diligence before determining and entering into any loan arrangements and shall not base any loan or borrowing base solely on the opinions of Aviation Asset Management.
- ✓ The maximum liability of Aviation Asset Management Inc for the breach of any obligation in connection with this engagement or the Report, and for any and all damages of any type or nature (whether in contract or in tort, and whether compensatory, consequential or punitive in nature) sustained or claimed by the Company(ies) or any other person or entity in connection with this engagement or the Report, shall be limited to the fee actually received by AAMI under the engagement agreement. In no event or circumstance shall AAMI have any liability to the Company(ies) or any other person or entity in excess of the fee actually paid to and received by AAMI under the engagement agreement.
- ✓ This appraisal is based upon the various types of values as defined in the Definition section of this report.
- ✓ This study and appraisal was accomplished by Aviation Asset Management, Inc. and will be held confidential. An experienced appraiser has prepared the appraisal and the analysis and conclusions are arrived at from many years of experience in the appraisal industry.
- ✓ We reserve the right to include your company name in our client list. AAMI will maintain the confidentiality of all reports, documents, and conversations provided to us for the preparation of this report, subject to any legal proceedings.
- ✓ This appraisal has been prepared in conformity with the Principles of Appraisal Practice and the Code of Ethics of the American Society of Appraisers.

APPRAISERS CERTIFICATION

We certify that to the best of our knowledge and belief:

- ✓ The statements of fact contained in this report are true and correct.
- ✓ The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional, opinions, and conclusions.
- ✓ I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- ✓ I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- ✓ My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- ✓ My compensation for completing this assignment is not contingent upon the development or reporting of predetermined value or direction of value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- ✓ My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- ✓ The signatories on this report all provided significant assistance in the compilation of this report.
- ✓ The American Society of Appraisers has a mandatory recertification program for all of its Senior members. All Accredited Senior Appraisers (ASA) signing this report are in compliance with that program.
- ✓ I / We have not previously appraised the property that is the subject of this assignment, within the three year period immediately preceding acceptance of this appraisal assignment.
- ✓ The aircraft was inspected by Daniel Rausch for this appraisal.

Daniel H. Rausch

Accredited Senior Appraiser

Business/General Aviation Outlook

2016



Prepared By

Aviation Asset Management Inc.

Aviation Outlook

The following information is taken from numerous industry sources, including General Aviation Manufacturers Association (GAMA), Honeywell Aerospace Forecasts, Boeing, Embraer, Airbus Industries, Cessna Aircraft Corporation, Federal Aviation Administration, IATA, ATA, and the National Business Aircraft Association (NBAA).

Inventories of pre-owned business jets for sale are climbing again, and the number of aircraft for sale in the six- to 10-year age range is at an all-time high. The inventory of business jets for sale inched up a percentage point in January, reaching 11 percent of the installed base of aircraft. Young aircraft for sale, those five years or younger, went up 2 percent in January and 1 percent over 2015. While this is still 63 percent less than peak, the inventory of slightly older aircraft for sale, those between six and 10 years old, jumped 19 percent over 2015 and is now above the 2009 absolute peak. In the six- to 10-year range, the number of large-cabin aircraft for sale has reached 12 percent of the installed base.

The General Aviation Manufacturers Association (GAMA) announced that total worldwide general aviation (GA) airplane shipments fell 4.6 percent, from 2,376 units in 2014 to 2,267 units in 2015. Billings for GA airplanes also dropped to \$20.9 billion, down 4 percent from \$21.8 billion in 2014.

Business Jet shipments were relatively flat, up 1.6 percent, from 644 units in 2014 to 654 units in 2015. Piston-engine airplanes fell for the first time since 2010, down 6.5 percent, from 1,129 units in 2014 to 1,056 units in 2015. Turboprop airplane shipments also declined, from 603 units in 2014 to 557 units in 2015, a 7.6 percent drop.

2015 AIRCRAFT SHIPMENTS OF AIRPLANES MANUFACTURED WORLDWIDE

	Manufactured Worldwide			Manufactured in U.S. Only*		
	2014	2015	Change	2014	2015	Change
Pistons	1,129	1,056	-6.5%	788	783	-6.4%
Turboprops	603	557	-7.6%	468	420	-18.6%
Business Jets	722	718	-0.6%	375	389	+3.7%
Total Shipments	2,454	2,331	-5.0%	1,631	1,592	-2.4%

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Bombardier delivered 199 business jets last year and expects shipments to drop by nearly a quarter this year, to about 150 business aircraft. Bombardier's business aircraft deliveries in 2015 comprised 73 Global 5000/6000s, 68 Challenger 300/350s, 25 Challenger 605/650s, one Challenger 850 and 32 Learjet 70/75s. Gross business jet sales also fell to 119 aircraft, from 181 in 2014. After accounting for Learjet 85 cancellations and restructuring certain customer agreements in the third quarter, net sales were -21, compared with 129 in the previous year.

Dassault Falcon sales declined by 72 percent in 2015 compared with 2014. In 2015, Dassault reported 45 gross Falcon sales, but a NetJets cancellation of 20 Falcon 2000s brought the net tally to just 25 aircraft. A disappointing 55 new Falcons were delivered in 2015 versus an expected 65, which would have put 2015 on par with 2014. The backlog included 91 Falcons, compared to 121 Falcons one year before.

Embraer delivered a total of 221 business jets and airliners in 2015, marking its highest number of aircraft shipments in five years. Deliveries were up by 13 aircraft year-over-year, with both its executive aviation and commercial aviation units making gains.

The Brazilian manufacturer handed over 120 business jets in 2015, the most since 2010, when it shipped 144. Deliveries were up by four aircraft over the 116 delivered in 2014. The 2015 shipments included 82 Phenoms and 38 of the larger jets, which include the Legacy 450, 500 and 600 and Lineage 1000. In 2014, Phenoms accounted for 92 of the deliveries and larger jets the remaining 24 deliveries.

Business And General Aviation Airplane Shipment Report 2015 versus 2014			
Manufacturer	Model	2015	2014
Airbus	ACJ (A318, A319, A320, A330)	4	5
Air Tractor	AT-401B & 402A & B	12	21
	AT-502A & B	36	62
	AT-504	3	3
	AT-602	18	14
	AT-802	8	10
	AT-802A/F/AF	41	36

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Manufacturer	Model	2015	2014
American Champion	7EC Champ	1	1
	7ECA Aurora	1	2
	7GCAA Adventurer	0	0
	7GCBC Citabria Explorer	0	3
	8GCBC Scout	6	7
	8KCAB Super Decathlon	6	14
	8KCAB Extreme Decathlon	5	3
Boeing	BBJ	4	3
	BBJ2	1	2
	BBJ3	1	0
	B777-300Er	1	1
	B787-8	2	4
	B787-9	2	0
Bombardier	Learjet 70/75	32	33
	Learjet 60XR	0	1
	Challenger 300/350	68	54
	Challenger 604/605	25	36
	Global 5000/6000	73	80
	CL850/870/890	1	0
Cirrus Design Corp.	Cirrus SR20	31	31
	Cirrus SR22	128	117
	Cirrus SR22T	142	160
CubCrafters	CC11 Sport Cub S2	0	0
	CC11 Carbon Cub SS	47	53
	CC18 Top Cub	5	7
Daher	TBM 900	55	51
Dassault Falcon Jet	Falcon 900LX/2000LXS/7X	55	66
Diamond Aircraft	HK36	1	0
	DA20-C1	22	16
	DA40	75	136
	DA42 Twin Star	44	50
	DA62	2	0
Embraer	Phenom 100/300	82	54
	Legacy 500/600/650	35	8
	Lineage 1000	31	2
	Shuttles (ERJs and E-Jets)	0	0
Extra Aircraft	AE300	27	31
Flight Design GmbH	ASTM CT Series	59	88
Gulfstream	G150/280	34	33
	G450//550/650	120	117
Honda Aircraft Co.	HA-420 HondaJet	2	0

