

Integrated approach helps improve aircraft valuation

Industry consolidation, combined with shifting operational and financial models, have put increased emphasis on valuation for companies that own or lease aircraft. Looking beyond a straightforward “appraisal” and taking a more strategic approach to valuation can help companies improve their financial positions. The proposed changes to lease accounting standards have raised the stakes even higher.



Within this fast-paced environment, PwC can help you gain an advantage. Our integrated approach to aircraft valuation considers accounting and financial reporting issues—as well as how the aircraft will be operated, maintained and leased. Working with PwC, you receive insight beyond determining “a number to book.”

Aircraft valuation and financial reporting challenges, at a glance

Changes in:

- Market demand
- Aircraft age
- Leasing terms
- Mergers & acquisitions
- Fleet composition or operation
- Lease accounting standards

Can impact these calculations:

- Maintenance reserves
- Residual value
- Useful life
- Relative value of specific aircraft components

PwC can assist with:

- Aircraft valuation
- Valuation model development or review
- Accounting or financial reporting compliance
- Segregation of aircraft value by component
- Useful life studies

Changes impacting the industry and your fleet

Interrelated issues regarding how aircraft is managed or operated can also impact your approach to aircraft valuation. Examples include:

- **Maintenance reserve calculations.** As your fleet ages and operating cycles change, you need a dynamic approach to calculating maintenance reserves and managing the inputs used in these calculations. Many companies create models to calculate and track ongoing

maintenance reserves. An independent assessment of reserve payments or the models used to calculate them can help improve reporting and satisfy the requirements of auditors, regulators and other stakeholders.

- **Residual value calculation.** For companies that lease aircraft, the residual value remaining at the end of the lease term is an important variable in financial management



and reporting. How do you calculate—and account for—residual values in your fleet? Operational changes can impact how companies value and account for their fleets, requiring a fresh look at valuation approaches and models. Taking a strategic approach to measuring and managing these values can help you make more informed choices in structuring, managing and reporting aircraft ownership and lease agreements.

- **Aircraft “componentization.”** Best practices in managing aircraft as a financial asset involve segregating an aircraft’s value into major components. How do you separately account for life, overhauls, values and residual values of components like engines, auxiliary power units, landing gear, airframe and in-flight entertainment systems? As an aircraft ages, its value will increasingly shift more to the engines rather than the airframes. Segregating values can also help streamline the replacement of components and retirements, for both financial reporting and tax.
- **Remaining useful life studies.** An asset’s accounting life can have a significant effect on depreciation and cash flows. A study of your fleet and its components’ useful lives can help you make informed decisions to maximize benefits for the company.

One company’s approach

The challenge: Our client, a leading aircraft leasing company, was continually adjusting new lease terms and the composition, maintenance and operating schedule of its fleet. As a result, the company was challenged in its efforts to calculate and track ongoing aircraft valuations.

The approach: PwC helped the client by providing input and oversight into new valuation models that allowed flexible inputs and tracked valuations for their fleet in

response to ongoing changes. The model produced detailed reports to assist with setting maintenance reserves, tracking current market values and residual values, and remaining useful lives of specific models of aircraft.

The results: The valuation model has helped the company streamline the financial reporting of its aircraft valuation and improve the management of its lease contracts. The flexibility of the model helps the company’s finance group keep pace with ongoing changes to the company’s fleet in response to shifting market demands.

The PwC advantage

PwC’s Aircraft Valuation specialists combine a deep knowledge of the industry with field-tested accounting and financial reporting experience. By bringing together professionals with extensive industry, valuation, technical accounting (US GAAP and IFRS), financial reporting, deal structuring, and tax expertise, PwC can offer something that most firms do not: an integrated valuation, accounting, tax and business advisory model.

We also understand how valuations are used to make strategic business decisions and to satisfy the needs of regulators, auditors, business partners and other stakeholders. As a result, you receive advice and deliverables that help you improve financial management, avoid surprises and close transactions more smoothly.

Doran McClellan who leads PwC’s aircraft valuation practice is a member of the International Society of Transport Aircraft Trading (ISTAT). He has years of experience assisting leading airlines and aircraft leasing companies with a range of valuation, accounting and financial reporting issues.

For more information

For assistance with your situation, please contact a member of our team

Doran McClellan
Managing Director, Aircraft Valuation Services
(415) 498-7935
doran.mcclellan@us.pwc.com

Matthew Tanner
Principal, Valuation Services
(646) 471-6296
matthew.a.tanner@us.pwc.com

Aircraft valuation credentials: Doran McClellan, Director



Office: (415) 498 7935
Fax: (813) 329 0420
Mobile: (415) 717 4180
Email: doran.mcclellan@us.pwc.com

Selected Aircraft Clients Served:

*United Airlines
Northwest Airlines
ATA Airlines
Horizon Airlines
Mesaba Airlines
Horizon Airlines
Air Wisconsin
Ford Air Services
Alaska Airlines*

Professional Experience

Doran V. McClellan has 35 years experience with the planning and execution of diverse tangible asset management services.

