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Trends and Market Analysis of Aircraft Values

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A330-200 Values Remain On Even Keel

2007 Orderbook Sees Important Jump

The combination of the delay in the B787, the absence of delivery slots in the short term for the Boeing product and sustained growth in the international sector prompted the placement of further substantive orders for the A330-200 in 2007, outstripping deliveries two to one and allowing values of the type to remain unchanged.

The year 2008 marks 10 years of service for the now almost ubiquitous A330-200. The "imminent" introduction – i.e. 2009 - of the B787 and the development of the A350 should have materially impacted values of the type but to date the demand for the A330-200 continues to be robust. While prices of new examples, in common with most aircraft types, have not enjoyed the type of increases that should be experienced during one of the most buoyant of periods for aviation, used values have bounced back from previous lows. In the period 2003-2005 the values of older used A330-200s dipped to below $45 million, considerably below values that were sometimes in excess of $65 million. Lease rentals had fallen from approximately $700,000 to less than $450,000. Demand for fuel efficient, medium-capacity widebodies from 2004 led to a rise in lease rentals such that values eventually recovered. Instead of offering prices of $45 million, the same aircraft were subsequently eventually sold for more than $65 million. A few owners accepted low opportunistic offer prices but fortunately most sought an interim medium-term lease until the market improved once again.

In the absence of large number of orders for the four-engined A340 due, in the main, to higher fuel prices, the A330-200 has needed to become the mainstay of widebody production. The type has therefore been pushed hard and pricing has sometimes had to be competitive, something which remains evident despite current demand and a weak dollar. The values of new A330-200s, based on single-unit disposals, have been fortunate to breach $100 million, a circumstance that has persisted for two or more years despite the improvement in used pricing. Even $95 million for a new example is considered high by some even though the very few passenger B767-300ERs delivered in 2007 are still valued at more than $83 million. Where a number of new A330-200s are being bought, net pricing can be very competitive, particularly if accompanied by strategic pricing which seeks to wrest a customer away from Boeing. Doric Asset Finance recently announced an A330-200 transaction involving Air Mauritius which included an indicated purchase price of $88 million, an attractive figure for the expanding lessor. The fixed lease rate of €497,538 per month also indicates how strong the current market is for the type.

Orders for the A330-200 in 2007 were particularly notable. A total of 85 new orders were announced with 66 for the A330-300 also reflecting renewed enthusiasm for the type. The A330-200 order book now totals 475 compared to 329 for the A330-300. With 285 A330-200 deliveries having been made, the backlog of 190 should see Airbus through to nearly the service entry of the A350. A total of 42 A330-200 deliveries were made in 2007 such that the backlog of 190 equates to nearly five years production. With 25 deliveries of the A330-300 in 2007, the backlog of nearly 100 represents some four years production. Orders for the A330-200F amount to 66.

The delay in the service entry of the B787 is one reason why the market for the A330-200 remains strong while new orders for the B767-300ER have withered. While the backlog for the A330-200 may equate to nearly five years, there are still gaps in the schedule which allows Airbus to satisfy demand from those customers who are unable to obtain B787s until 2012 and beyond.

The introduction of the type represented a significant change in design philosophy for Airbus though it failed to change attitudes sufficiently quickly to avoid the development of the A340-500 and -600. Airbus recognized that a twin-engined widebody could be used on longer routes, as illustrated by not only the B767-300ER but also the B777-200ER. By downsizing the existing A330-300, the inherent greater fuel capacity enabled longer sectors to be served. However, downsizing an existing product brings its own problems in terms of excess weight. Airbus has had to work hard to ensure that some of the negatives of the A330-200 are outweighed by the positives. ✈

ATP Lease Rentals Sustained By New Conversions

The ATP market is showing signs of improvement albeit through conversion of passenger units to freighters.

The market for the ATP has experienced considerable problems over the years, owing to a limited operator base and a preference for the Dash8-400 and ATR72-500. However, as is the case with other turboprop programs such as the ATR, the appetite for freighter use is allowing lease rentals to stabilize.

BAE Systems Regional Aircraft announced long-term leases with UK freight carrier Atlantic Airlines, for a further six ATP Freighters. This will take the Atlantic fleet to 11 aircraft. BAE regional have 32 ATP aircraft in their portfolio while another 27 are owned by other companies. Of the 32 BAE aircraft, 17 have already been converted to freighters with another three due to be converted. These aircraft have a Large Freight Door (LFD) allowing the carriage of pallets and containers. Another five BAE aircraft are E-Class bulk freighters. Of the remaining passenger aircraft, three are on long-term lease to SATA while another three are in storage. Of the remaining 27 non BAE aircraft, a further two are already fitted with the LFD while another 19 are converted or committed to the E-Class bulk freighter conversion program.