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Manufacturer	Model	2015	2014
Mahindra Aerospace	Airvan 8	14	17
Maule Air	MX-7-180B	12	1
	M-9-235	1	0
Mooney Aircraft	M20R Ovation	3	0
	M20TN Acclaim	8	1
One Aviation Corp.	Eclipse 550	7	12
Pacific Aerospace	PAC 750XL	5	4
Piaggio	Avanti / II	3	2
Pilatus	PC-6	4	10
	PC-12	70	66
Piper	PA-28-161 Warrior III	20	3
	PA-28-181 Archer III	25	45
	PA-28R-201 Arrow	5	8
	PA-34-220T Seneca V	8	10
	PA-44-180 Seminole	17	22
	PA-46-350P Malibu Mirage	34	37
	PA-46-350T Matrix	2	11
	PA-46-500TP Meridian	27	36
Quest Aircraft	Kodiak 100	32	30
Tecnam Aircraft	ASTM-LSA	102	108
	P2002JF	20	18
	P92JS	4	7
	P2002JR	0	0
	P2008JC	24	36
	P2006T	21	21
	P2010P Twenty Ten	20	0
Textron Aviation			
<u>Beechcraft Corporation</u>	Bonanza G36	23	32
	Baron G58	18	40
	King Air C90GTx	15	21
	King Air 250	28	35
	King Air 350i/ER	74	71
<u>Cessna</u>	CE-172S Skyhawk SP	143	155
	CE-182T Skylane	33	0
	CE-T206H Turbo Stationair	51	43
	CE-240 TTx	44	22
	CE-208 & 208B Caravan	102	94
	CE-510 Citation Mustang	8	8
	CE-525 Citation M2	41	46
	CE-525B Citation CJ3+	22	18
	CE-525C Citation CJ4	33	28
	CE-560 Citation XLS	21	22
	CE-680 & 680A Sovereign	34	28
	CE-750 Citation X+	6	9

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Manufacturer	Model	2015	2014
Thrush Aircraft Inc	S2R-T34	8	10
	S2RHG-T65	0	0
	S2R-T660	7	1
	S2R-G10	0	1
	S2R-H80	14	24
WACO Aircraft Co.	2T-1A-2	6	6
	YMF-5D	4	5
Grand total: Shipments		2,331	2,454

The Business/General Aviation Fleet

Honeywell is forecasting up to 9,200 new business jet deliveries worth \$270 billion from 2015 to 2025, with a 3 to 5 percent reduction over the value noted in the 2014 forecast.

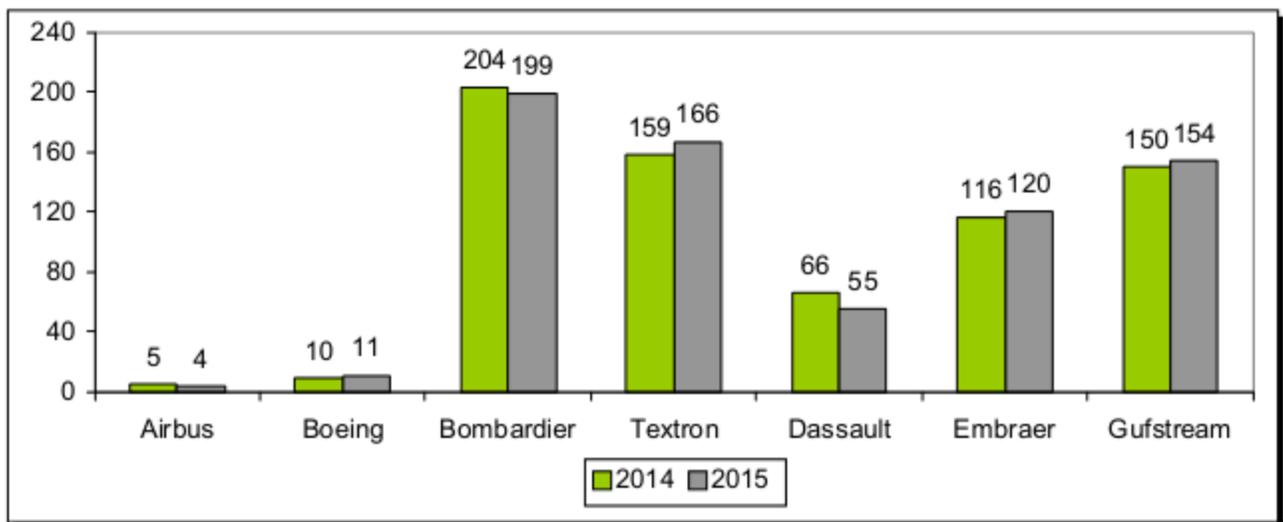
Honeywell forecasts 2014 deliveries of approximately 675 to 725 new jets in 2015, a single-digit percentage growth year over year. The improvement in deliveries expected in 2015 is largely due to new model introductions and an increase in fractional-usage type of aircraft deliveries. 2016 deliveries are projected to be slightly lower reflecting weaker emerging market demand partially offset by deliveries to fractional operators.

Operators surveyed plan to make new jet purchases equivalent to about 22 percent of their fleets over the next five years as replacements or additions to their current fleet. Of the total new business jet purchase plans, 19 percent are intended to occur by the end of 2016, while 17 and 20 percent are scheduled for 2017 and 2018, respectively.

Operators continue to focus on larger-cabin aircraft classes, ranging from super mid-size through ultra long-range and business liner, which are expected to account for more than 80 percent of all expenditures on new business jets in the near term. The longer-range forecast through 2025 projects a 3 percent average annual growth rate despite the relatively flat near-term outlook as new models and improved economic performance contribute to industry growth.

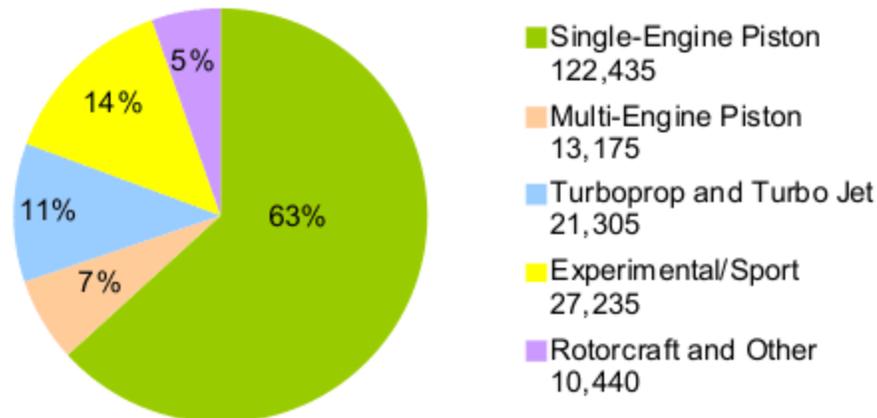
The worldwide business aircraft fleet continued to grow in 2015. There were 35,682 turbine airplanes at the end of 2015 compared to 34,755 airplanes in 2014. The number of active operators is also growing; At the end of 2015, there were 21,339 business airplane operators. After several years of decline, the fractional aircraft fleet has stabilized. In 2015 there were 837 aircraft used in fractional operations, up from 823 in 2014, and the number of fractional owners was 4,369 slight decline from 2014, when there were 4,402 owners.

