

Extended Desktop Appraisal

Client: SAMPLE CLIENT

Asset:



AUTHOR:
REPORT DATE:
ATTN:



Prospective client



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Scope of Work

Airline Economics+ is pleased to provide this Extended Desktop Appraisal, at the request of its client SAMPLE CLIENT.

SAMPLE CLIENT has requested that Airline Economics+ provide an Extended Desktop Appraisal providing for a [REDACTED] controlled by [REDACTED] and based on information provided by the client.

The appraisal covers the following scenarios:

Scenario 1: in current "as is" condition as advised by the clients

- Both engines are fitted with [REDACTED] QEC
- Both engines are presumed to be due a performance restoration shop visit
- Value provided is a Current Maintenance Adjusted Market Value for each engine

Scenario 2: following rebuild of both engines

- Both engines are assumed to have been rebuilt to a standard such that they have 4,000 cycles remaining at the [REDACTED] thrust rating / Category [REDACTED] level
- Both engines are fresh from performance restoration and with [REDACTED] QEC
- Value provided is a Hypothetical Maintenance Adjusted Market Value for each engine



[REDACTED]
SVP - Valuations

Asset Identification and Appraisal Summary

The clients have provided Airline Economics+ with information regarding the LLP and maintenance status of the engines.

Scenario 1: As is

Engine type		
ESN		
TSN	54,064	45,918
CSN	50,977	44,265
LLP Limiter cycles remaining (Cat [REDACTED])	8,961	11,620
Performance restoration status	Due	Due
MX life remaining	0.0%	0.0%
LLP life remaining	28.8%	30.2%
Maintenance Adjusted Current Market Value (USD m)		

The Current Maintenance Adjusted Market Value for the engines as at [REDACTED] is USD [REDACTED] million.

Scenario 2: Following rebuild of both engines

Engine type		
ESN		
TSN	26,371	48,691
CSN	17,470	44,483
LLP Limiter cycles remaining (Cat [REDACTED])	4,000	4,000
Performance restoration status	Fresh	Fresh
Performance restoration reason	Rebuild to 4,000 CR	Rebuild to 4,000 CR
MX life remaining	100.0%	100.0%
LLP life remaining	33.4%	32.0%
Hypothetical Maintenance Adjusted Market Value (USD m)		

The Hypothetical Maintenance Adjusted Market Value for the engines, presuming rebuild to minimum 4,000 cycles remaining at Category [REDACTED] thrust as at [REDACTED], is USD [REDACTED] million.



Life Limited Parts Scenario Analysis

The client has provided Airline Economics+ with information regarding the LLP and maintenance status of the two engines. Based on this information the assumed LLP status for the purposes of valuation under the two scenarios is outlined below.

	cycles remaining		
	Scenario 1	Scenario 2	
	LLP cycles remaining	LLP cycles remaining	Status for valuation
Disc, Fan Rotor	6,775	6,775	Left as is
Booster, Spool	12,530	12,530	Left as is
[REDACTED]	12,530	12,530	Left as is
[REDACTED]	2,530	4,000	Replaced
[REDACTED]	2,530	4,000	Replaced
[REDACTED]	2,530	4,000	Replaced
[REDACTED]	1,641	4,000	Replaced
[REDACTED]	8,730	8,730	Left as is
[REDACTED]	9,650	9,650	Left as is
[REDACTED]	8,044	8,044	Left as is
[REDACTED]	1,291	4,000	Replaced
[REDACTED]	2,914	4,000	Replaced
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	7,530	7,530	Left as is
[REDACTED]	12,530	12,530	Left as is

SAMPLE CLIENT

[REDACTED]

Report Reference APP SAMPLE EXTENDED DESKTOP

	[REDACTED] cycles remaining		
	Scenario 1	Scenario 2	
	LLP cycles remaining	LLP cycles remaining	Status for valuation
Booster, Spool	9,144	9,144	Left as is
Shaft, Fan	7,900	7,900	Left as is
[REDACTED]	7,066	7,066	Left as is
[REDACTED]	7,066	7,066	Left as is
[REDACTED]	8,296	8,296	Left as is
[REDACTED]	4,603	4,603	Left as is
[REDACTED]	4,320	4,320	Left as is
[REDACTED]	3,590	4,000	Replaced
[REDACTED]	2,141	4,000	Replaced
[REDACTED]	11,804	11,804	Left as is
[REDACTED]	6,194	6,194	Left as is
[REDACTED]	2,387	4,000	Replaced
[REDACTED]	3,174	4,000	Replaced
[REDACTED]	3,174	4,000	Replaced
[REDACTED]	3,174	4,000	Replaced
[REDACTED]	3,174	4,000	Replaced
[REDACTED]	3,174	4,000	Replaced
[REDACTED]	17,066	17,066	Left as is

* for the purposes of valuation under Scenario 3 the Hypothetical Part out Value of ESN [REDACTED] includes remnant LLPs from ESN [REDACTED] following installation of LLPs originally on ESN [REDACTED]

To be read in conjunction with Disclaimer on final page of this Report



Appraisal Definitions

In compiling this report, Airline Economics+ has referred to data freely available in the public domain, as well as information held by the Airline Economics+ databases and anecdotal information given by reputable third parties. While efforts have been made to verify such information, Airline Economics+ does not guarantee the accuracy of such information. Additionally, information disclosed to Airline Economics+ in confidence has been used to form the valuations expressed in this document.