Doran's areas of expertise include construction cost analysis, cost segregation, tracking and valuation of machinery, equipment and real estate, as well as other related engineering services. Engagements are performed for many purposes including, planning and management, ad valorem tax, insurance needs, leasing decisions, purchase price allocation, financings and collateral, federal income tax reporting, as well as expert testimony in litigation and disputes. Prior to joining PricewaterhouseCoopers, he was a Director at Navigant Consulting and Huron Consulting Group and a Principal in Arthur Andersen's Valuation Services Group.

Doran provides leadership to the specialty team that develops replacement costs, market values and liquidation values for major assets, asset groups or entire facilities. The group estimates direct and indirect costs associated with building and equipment projects including architectural and engineering fees and installation. Other services include projection of future residual values and early buyout options, analysis of production capacities, and other cost engineering measurements. The group studies and documents asset mortality, including remaining life, asset age and maximum life as determined by physical wear and tear, functional characteristics, and economic conditions.

Fluent in Spanish, Doran has performed and supervised asset studies in Spain, Mexico, Caribbean, and throughout South America, as well as England, Ireland, Taiwan, Canada, Italy, Germany, France, Austria, Belgium, The Czech Republic, Portugal, Italy, Norway, Sweden, Malaysia, India and Iraq.

Educational Background

Bachelor of Science, Mechanical Engineering, Portland State University

Bachelor of Arts, Mathematics, Boise State University.

Professional Associations

Member, American Association of Cost Engineers

Associate Member, American Society of Mechanical Engineers

Member, American Society of Appraisers

Aircraft valuation credentials: Doran McClellan, Director

Professional Experience (cont.)

Doran has performed fair market value appraisals for Commercial Airlines including United, Northwest, ATA, Mesaba, Air Wisconsin, Jamaican and others for the purpose of establishing market values for Bankruptcy and Fresh Start Accounting purposes. The appraisals included all of United, Northwest, ATA, Mesaba, Air Wisconsin and Horizon Airline's Flight Equipment, Non-Flight Equipment, and Owned Real Property and Property or Assets held under Operating or Capital Leases. Doran also valued other fixed assets from other entities such as Mileage Plus, United Loyalty Services Midpoints and United CoGen, and other NWA entities.

Doran has also valued municipal airports and their holdings and leases, primarily for insurance, financial reporting or fiduciary requirements. He recently consulted on a pre-deal analysis of a major United States Midwest Airport for potential sale.

The major asset categories appraised include the following:

Equipment Aircraft – (owned and capital lease);
Spare engines;
Spare parts – (rotables, fixed recoverables, current recoverables and expendables);
In-Flight Entertainment Equipment;
Flight Training equipment;
Ramp equipment;
Ground Support equipment;
Computer equipment;
Jetways
Fuel Systems with Storage Tanks and Piping
Baggage Handling Systems
People Movers
Radar Systems

Real Estate Land
Terminals and Concourses
Terminal Improvements Owned and Leasehold Improvements
Commercial Airlines Counters, Gate Areas and Other Improvement
Airport Restaurants and Clubs
Maintenance Hangers
Airport Office Buildings
Other Airport Miscellaneous Buildings
Tarmacs and Runways

His experience includes multiple site visits to each airlines Maintenance Facilities. Flight Training Centers and many review of foreign operations. He has conducted numerous interviews with Commercial Airlines and Airport personnel regarding the existence, age, condition, and operational status of the subject fixed assets.

He has performed Property Tax Consulting Services for United, which included the creation of a valuation model to estimate the fair market value of United's aircraft for property tax purposes in California. The valuation models were designed to specifically measure functional and economic obsolescence to comply with agreements allowing the airlines to recognize those adjustments. The study was used as part of United's appeal regarding the assessed value in the State of California.

He led the team in performing Orderly Liquidation Analyses for United, Northwest and ATA's owned fixed assets, related to recent bankruptcy proceedings. The analyses included a site visit to each airlines major facility, a visual inspection of certain aircraft and spare parts and discussions with key maintenance personnel. A market analysis was performed to develop an opinion of the likely net proceeds potentially recoverable if they had to dispose of their owned fixed assets in a 90 day period or 180 day period.

Selected Aircraft Clients Served:

*Quantas Airlines
Hawaiian Airlines
Aloha Airlines
Jamaica Airlines
Allied Signal
CIT Air Leasing Portfolio*