2014-2015 Business Jet Deliveries



The active general aviation fleet is projected to increase at an average annual rate of 0.4 percent over the 21-year forecast period, growing from an estimated 198,860 in 2014 to 214,260 aircraft by 2035. The more expensive and sophisticated turbine-powered fleet (including rotorcraft) is projected to grow to a total of 45,905 aircraft at an average rate of 2.4 percent a year over the forecast period, with the turbine jet portion increasing at 2.8 percent a year, reaching a total of 20,815 by 2035.

**ACTIVE GENERAL AVIATION AND
AIR TAXI AIRCRAFT FOR 2015**



Business/General Aviation Market Forecast

According to the 2016 Business Aviation Forecast, the world's western produced in-service business fleets will increase from 31,000 aircraft in 2016 to nearly 38,000 aircraft at the end of 2025, a growth rate of 2.3% annually. Additionally, the 10-year demand for maintenance, repair and overhaul (MRO) in the business market is expected to be \$121.8 billion. The 2016 forecast expectations show that the North American market will dominate the world sales and MRO demand for years to come; and will also have a vibrant fleet replacement cycle with nearly 3,400 aircraft retirements and over 8,000 aircraft deliveries.

Other key findings from the 2016 Business Aviation Forecast Summary include:

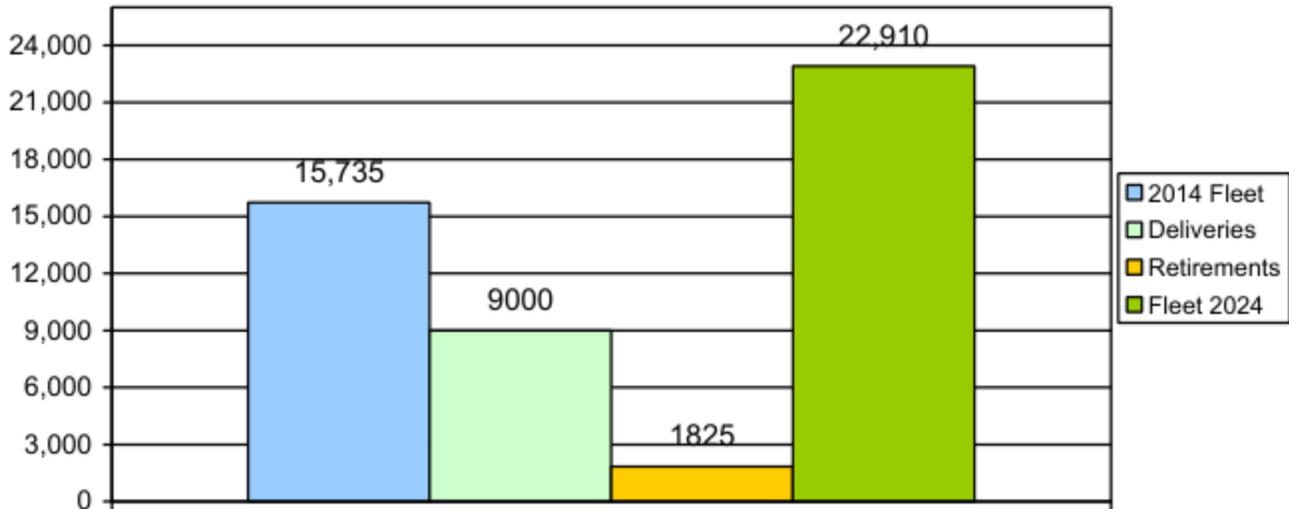
1. Ultra Long Range category jets will grow fleet share the fastest along with Super Mid Size category aircraft growing nearly as fast ending the year 2025 with nearly 3,200 aircraft. Very Light Jets will grow its category share rapidly to over 1,500 aircraft over the next 10 years.
2. China, with a small base fleet, will grow the fastest fleet at 9% and MRO requirements despite economic and political pressures; the largest market, North America, will grow at 2.3% rate.
3. North America's in-service fleet share will remain constant during the forecast period at 63.5% while Western Europe will increase its share to 12.5% of the

world's fleet. Latin America and Africa will lose fleet share, with Eastern Europe and China gaining fleet share.

4. The top five aircraft deliveries are expected to be: King Air 300/350, Pilatus PC-12, Gulfstream G650, Challenger 300/350 and Phenom 300.

Bombardier estimates that 9,000 new business jets worth \$267 billion will be delivered over the next decade. Although the light jet segment is expected to provide the best sellers in terms of numbers, with 3,400 sales forecast, it offers the lowest share of the revenue, totalling \$39 billion, and only a 2.4-percent annual growth rate.

10-Year Business Aircraft Fleet Forecast



The midsize category fares a bit better, with a projected growth rate of 3.8 percent. Conversely, sales in the large-cabin arena are expected to cover 2,500 aircraft that generate \$137 billion in sales, with an expected annual growth rate of 9.6 percent.

Regional analysis suggests that the North American market will continue to lead the way in terms of numbers, with 3,900 new sales, but at a growth rate of only two percent. Europe is expected to generate 1,525 sales, with a growth rate of seven percent. One of the criteria examined by Bombardier in its analysis is regional penetration, measured by how many business jets represent each \$1 trillion of GDP. In the U.S. the figure is 600, while in

Europe it is just 80. This suggests to Bombardier that there is considerable potential in the European market for greater penetration.

Bombardier's analysis sees the slowdown in business aviation in China and Russia as being short-term effects, and that both markets, along with other developing regions such as Latin America, will contribute to the market growth in the longer term. For instance, Bombardier estimates an annual fleet growth rate of 13 percent for China and six percent for Russia/CIS

Embraer's market analysts have revised their 10-year forecast for business jets predicts sales of 9,100 aircraft worldwide worth \$259 billion. This represents a modest annual growth rate of 3 percent, as well as a slight increase in deliveries compared with the previous decade, at 8,190 business jet shipments worth \$198 billion.

Once again the North American market drives the demand with 4,850 units worth \$130 billion, followed by Europe and Africa with 2,100 jets worth \$64 billion; the Middle East and Asia-Pacific with 1,500 aircraft worth \$54 billion; and Latin America with 650 airplanes valued at \$11 billion.

Large jets will lead the market both in terms of number of units and valuation at 3,400 and \$175 billion, respectively. But midsize jets are expected to regain some traction, selling 3,280 worth \$66 billion, which is good news for Embraer's new Legacy 450 and 500. Meanwhile, while the light jet market will continue to struggle, with estimated deliveries of 2,420 worth \$18 billion.

While other regions of the world are lagging, the North American market is steadily improving, accounting for 66 percent of deliveries in the third quarter this year.

Appraiser Qualifications

Aviation Asset Management, Inc. (AAMI) was founded in August, 1997. The experienced staff at AAMI brings over 100 years of aviation experience in an integrated consulting group. We provide financial/technical services, appraise and physically inspect individual aircraft, fleets, support inventory, tooling and equipment. AAMI's staff is composed of professionals who have held key operational, maintenance, financial and marketing positions at airlines, business flight operations, and aviation consulting firms and possess an intimate knowledge of the worldwide aviation industry.

AAMI is able to provide both aviation and investment clients with the highest level of resources and experience. Our experience includes work for air carriers, aircraft manufacturers and corporate clients, attorneys, banking, finance, leasing and investment concerns, federal and local assessing, taxing authorities, government and military authorities, insurance companies, and repair stations.

AAMI is able to provide hands-on management as well as expert strategic analysis to meet our client's requirements. AAMI is able to provide expertise tailored to each individual client while maintaining an overall "big picture" perspective of how each client's needs relate to the company's goals and the larger worldwide aviation industry.