Consequently a significant proportion of the fleet has already been converted to freighter, reducing the number of passenger examples on the market by a significant amount. Of the total 59 ATPs in, or available, for commercial service, 41 are already serving the freight sector. This results in very few opportunities for future conversions. Operators of the ATP freighter, apart from Atlantic, include First Flight Couriers and West Air Sweden.

The list price of incorporating the LFD is $750,000 and the conversion requires some five months. The E-Class freighter, if undertaken separately, takes a further three months. The desired lease rental for an E-Class freighter approximates $45,000 per month plus reserves and a contribution to the E-Class conversion. A fully converted ATP with a Large Freight Door will see a BAE seeking a rental of $60,000 per month plus reserves.

The demand for the ATP and other turboprops stems from the better operating economics in an era of high fuel prices. Horizon Air of the U.S. is contemplating moving to an all Dash8 fleet, disposing of its CRJ jet fleet. In 2007, ATR recorded a total of 113 new orders as well as options for a further 26 units. Of the 113 orders, 74 were placed by new customers for the type, underlining the continued expansion of the customer base. With ATR delivering only 44 aircraft in 2007 the new order intake is resulting in an extension of the backlog. However, ATR expects to deliver 60 new aircraft in 2008 and is seeking further rises in the coming years in anticipation of sustained demand. The turnover of ATR has doubled since 2005 and increased by more than 50 percent for 2007 compared to the previous year.

However, the problems being encountered by Bombardier over the withdrawal of the SAS Dash8Q-400 fleet continues to overshadow values for the type. At the time of the withdrawal of the type, values for the -400 fell by some 10-12 percent, more due to the perceived influx of units into the used market than as a result of concern over any design issues. Values have yet to improve. ✈

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Economics of Beech 1900D Fail to Prevent Demise

Values of the Beech 1900D, already under pressure owing to increased enthusiasm for larger equipment, are experiencing further problems as the U.S. economy takes it toll on short-haul flights.

A number of Beech 1900D operators have been forced to pull the plug on operations. Mesa Air Group has needed to dissolve Air Midwest, an operator of some 19 Beech 1900Ds. Colgan Air operates 10 Beech 1900Ds and intends to retire the type by the end of this year. Midwest Airlines is also reportedly seeking to close down Skyway Airlines, an operator of 10 Beech 1900Ds as well as 12 328JETs.

In a period of high fuel prices the turboprops should be enjoying renewed demand. Production of the Beech 1900D only ceased in the last few years making it the last 19 seater to be built. Values of the Beech 1900D and other 19 seaters have in any case been under pressure as a result of operators seeking larger equipment to make better use of resources. More recently, the faltering U.S. economy has reduced both disposable income as well as business travel from destinations served by the smaller aircraft types. Combined with the high price of fuel, the smaller aircraft have become increasingly uneconomic. There have always seemed to be a high number of Beech 1900D aircraft on the market at any one time but recent announcements make it increasingly difficult to allow values to remain at current levels.

The type may have a role in the freight sector but in view of the number being released in the coming months, demand from this source will be insufficient to prevent a surplus. ✈

Out of Production Narrowbody Lease Rates

First Generation Stage 3 Rental Ease

The fall in interest rates has begun to have an impact on lease rentals. Financial uncertainty has also played a role in making the market more cautious, particularly where certain types carry greater risk.

There are some older narrowbodies that continue to benefit from the Ripple Effect whereby the lack of availability of more modern equipment has forced airlines to seek capacity from those no longer in production. The operating lease rates below, provided by The Aircraft Value Analysis Company www.aircraftvalues.net, are for indicative purposes only. Rentals are quoted in US dollars per month and exclude maintenance reserves. They assume a medium credit, average return conditions and an average lease term. Lease rentals for actual transactions may differ. European specification, weaker credits and short lease terms may warrant a higher rental. ✈