The scope of the report is identified in the report Scope of Work and conforms to the relevant definition below:

An Extended Desktop Appraisal accounts for aircraft maintenance status based on unverified maintenance information provided to Airline Economics+ by the client and provides values net of maintenance adjustments (positive or negative) from the pertinent Half Life Value.

Value Definitions

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

It is further assumed that the asset is intact, airworthy and in a configuration and condition for its relevant age that would facilitate sale without hindrance at the price indicated by the Market Value. This assumption includes, but is not limited to, that the asset has a typical specification, is free from abnormal damage or defect, and the physical condition of the asset and presentation of the records conform to reasonable industry expectations.

For Market Value, major components are assumed to be mid-way between their respective major overhaul or replacement intervals (or benefitting from an above average maintenance status if new or nearly new, as the case may be). These assumptions result in what is

sometimes referred to in the Aviation industry as the valuations being basis 'Half-Life' (or 'Mid-Life' as per ISTAT).

Part Out Value is the Appraiser's opinion of value of an aviation-related asset when its highest and best use (as defined by the Appraiser) derives from its major assemblies and/or parts having a higher market value than it does as an operating entity. Part-Out Value is a wholesale value based on the potential market value to a specialist aircraft disassembly company of individual parts and assemblies, including engines, landing gear, APUs, rotatable parts, airframe parts, etc.

Appraisal Methodology

Market Values and Part-Out Values are calibrated by recent sales data and market intelligence gathered from reputable third parties, normalised for each transaction's unique context.

Value Assumptions

The asset will remain in service throughout the period of evaluation.

The asset has been and will continue to be maintained under a manufacturer approved program.

The asset has and will continue to have its full complement of records with back-to-birth traceability, maintained in the English language.

Any modifications are and will be completed in accordance with manufacturer's recommendations to be comparable with the most recent standard of modification; excepting circumstances in which such modification would compromise the performance or marketability of the asset.

All applicable mandatory maintenance requirements will be complied with.

Where the asset is removed from service, all required and reasonable precautions against deterioration and documentation will be taken by the operator, lessor, or manager.

The asset is in typical physical condition unless otherwise stated.

Glossary of Abbreviations and Acronyms

CR	Cycles Remaining
CSLHSV	Cycles Since Last Heavy Shop Visit
CSN	Cycles Since New (Flight Cycles)
EBU	Engine Build Up accessory components
EFC	Engine Flight Cycles
EFH	Engine Flight Hours
ESN	Engine Serial Number
HPT	High Pressure Turbine module
ISTAT	International Society of Transport Aircraft Trading
LLP	Life Limited Part
MRO	Maintenance Repair and Overhaul
MV	Market Value
MX	Maintenance
MX. Adj. MV	Maintenance Adjusted Market Value
OEM	Original Equipment Manufacturer
QEC	Quick Engine Change kit/accessories
TSLHSV	Time Since Last Heavy Shop Visit
TSN	Time Since New (Flight Hours)
USD m	US Dollar Millions

Disclaimer

Airline Economics+ has no present or contemplated interest in the assets being appraised and this appraisal report concerning the report is submitted in the belief that it represents a fair and unbiased appraisal of the assets.

Airline Economics+' Market Values constitute an opinion that is effective as at the valuation date only. Airline Economics+ reserves the right, without obligation, to retrospectively update or revise its values because of new information, changed circumstances or otherwise.

Airline Economics+ has neither made a physical inspection of the asset nor inspected its records. All statements made in these valuations are derived from technical specification, commercial, and other relevant information provided by the client or available to Airline Economics+ at the date of the valuation and are based on the assumptions outlined above. While reasonable effort has been made as to the veracity of the information gathered, Airline Economics+ makes no warranty as to the accuracy of information provided by third parties, and no assurance is given that the value will be sustained or realisable in any actual transaction.

Any person contemplating entering a transaction of any nature whatsoever should not rely on any statement (express or implied) made in these valuations without undertaking all necessary due diligence including but not limited to inspection of the aircraft and its records, or other independent means as to ascertain the correctness of statements made in these valuations.

Airline Economics+ assumes no liability for actions taken or not taken by the client or any other parties that receive these valuations. No assurance is given that the amount realisable for a multiple asset transaction would be equal to the total of the individual Market Values. No person other than the named addressee of this valuation shall have any rights whatsoever against Airline Economics+ Ltd as arising out of or relating to this valuation under the Contract (Rights of Third Parties) Act 1999 or otherwise.



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