- Dan Rausch is a member of The American Society of Appraisers (ASA) and is an Accredited Senior Appraiser.
- Member of International Society of Transport Aircraft Trading (ISTAT) and is an ISTAT Certified Appraiser.
- Member of National Business Aviation Association (NBAA)
- Member of Helicopter Association International
- Member of the Aviation Suppliers Association
- Special Magistrate for Ad Valorem Tangible Personal Property Taxes

ASSET MANAGEMENT SERVICES

- Inventory Appraisals
- Aircraft Appraisals and Value Forecast
- On-Site Maintenance Representation
- Aircraft Surveys
- Maintenance Records Audits
- Portfolio Management & Monitoring
- Tax Letters
- Expert Testimony and Legal Support
- Finance & Strategic Planning
- Safety Assessments

AAMI SENIOR MANAGEMENT PERSONNEL

DANIEL H. RAUSCH, ASA

Accredited Senior Appraiser

Mr. Rausch's fifty year aviation career began as a flight instructor while attending college in Daytona Beach, Florida. He then became chief pilot for the National Association of Stock Car Auto Racing (NASCAR), with the added responsibilities of overseeing all maintenance of the company's fleet. He then went on to work for the Federal Aviation Administration in Los Angeles and Miami, where he spent eleven years and held various positions including Air Traffic Control Specialist and Military Liaison and Security Specialist. He participated in feasibility studies and was instrumental in the writing and re-writing of various Federal Air Regulations (FARs). Mr. Rausch is a former Senior Vice President of Avmark Services Ltd (ASL), a law firm specializing in the aviation and related equipment fields. During his thirteen and-a-half years at ASL, he performed aircraft inspections and appraisals, tracked Department of Transportation and airline industry data for determining aircraft half-life values, and maintained an extensive up-to-date aviation library. He is widely known in his position of co-editor of the company's Aircraft Marketletter, where it was his responsibility for the gathering of all aircraft and engine transactions and offerings around the world. He has extensive knowledge of aircraft and engine values relative to such transactions. In 1998 he co-founded Aviation Asset Management Inc, which specializes in the appraisal and consulting areas concerning physical assets of airlines including ground equipment, OEM & wholesale suppliers, and FAR 145 Overhaul & Repair Facilities. He is a Commercial Pilot and Certified Flight Instructor (instrument & multi-engine) and holds Masters Degrees in Business Administration and Aeronautical Science, from Embry-Riddle Aeronautical University in Daytona Beach, Florida. Mr. Rausch is a member of the International Society of Transport Aircraft Trading (ISTAT) and is an ISTAT Certified Appraiser. Mr. Rausch is also a member of The American Society of Appraisers and is an Accredited Senior Appraiser. He is one of a small number of listed appraisers under the specialty of Machinery, Technical Specialties/Aircraft in the USA. He also is an Accredited Senior Appraiser under the specialty of Machinery, Technical Specialties/Machinery & Equipment. In addition, Mr. Rausch holds a certificate from The American Society of Appraisers for advanced training in the appraisal of inventory. Mr. Rausch has served as a Special Magistrate for Broward and Palm Beach Counties since 2005. He was chosen for his years of experience in appraisals and is responsible for judging taxpayer disputes with the county's Ad Valorem Tax division on tangible personal property.

GLOSSARY

Unique circumstances may demand specific definitions not found below. Many terms are used to describe notions of value. The definitions offered here are to provide the fundamental concepts and are not the only acceptable definitions, since contracts may dictate a somewhat different notion. Therefore, these definitions may be expanded or redefined as the purpose and function of an appraisal may dictate, as long as the fundamental concept is not altered.

Also, because of its specialized nature, appraisal practice involves the usage of many technical and financial terms that may not be commonly understood by clients or laymen. The following glossary is intended to assist the client in understanding these terms.

TYPES OF APPRAISALS

APPRAISAL: A formal valuation of property made by a competent authority.

DESKTOP APPRAISAL: 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.

EXTENDED DESKTOP APPRAISAL: An extended desktop appraisal is one which is still characterized by the absence of any on-site inspection of the aircraft or its maintenance records, but does include consideration of maintenance status information that is provided to the appraiser from the client, aircraft operator, or in the case of a second opinion, possibly from another appraiser's report. An extended desktop appraisal would normally provide a value that includes adjustments for the mid-time, mid-life baseline to account for the actual maintenance status of the aircraft.

FULL APPRAISAL: Includes an inspection of the aircraft and its maintenance records. This inspection is aimed solely at determining the overall condition of the aircraft and records to support the value opinions of the appraiser, and would not, for example, include opening of inspection panels on the aircraft or a detailed review of record archives. A full appraisal would normally provide a value that includes adjustments from the mid-time baseline to account for

the actual maintenance status of the aircraft, and possibly other adjustments to reflect the findings of the inspection of the aircraft and its records.

COMPREHENSIVE APPRAISAL: Includes a detailed inspection of the aircraft and records. Sufficient detail is required, for example, to insure that the records are in sufficiently good order to allow for the re-registration of the aircraft in a different country.

FINANCIAL APPRAISAL: A financial appraisal is one that determines the value of an aircraft to an investor based upon the income earning potential from its lease and residual value. A financial appraisal may be done in conjunction with either desktop or full appraisals.

VALUE DEFINITIONS

BASE VALUE (Aircraft): 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 mid-life, mid-time (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be).

CATALOG VALUE (List Price): Is the Manufacturer's published suggested selling price. The catalog price may be changed periodically by the manufacturer.

CURRENT FAIR MARKET VALUE (CFMV): Is the Appraiser's opinion of the most likely trading price that may be generated for a property under the market circumstances that are perceived to exist at the time in question.

The term assumes that the property 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.

It is a synonymous with Market Value, and likewise Current Fair Market Value is synonymous with Current Market Value because the criteria typically used in those documents that use the term "Fair" reflect the same criteria set forth in the above definition of Market Value.

By itself, the term "Fair" does not bring any additional qualifications to the appraised value, but it is a term sometimes used in leases, sales contracts, tax regulations and legal documents, and is sometimes accompanied with a specific definition to which the contracting parties have agreed.

CURRENT FAIR MARKET VALUE IN CONTINUED USE: The estimated amount, expressed in terms of money, that may reasonably be expected for a property in exchange between a willing buyer and seller with equity to both, neither under any compulsion to buy or sell, and both fully aware of all relevant facts, including installation, as of a specific date, and assuming that the business earnings support the value reported.

CURRENT FAIR MARKET VALUE INSTALLED: The estimated amount expressed in terms of money that may reasonably be expected for a property in exchange between a willing buyer and a willing seller with equity to both, neither under any compulsion to buy or sell and both fully aware of all pertinent facts as of a specific date. Installed refers to the inclusion of expenditures to make the equipment operable in its present location.

CURRENT FAIR MARKET VALUE REMOVAL: The estimated amount, expressed in terms of money, that may reasonably be expected for a property between a willing buyer and seller, with equity to both, neither under any compulsion to buy or sell, and both fully aware of all relevant facts, as of a specific date, considering removal of the property to another location.

FORCED LIQUIDATION VALUE (FLV): Is the estimated gross amount expressed in terms of money which could be typically realized from an immediate forced sale (auction), with the seller being compelled to sell on an as-is-where-is basis. It is the Appraiser's opinion of the price at which a property could be sold under abnormal conditions, such as 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 significantly reduce the bargaining leverage of the seller and give the buyer a significant advantage that can translate into heavily discounted actual trading prices. Apart from the fact that the seller is uncommonly motivated, the parties to the transaction are otherwise assumed to be willing, able, prudent and knowledgeable, negotiating at arm's-length, normally under the market conditions that are perceived to exist at the time, not an idealized balanced market.