Narrowbody Dry Lease Rates (Dry) US$ '000s per month – February 2008

Aircraft	Age	Rental	Trend Analysis
B707-320CH	**1968-74**	**10-20**	**The easiest way to double the value of a B707 is seemingly to fill the fuel tanks! Lease rentals have failed to perform any better such that they remain at very low levels. Power-by-the-hour agreements are much more likely for such vintage aircraft such that maintenance costs are also covered. Once the Queen of the Skies but now earthbound.**
B727-100H	**1967-71**	**15-25**	**The market for the hushed is very subdued not least because of the limited number in service. Rates are barely impacted by external forces.**
B727-200H	**1969-71**	**15-30**	**The time for the -200H has long since passed such that the hushkit seems a very expensive option.**
B727-200HADV	**1975-79**	**30-50**	**The market for the -200HADV remains despite age, efficiency and flight crew costs. In the absence of readily available alternatives, there are a number of carriers who have little option but to carry on operating the type. With the variation in the financial standing of the lessee, the term and the aircraft, there can be a range of appropriate rentals. Reliability remains a key issue for those seeking to maintain a high level of utilization.**
B737-200H	**1968**	**-**	**The -200 has no relevance in the leasing market.**
B737-200HADV	**1978-84**	**30-60**	**The number of -200HADVs remaining in service always comes as something of a surprise in view of the large number of replacements now available. Lease rentals can range by a considerable amount due to the differences in terms. The rates must however, be seen in the context of changing market conditions which is seeing ever decreasing interest in the type.**

BAe146-200	1984-88	40-60	The age profile of the BAe146 now stretches back for nearly 25 years. Contemporary types such as the MD80 have been facing problems for many years which contrasts with the more steady performance of the -200. The type still has considerable merit as illustrated by those aircraft that remain in service with prime operators. The move to the RJ is however, a negative.
BAe146-300	1988-92	45-75	The larger capacity of the -300 offers more attractive seat mile costs particularly for those operators experiencing greater traffic. Compared to modern regional jets the -300 represents a bargain. However, the market is changing and the appetite for the type is not what it once was.
BAC1-11-400	1970	15-30	The BAC1-11-400 can virtually be leased for small change though maintenance reserves will likely require slightly more investment.
F28-4000	1977	15-25	The price of the F28-4000 is such that it now equates to the price of a house in Western Europe making a vanilla operating lease less appealing.
Fokker 100	1988-93	40-60	Hard work amongst the owners of the Fokker 100 has enabled lease rentals to register an improvement. Though finding willing lessees is still not easy despite the strength of the market, the type is experiencing better fortunes than those of a few years ago. There should yet be some opportunity for stability in rentals.
Fokker 70	1994-96	40-50	The number of Fokker 70s in service is limited but the appetite for the variant remains very fragile. There exist a number of rivals featuring better operating economics such that demand for the Fokker 70 stems from availability and price.
DC9-30H	1968-75	20-30	There continues to be some demand for the DC9-30H but this remains limited. Lease rates can exhibit considerable variation but the overall trend remains depressing.
B737-300	1985-89 1990-95	90-130 110-160	The market for the B737-300 continues to remain reasonably resilient. The inability of the manufacturers to build aircraft fast enough to meet demand combined with the sustained growth of the market means that operators have little option but to continue to use the B737-300. The preference is clearly for those in better condition. Rentals in excess of $160,000 per month would seem to be exceptional and rare. The number on the market has been steady at around 30 for nearly a year though this still represents a small proportion of the fleet. Lessors simply do not have to advertize.
B737-400	1989-93	105-165	The demand for the -400 is strong even though performance characteristics are somewhat compromised. A great many operators do not require absolute range nor seek to push payload/range envelopes. As a result lease rentals remain strong though as newer aircraft types deliver in number, some weakness is expected to appear in the short term. Only a single unit is currently being advertised for sale or lease demonstrating how quickly aircraft can be placed.
B737-500	1991-96	90-145	The demand for the -500 continues to be consistent although in contrast to the -400 availability is slightly higher. The demand from operators in Eastern Europe and Russia is notable and this is helping to keep lease rentals at current levels. With the expansion of this market segment, there may yet be further demand.
MD82	1982-89	40-75	The MD80 series continues to experience considerable difficulties in terms of relative attraction. The type has failed to take advantage of the demand for capacity and lease rentals, therefore, remain in a backwater. Power-by-the-hour arrangements may generate more revenue than straight leasing. The number being advertized are less than 10 but this obscures the fact that some are simply not being advertised.

MD83	**1986-93**	**50-90**	**Expectations of rentals topping $100,000 remain just as much a forlorn hope as it did 18 months ago. The type may have better performance than other MD80 examples but, with so many more leased, the competition to place aircraft is that much more intense. There are now some 30 being advertised for sale or lease, a figure which is rising rather than falling. Rentals may be higher only because of leases to weaker credits on shorter terms.**
Commentary reflects change over the previous three months.			