LIQUIDATION VALUE IN PLACE: The estimated gross amount, expressed in terms of money, that is projected to be obtainable from a failed facility, assuming that the entire facility would be sold intact, as of a specific date, within a limited time to complete the sale.

NET ORDERLY LIQUIDATION VALUE (NOLV): A professional opinion of the estimated most probable price expressed in terms of currency which the property could typically realize at a privately negotiated sale, properly advertised and professionally managed, by a seller obligated to sell over a six to eighteen month time period, as of the effective date of the appraisal report. Further, the ability of the inventory to draw sufficient prospective buyers to insure competitive offers is considered. It is assumed that all of the property will be sold on a piecemeal basis "as is, where is" with the purchaser being responsible for removal at their own risk and expense. The circumstances of liquidation must be carefully reviewed at the time so as to maximize return.

The typical costs of liquidating a property of this type, over a liquidation period, must, at a minimum, budget for salaries, increased commissions, warehousing & office space, telephone & utilities, advertising, insurance, accounting and legal expenses. These expenses would be deducted from the Orderly Liquidation Value given.

ORDERLY LIQUIDATION VALUE (OLV): Is a professional opinion of the estimated most probable price expressed in terms of currency which the inventory could typically realize at a privately negotiated sale, properly advertised and professionally managed, by a seller obligated to sell over a defined period of time. Further, the ability of the inventory to draw sufficient prospective buyers to insure competitive offers is considered. It is assumed that all of the inventory will be sold on a piecemeal basis "as is, where is" with the purchaser being responsible for removal at their own risk and expense."

SALVAGE VALUE: The estimated amount, expressed in terms of money, that may be expected for the whole property or a component of the whole property that is retired from service for use elsewhere.

SCRAP VALUE: The estimated amount, expressed in terms of money, that could be realized for the property, as of a specific date, if it were sold for its material content not for a productive use.

SECURITIZED VALUE or Lease-Encumbered Value: Is the Appraiser's opinion of the value of an aircraft, under lease, given a specified lease payment stream (rents and term), and estimated future residual value at lease termination, and an appropriate discount rate.

INSURANCE REPLACEMENT COST: The replacement cost new as of a specific date, as defined in the insurance policy, less the cost new of the items specifically excluded in the policy, if any.

INSURANCE VALUE DEPRECIATED: The insurance replacement cost as of a specific date, less accrued depreciation considered for insurance purposes.

REPRODUCTION COST NEW: The current cost of reproducing a new replica of a property with the same or closely similar materials.

REPLACEMENT VALUE: Is the Appraiser's opinion of "a fair return in money, goods, services, etc., for something in exchange; monetary worth of a thing; marketable price." It is the most likely trading price that a property would trade for under the market circumstances that are perceived to exist at the time in question. *Value* is usually estimated and is subject to differences of opinion and interpretation and varies from one person to another. (Value is what a thing is worth; price is what is paid to acquire it.)

The term assumes that the property 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.

REPLACEMENT COST NEW: The current cost of a similar new property having the nearest equivalent utility as the property being appraised.

TECHNICAL TERMS

The following definitions are largely derived from other aviation industry publications, including:

- Federal Aviation Regulations
- FAA Publication 8300.9, Airworthiness Inspector's Handbook
- World Airlines Technical Operations Glossary (WATOG) developed jointly by the Air Transport Association (ATA), International Air Transport Association (IATA) and Aerospace Industries Association (AIA).

In some cases additional explanatory language has been added as clarification or to discuss the item's particular relevance to the aircraft appraisal process.

Note that many of the entries below refer only to the US FAA where it might be more appropriate to add "or other air authority". Also, in many cases the definitions are drawn from or refer to specific Federal Aviation Regulations, although it is possible that these could differ from similar regulations published by the air authorities in other international jurisdictions.

ACCIDENT: An occurrence associated with the operation of an aircraft, which takes place between the times any person boards the aircraft with the intention of flight, until such time as all such persons have disembarked, in which:

- Any person suffers death or serious injury as a result of being in or upon the aircraft, or by direct contact with the aircraft or anything attached thereto; or
- The aircraft received substantial damage; or
- Any damage is caused to the property of a third party.

ADVISORY CIRCULAR: A publication of the FAA to inform the aviation public of non-regulatory material of interest. Unless incorporated into a regulation by reference, the contents of an AC are not binding. An AC is issued to provide guidance and information in its designated subject area or to show a method acceptable for complying with a related Federal Aviation Regulation.

AIRCRAFT: A device that is used or intended to be used for flight in the air.

AIRCRAFT COMMUNICATIONS ADDRESSING/REPORTING SYSTEM (ACARS):

A communications system that automatically reports via radio when an aircraft is out of the gate, off the ground, back on the ground, and at the gate again, thus automatically collecting data on flight cycles, flight time and block time. During flight the system may also monitor and report on aircraft and engine performance.

AIRCRAFT, LARGE: A defined category used by the US FAA for aircraft having a maximum certificated takeoff weight more than 12,500 pounds.

AIRCRAFT, SMALL: A defined category used by the US FAA for aircraft having a maximum certificated takeoff weight more than 12,500 pounds or less.

AIRCRAFT MAINTENANCE MANUAL (AMM): A manual that describes the methods, techniques and practices to be used by persons performing maintenance, alteration or preventive maintenance on an aircraft.

AIRPLANE: An engine-driven fixed-wing aircraft, heavier than air, that is supported in flight by the dynamic reaction of the air against its wings.

AIRWORTHINESS: The condition of an item (aircraft, aircraft system or part) in which that item is capable of operating in a safe manner to accomplish its intended purpose. Two key factors are: the aircraft (or device) must conform to its type design and it must be in a condition for safe operation.

AIRWORTHINESS CERTIFICATE: An Airworthiness Certificate is issued by the FAA for an individual aircraft when it is satisfied that the aircraft conforms to the Type Certificate and is in a condition for safe operation. The Airworthiness Certificate is issued to the registered owner, and is transferred with the aircraft. It remains in effect as long as the aircraft is maintained (or altered) according to the appropriate FAA regulations and continues to be registered in the United States.

AIRWORTHINESS DIRECTIVE (AD): A mandatory order issued by the FAA, usually applying to specific types of aircraft, engines or appliances, when an unsafe condition exists and that condition is likely to exist or develop in other aircraft, engines or appliances of the same design. An AD usually requires some maintenance action (possibly only an inspection),

within some specified time in order to ensure continued safety and airworthiness, and no aircraft may be operated in contravention of the requirements or limitations of an AD.

ASSEMBLY: A number of parts, subassemblies, or any combination thereof joined together to perform a specific function and which can be disassembled without destruction of designed use. (The distinction between an assembly and a subassembly is not always exact. An assembly is one instance may be a subassembly in another where it forms a portion of an assembly).

BURDEN, MAINTENANCE (sometimes also referred to as indirect maintenance cost): Those maintenance labor and material costs not considered to be direct maintenance costs, but which contribute to overall maintenance program costs through overhead operations, administration, record-keeping, scheduling, controlling, planning, supervision, tooling, test equipment, facilities, etc.

CARGO: All traffic other than passengers. Cargo includes freight, mail and excess baggage shipments.

COMPONENT: Any self-contained part, combination of parts, sub-assemblies or units, which perform a distinctive function necessary to the operation of a system.

COST, DIRECT AND INDIRECT: Although there is not an “official” definition from any regulatory body, aircraft direct operating costs (DOCs) are customarily categorized as follows:

- Flying Operations
 - Crew Salaries & Expenses
 - Fuel & Oil
 - Insurance

- Maintenance
 - Direct Labor & Material
 - Maintenance Burden
- Depreciation & Rentals
- Landing Fees & Airport Handling Charges (sometimes)

The major categories of indirect operating costs include:

- Aircraft Servicing

- Traffic Servicing
- Servicing Administration
- Reservations & Sales
- Advertising & Publicity
- General & Administrative

CYCLE, AIRCRAFT OPERATING: A complete flight sequence including taxi, takeoff, flight en route, and landing. In the case of engines, a cycle includes starting, acceleration to maximum rated power, deceleration and stopping (FAR 33.14).

DAMAGE, FOREIGN OBJECT (FOD): Damage to any portion of the aircraft (most commonly engines) caused by impact or ingestion of birds, stones, hail or other debris.

ENGINE: The basic engine assembly plus its essential accessories as supplied by the engine manufacturer. These include those units and components which are used to induce and convert fuel/air mixture into thrust/power; to transmit power to the propeller shaft, if any, and accessory drives; to supplement the function of other defined systems external to the engine; and to control and direct the flow of internal lubrication. The nacelle and the reverser are excluded.

ENGINE SHOP VISIT: An engine removal is classified as a "shop visit" whenever the subsequent engine maintenance performed prior to reinstallation entails one of the following:

- Separation of pairs of major mating engine flanges (other than solely for shipment),
- Removal/replacement of a disk, hub, or spool.

Sometimes the definition is specifically tailored, as in some Airworthiness Directives that say, "For the purpose of this AD, an engine shop visit is defined as input to an engine repair shop where the low pressure turbine module is removed", or "the front and rear flanges of the combustion case are separated", or "any major module is separated", or "the inlet gearbox is exposed".

EXTENDED OVERWATER OPERATIONS: Flight operations over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline. These are operations for which the regulations require certain communications equipment, as well as various items of emergency and water survival equipment (life rafts and emergency flotation

devices, for example). Note that the distance is specified from the shoreline, not necessarily from an airport.

EXTENDED-RANGE OPERATIONS (EROPS): Generally, flight operations at a distance more than 60 minutes flying time with one engine inoperative from a suitable airport. "EROPS" now has virtually no official standing except within Canada where certain communication, navigation and emergency requirements pertain to all aircraft in extended-range operations, regardless of the number of engines. In the U.S. and many other countries, the requirements have evolved into "ETOPS" (listed separately below) with rules that apply only to twin-engine aircraft operating beyond the 60 minute distance.

EXTENDED-RANGE TWIN-ENGINE OPERATIONS (ETOPS): ETOPS applies specifically to twin-engine aircraft operated at a distance more than 60 minutes flying time with one engine inoperative from a suitable airport. In the U.S. there are approvals for ETOPS at distances from suitable airports, varying from 75 minutes up to 180 minutes at the engine-out cruising speed. In general, aircraft used in ETOPS must have an ETOPS type design approval which may require the incorporation of a substantial number of equipment options and Service Bulletins, and the national air authorities may approve specific operators, aircraft and routes based upon various qualifications, demonstrated reliability and competence.

EXTRAORDINARY ASSUMPTION: An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions.

Comment: Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

FAIL-SAFE: A design criterion, which requires that predictable failure of an item will not place the aircraft into an uncontrollable condition. The intent is that a partial failure of a structural element, for example, will not lead to the catastrophic failure of the entire structure.

FLIGHT: The entire passage consisting of one or more flight legs, from leaving the airport of origin to arrival at the airport of final destination and operated under one flight number.

HYPOTHETICAL CONDITION: That which is contrary to what exists but I supposed for the purpose of analysis.

Comment: Hypothetical condition assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property, or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

HOT SECTION INSPECTION (HIS): The inspection and restoration of the hot section items of an engine (principally the combustion and turbine sections), usually at a predetermined time/cycle limit. A hot section inspection is not necessarily considered an "engine shop visit" if no major disassembly or repairs are required.

INSPECTION, DETAILED: An intensive visual examination of a specified detail, assembly, or installation. It searches for evidence of irregularity using adequate lighting and, where necessary, inspection aids such as mirrors, hand lens, etc. Surface cleaning and elaborate access procedures may be required.

INSPECTION, EXTERNAL SURVEILLANCE (STRUCTURAL): A visual check that will detect obvious unsatisfactory conditions/discrepancies in externally visible structure. It may also include internal structure, which is visible through quick opening access panels/doors. Work stands, ladders, etc., may be required to gain proximity.

INSPECTION, GENERAL VISUAL: A collective term, which includes the External Surveillance Inspection, the Internal Surveillance Inspection, and the Walk-Around Check.

INSPECTION, INTERNAL SURVEILLANCE (STRUCTURAL): A visual check that will detect obvious unsatisfactory conditions/discrepancies in internal structure. This type of inspection applies to obscured structure and installations which require removal of fillets, fairing, access panels/doors, floor-boards, liners, insulation blankets etc.

INSPECTION, WALK-AROUND CHECK: A visual check conducted from ground level to detect obvious discrepancies.

ITEMS, CONSUMABLE: Consumable: Any component that is rendered unsuitable for reuse when it's installed. Examples include gaskets, sealants, compression fittings, etc.

ITEMS, EXPENDABLE: 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 hose. For financial accounting purposes, expendable items are normally considered to be consumed when they are issued, so they are then not carried as inventory assets.

ITEMS, LIFE-LIMITED: An Item which, when listed on the aircraft, engine or propeller type certificate data sheet or the manufacturer's instructions for continued airworthiness, must be permanently removed from service and discarded before a specified time (e.g. hours, cycles or calendar limit) is achieved. Among the most significant life-limited items for appraisal purposes are engine disks and shafts.

ITEMS, REPAIRABLE: A replacement part or component, commonly economical to repair, and subject to being rehabilitated to a fully serviceable condition over a period of time less than the life of the flight equipment to which it is related. Examples include many engine blades and vanes, some tires, seats, galleys.

ITEMS, ROTABLE: 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 period of time approximating the life of the flight equipment to which it is related. Examples include avionics units, landing gears, auxiliary power units, and major engine accessories.

ITEMS, TIME-LIMITED: An item which must be inspected, tested or reconditioned at specified intervals of time (hours, cycles or calendar) in order to ensure continued airworthiness. Not the same as Item, Life-Limited, listed separately.

LIFE, ECONOMIC USEFUL: As it pertains to an aircraft or engine, the economic useful life is the period of time over which it is (or is expected to be) physically and economically feasible to operate it in its intended role. Periodic maintenance and repair will usually be required in order to preserve safety and efficiency during the economic useful life.

LIST, MINIMUM EQUIPMENT (MEL): An approved list of items, which may be inoperative for flight under specified conditions and/or specific limited periods of time. For example, an aircraft with triple-redundant navigation systems might be permitted to depart with one system inoperative, or certain lights may be inoperative for daylight flights. An MEL is not transferable between operators of the same equipment.

MAINTENANCE: Those actions required for restoring or maintaining an item in serviceable condition, including servicing, repair, modification, overhaul, inspection, determination of condition, preservation and storage.

MAINTENANCE, CONDITION-MONITORED: A primary maintenance process under which data on the whole population of specified items in service is analyzed to indicate whether some allocation of technical resources is required. Not a preventive maintenance process, condition monitored maintenance allows failures to occur, and relies upon analysis of operating experience information to indicate the need for appropriate action.

Note: Failure modes of condition-monitored items do not have a direct adverse effect on operating safety.

MAINTENANCE, SCHEDULED: The maintenance performed at defined intervals to retain an item in a serviceable condition by systematic inspection, detection, replacement of worn out items, adjustment, calibration, cleaning, etc.

MEAN TIME BETWEEN FAILURE (MTBF): A performance figure calculated by dividing the total unit time or cycles accrued in a period by the number of unit failures that occurred during the same period.

MEAN TIME BETWEEN REMOVALS (MTBR): A performance figure calculated by dividing the total unit time or cycles accrued in a period by the number of unit removals (scheduled plus unscheduled) that occurred during the same period.

MID-TIME, MID-LIFE: (sometimes half-time, half-life) These are two terms commonly used by appraisers to describe the maintenance time status of an aircraft or engine.

- Mid-time pertains to scheduled inspections or overhauls that are repeated at specified intervals of time, with "mid-time" (or half-time) implying that the status is mid-way through such an interval.

- Mid-life pertains to items with mandated life limits (engine disks, for example), and “mid-life” (or half-life) implies that such items have been in service for one-half of their life limits.

NON-DESTRUCTIVE TESTING (NDT): A maintenance procedure to determine the condition of an area or part of an aircraft or component by means of tests that do not affect the function or serviceability of the item being tested. Some commonly used NDT methods include visual, radiographic, magnetic particle, ultra-sonic, dye penetrant, and eddy-current inspections.

OVERHAUL: The disassembly, inspection and/or check of an aircraft, component, engine or appliance to an extent necessary to determine, as substantiated by service experience and accepted practices, that it is in satisfactory condition to operate one complete overhaul period. It shall include the replacement, repair, adjustment or refinishing of such parts as required, which, if improperly accomplished would adversely affect the structural strength, performance, flight characteristics or safety of the aircraft involved.

POOL, PARTS: An arrangement whereby participants are entitled to withdraw items from the agreed stock held by any participant.

PROGRAM, MAINTENANCE: A program, either acceptable or approved by airworthiness authorities, which defines a logical sequence of maintenance actions to be performed as events or pieces of a whole which, when performed collectively, result in achievement of the desired maintenance standards. The program may be originated by the manufacturer or the operator.

- A “Block Maintenance Program” is one, which allocates major structural inspections and/or maintenance tasks into groups, or blocks, which permit convenient, economical and effective accomplishment. A program of recurring C-Checks and D-Checks may be a block maintenance program.
- A “Continuous Airworthiness Maintenance Program” is a compilation of the individual maintenance and inspection functions utilized by an operator to fulfill its total maintenance needs. The authorization to use continuous maintenance program are:

- Aircraft inspection
 - Scheduled maintenance
 - Unscheduled maintenance
 - Engine, propeller and appliance repair & overhaul
 - Structural inspection program / airframe overhaul
 - Required inspection items
 - Maintenance Manuals
- A “Phased Maintenance Program” (sometimes called an “equalized” / “segmented” program) is one where some of the maintenance effort is apportioned to smaller packages that may be accomplished more frequently than the packages in a block maintenance program. Usually, the objective of this subdivision of effort is to even out the maintenance workload over time and shorten the length of each period of down-time.
 - Note that the distinction between “block” and “phased” programs is not very clear. Different airlines and different air authorities have adopted many variations, so these terms do not have unique meanings applicable to all circumstances. For example, the C-Check might be divided into phases while the D-Check is left intact, or the D-Check might also be divided into phases, and the number of phases could be large or small. Moreover, different airlines have adopted different lettering and numbering terminologies to designate their checks.
 - A “Progressive Maintenance” program is one which provides for the complete inspection of an aircraft within each 12 calendar months. Consistent with the manufacturer’s recommendations and other regulatory requirements. In practice, this primarily applies to small aircraft, although FAA Order 8300.9 Section 5 says the progressive inspection system “is particularly adaptable to larger multiengine aircraft and aircraft operated by companies and corporations where high utilization is demanded.

QUICK ENGINE CHANGE (QEC): A QEC kit is a collection of components and accessories such as pumps, generators, thrust reverser, nose cowl, wiring harnesses and fluid lines installed onto a bare engine to speed the eventual installation of the entire power

plant onto an aircraft. The actual make-up of the QEC kit will usually depend on the type of aircraft that the engine will be used on, and may also be different for different engine positions on the same aircraft. With the QEC kit installed, the power plant is sometimes then called a "QEC Unit".

REBUILD: A maintenance process whereby an aircraft, engine, propeller, appliance or component part is disassembled, cleaned, inspected, repaired as necessary, reassembled and tested to the same tolerances and limits as a new item, using either new parts or used parts that either conform to new part tolerances and limits or to approved oversized or undersized dimensions.

REGISTRATION CERTIFICATE: With certain exceptions for foreign aircraft, aircraft with temporary authorizations, or aircraft of the armed forces, no aircraft may be operated without a Registration Certificate that is issued to its owner by the FAA. The Registration Certificate is also the basis for assigning a U.S. identification number ("N" Number). Generally, the Registration Certificate remains effective until the aircraft is sold, exported, destroyed or scrapped. Note that this definition pertains specifically to the U.S. but comparable regulations apply in most other jurisdictions.

REPAIR: The restoration of an airframe, powerplant or appliance to a condition for safe operation after damage or deterioration. A "Major" repair is one that, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics or other qualities affecting airworthiness.

ROTORCRAFT: (sometimes rotocraft) A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

SERVICE BULLETIN (SB): A document issued by the manufacturer to notify the owner or operator of an aircraft (or engine or other device) of recommended (or required by Airworthiness Directives) modifications, substitution of parts, special inspections/checks, reduction of existing life limits or establishment of first-time life limits and conversion from one engine model to another. Service Bulletins may or may not be FAA-approved.

SUPPLEMENTAL TYPE CERTIFICATE (STC): An STC is issued by the FAA to grant approval for an alteration of a product by a major change in the type design, where such a

change is not great enough to require a new application for a Type Certificate. The STC is kept by the applicant and is then the basis for issuing or retaining airworthiness certificates to all aircraft (or engines or propellers) subsequently modified in the same way. In the case of alterations by the original manufacturer, approval is normally in the form of an amendment to the original Type Certificate, rather than an STC.

TERRAIN AWARENESS AND WARNING SYSTEM (TAWS): It provides information concerning impending or potential hazards with fixed objects.

TIME, BLOCK: Block time is the time from the moment an aircraft first moves for the purpose of flight until the moment it comes to rest at the destination; sometimes called block-to-block time. Pushback time is considered as part of Block Time.

TIME, FLIGHT: Flight time is the duration of the airborne portion of a flight, sometimes called wheels-off to wheels-on-time. It is always less than block time. Note that FAR 1 appears to equate Block Time and Flight Time, but this is not generally accepted.

TIME, TOTAL: The operating time that an aircraft, engine or component has accumulated since new. Unless otherwise stated, this is usually total flight time, rather than total block time.

TIME BETWEEN OVERHAULS (TBO): The maximum time that an item is permitted to operate between overhauls, TBOs are usually expressed in flight hours, cycles, or calendar increments.

TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS): A system intended to alert flight crews of the existence of nearby aircraft and to provide warning of imminent collisions. There are three categories of TCAS; TCAS I is a proximity warning system that advises pilots of the presence of nearby aircraft. TCAS II is intended to warn pilots of an impending collision, and it commands vertical avoidance maneuvers. TCAS III warns of the impending collision and commands both vertical and horizontal avoidance maneuvers.

TYPE CERTIFICATE: A Type Certificate pertains to aircraft, aircraft engines and propellers. The FAA issues a Type Certificate when the applicant (normally the manufacturer) submits the type design, test reports, and computations and proves to the FAA's satisfaction

that the product meets the applicable requirements of the FARs regarding airworthiness, noise and emissions. The Type Certificate is kept at the manufacturer's facility and is the basis for issuing airworthiness certificates to all aircraft (or engines or propellers) subsequently manufactured according to the same type design.

Type Certificates may also be issued for products manufactured in foreign countries with which the United States has an agreement for the acceptance of these products if the country of origin certifies that the product meets airworthiness, noise and emission standards equivalent to the U.S. standards, and the manufacturer submits the appropriate supporting technical data.

TYPE CERTIFICATE DATA SHEET: The Type Certificate Data Sheet is the part of the Type Certificate setting forth the limitations prescribed by the applicable airworthiness regulations and any other limitations and information found necessary for type certification.

UTILIZATION, AIRCRAFT: The average daily flying hours for an aircraft or a fleet of aircraft. May be also expressed in hours per year or hours per month.

FINANCIAL TERMS

ASSET-BASED FINANCE: Secured asset financing, with credit emphasis on the ownership of, or lien on, such assets as accounts receivable, inventory, machinery and equipment.

BALLOON PAYMENT: The final payment, which is substantially larger than the other payments, of an amortized term loan or lease. Less commonly, balloon payments may also occur periodically during a lease term.

BARGAIN PURCHASE OPTION: An option given to the lessee to purchase leased equipment at lease expiry for a price which is significantly lower than the expected fair market value of that equipment at the end of the lease.

CAPITAL LEASE: A lease in the U.S. is classified as a capital lease if it meets any of the following criteria:

- The lease transfers ownership to the lessee at the end of the lease term.
- The lease contains an option to purchase the property at a bargain price.

- The lease term is equal to 75% or more of the estimated economic life of the property (with exceptions for used property that is already near the end of its useful life).
- The present value of minimum lease rental payments is equal to 90% or more of the fair market value of the leased property

CHAPTER 7: A chapter of the U.S. Bankruptcy Code, which provides the rules whereby a debtor or creditor, may petition the court for the appointment of a trustee or receiver to supervise the orderly liquidation of a business.

CHAPTER 11: A chapter of the U.S. Bankruptcy Code which provides the rules whereby a debtor is allowed to file for court protection. Such protection enables the debtor to continue its operations while undergoing reorganization. Chapter 11 also allows a creditor to protect its interests.

DISCOUNTED CASH FLOW: A technique for assessing the present value of future payments which takes into account the time value of money.

DRY LEASE: Traditionally in aircraft and marine leasing, an agreement that provides financing only for the equipment itself, and does not extend to personnel, maintenance, fuel and provisioning necessary to operate the craft. Corollary in marine leasing is a bare boat charter.

INVESTMENT TAX CREDIT (ITC): A provision of the tax code designed to stimulate investment in capital equipment by allowing a percentage of the purchase price to be credited directly against taxes due.

LEVERAGED LEASE: Involves at least three parties: lessor, lessee and a lender. The lessor owns the equipment and will generally provide a portion of the purchase price while borrowing the remainder, usually on a non-recourse basis, from the lender. The lessor thereby enhances his ability to purchase and own the asset using the capital of a third party.

NET LEASE: A lease which provides that all costs in connection with the use of the equipment are paid by the lessee and are not part of the rental, e.g. taxes, insurance and

maintenance are paid directly by the lessee. Note that most capital leases, leveraged leases and direct finance leases are net leases.

OPERATING LEASE: For financial accounting purposes, a lease which does not meet the criteria of a capital lease (see separate entry). Also used generally to describe a short-term lease whereby the user can acquire the use of an asset for a fraction of its useful life. It is not common, but the lessor may pay for maintenance and insurance.

OWNER TRUSTEE: In a leveraged lease, the party who holds title to the equipment for the benefit of the equity participants. The owner trustee issues trust certificates to the equity participants, maintains the register, acts as the agent for such certificates, and makes appropriate filings to perfect and protect the lender's interest in the collateral.

PURCHASE OPTION: The right to buy leased property at the end of the lease term. In the U.S., if the tax characteristics of a true lease are to be protected, the purchase option may not be at a price less than the asset's fair market value at the time the right is exercised.

RENEWAL OPTION: A right whereby the lessee may renew a lease for an additional period after the original termination date. The rent for the renewal period is usually set at a lower rate than in the initial period.

RESIDUAL VALUE: The value of equipment at a future date, usually in connection with the conclusion of a lease term. Not the same as salvage value or scrap.

TAX LEASE: A single-investor or leveraged lease in which the lessor has satisfied certain Internal Revenue guidelines, retaining the tax benefits (such as investment tax credits and depreciation) associated with ownership. These tax benefits may be passed through to the lessee in the form of lower rental payments. The lease may require special indemnity by the lessee for any of the lessor's benefits lost or subject to recapture.

WET LEASE: An operating lease that provides crew, fuel and maintenance services in addition to the aircraft itself.

Component/Material Codes

The following industry accepted terms and Component/ Material Codes are used when describing the condition of parts.

APIS (Approved Production Inspection Systems) ensures that a part in all ways meets its FAA approved design data.

PC (Production Certificate) conveys production approval for a complete aircraft, engines or propellers and associated spare parts that pass through PC holders APIS.

PAH (Production Approval Holders) either a TC, PC, PMA, or TSO holder.

TC (Type Certificate) conveys FAA design Approval for a complete aircraft, engines or propellers.

OEM (Original Equipment Manufacturer): An aircraft or engine manufacturer or other designated and authorized manufacturer that is the holder of a Production Certificate, Parts Manufacturer Approval, or Technical Standards Order.

PMA (Parts Manufacturer Approval): PMA is issued for replacement or modification parts under FAR 21, Subpart K, Section 21.303. Such parts are permanently and legibly marked with the letters "FAA-PMA", the name, trademark, or symbol of the holder of the PMA, the part number, and the name and model designation of each type certificated product on which the part is eligible for installation. Parts which are too small, or where it is otherwise impractical to mark the parts per the foregoing, may be tagged with the required information on the tag or, as an alternative when necessary, the tag may reference the specific, readily available manual or catalog for part eligibility information.

TSO (Technical Standard Order): FAA authorization for aircraft systems such as seats, wheels and brakes, which meet a minimum performance standard. Most aircraft accessories, such as CSD's, pumps, actuators and valves must have a PMA and are ineligible for TSO. TSO's involve certain certificated aircraft subsystems, which may be used on several different aircraft.

NE/N NU (NEW), FACTORY NEW (FN): A new part or material received from an OEM, holder of a PMA, or OEM authorized distributor.

NS (New Surplus): A new part or material received from an authorized supplier, OEM, or airline (foreign or domestic), which was never installed on an aircraft. The part or material will have accompanying documentation showing traceability back to the OEM or air carrier from which it was originally purchased.

OHC (Overhauled & Certified): A part which has been overhauled and certified by an authorized OEM, Manufacturer's Maintenance Facility (MMF), or Part 145 Repair Agency. The part was overhauled in accordance with accepted/approved data in compliance with FAR Part 43 and will have a Time Since Overhaul (TSO) of 00.00 hours.

SV/S (Serviceable): Part is used but certified as airworthy by a Part 121 / 129 airline or authorized FAA repair agency.

AR (As Removed): Part or material in its "as removed condition" from an aircraft or powerplant, normally requiring repair and bench check. Part is used but not certified as airworthy. The part can usually be economically repaired and/or overhauled to SV or OHC condition.

BER/B/ BR (Beyond Economical Repair): The part is being evaluated for disposition as "REPAIR" or "SCRAP".