Regional Jet Current Values

50-Seat Regional Jet Values Need Realism

There is no clear cut trend line in evidence for the 50 seaters. Production has all but ended demonstrating that the market has moved on and upwards while at the same time there remains sufficient interest in the type to keep availability at low levels.

Despite the demand for the 50 seaters, values are beginning to reflect out-of-production status. The youngest aircraft are usually the most vulnerable to declines in values. This is due to the limited differentiation in terms of specification between the oldest and newest as well as lesser difference in terms of maintenance status. Operators are not willing to pay a substantial premium for a newer aircraft if it performs the same as one which is five or more years older.

Values of the larger, more modern regional jets, remain firm. This sector has traditionally been dependent on manufacturers taking a more significant risk in developing the type and then waiting for larger scale orders to emerge once full production has started. This contrasts with the experience of Airbus and Boeing whereby they are able to depend more on a number of launch customers.

Values are in Millions of US Dollars and are based on The Aircraft Value Reference published by The Aircraft Value Analysis Company www.aircraftvalues.net.

An Aircraft Rating has been included for the first time for regional jets reflecting the suitability of the type for asset based financing over the medium term with a range of A++ (best) through to E—(worst). ✈

Regional Jet Current Values US$m – February 2008

Aircraft	Age	Value	Rtg	Trend Analysis
BAe146-100	**1983** **1988**	**1.1** **2.2**	**D--**	**The values of the -100 have exhibited a modest fall over the course of the last six months despite the improvement in availability. The value of the -100 is even less than a similar vintage Saab 340 demonstrating yet again that size is no indicator of value. However, at current values the -100 still represents a bargain particularly as operating costs can be largely contained through fixed cost arrangements – except of course for fuel.**
BAe146-200	**1985** **1993**	**1.5** **3.9**	**D-**	**To some extent values of the oldest -200s have reached a point such that further declines would equate to scrap levels. As such, most of the decline has focused on newer examples, those built at the end of the production run. The level of -200 availability has been rising such that an excess has been evident for some months contrasting with previous improvement. The delivery of new types continues to erode the traditional market for the -200 as does the move to the RJ.**
BAe146-300	**1988** **1993**	**3.1** **4.3**	**D-**	**In the past there was sometimes an inclination to assign a $1 million premium to the -300 but this was never really considered appropriate. Some 25 percent of the -300 fleet remains on the market but the BAE team continues to make headway in placing aircraft. The values of the youngest -300s have fallen but in the context of a very competitive segment of the market the trend is reasonably positive. Lease extensions continue to play a role in containing availability.**
Avro RJ70	**1993** **1996**	**4.2** **5.8**	**D**	**For once availability of the RJ70 appears to be non existent. There are only a few in service in any event and other uses are being sought including corporate use. The type is considered a niche variant and continual value erosion must be expected for those in a commercial configuration.**

Avro RJ85	1993 1998	5.3 7.8	D++	The asset management team have been working hard to expunge the excess. A year ago there were nearly 20 being advertised not least because of the disposal by Northwest. There are now none on the market. Despite the competition, the RJ85 has known costs and in view of more limited sector lengths, the fuel component of direct operating costs is less significant than for other types. The potential for freighter conversion in the future will do much to prevent residual values from exhibiting a marked decline.
Avro RJ100	1993 1998	5.9 8.5	D++	There are a few RJ100s on the market though this is perhaps a consequence of other factors than demand. The type has considerable merit as evidenced by the operator base. Though in operation in relatively limited numbers the capacity and capability of the type ensures sustained interest. Lease rentals have recovered from the lows of a few years ago.
CRJ100ER	1993 1998	5.3 8.3	D-	The earliest variant of the modern generation of 50-seat regional jets is showing its age such that values have been declining. The availability of newer types and the appetite for larger capacity is making it necessary for pricing to be more realistic.
CRJ200ER (U.S.)	1996 1999 2001 2003 2005	7.9 10.3 11.7 13.2 14.8	C--	Only a few years ago the CRJ200ER held a pre-eminent position in the market but the market structure has changed and with it demand patterns. The values of the aircraft have experienced a decline, a trend that is expected to continue. However, the efforts to find alternative uses and the ability to place equipment has been noteworthy. There are only some 16 CRJ100/CRJ200s being advertised.
CRJ700 (U.S.)	2000 2003 2005	14.5 18.5 20.9	B--	The CRJ700 has become part of the establishment and can no longer be considered to be the newcomer. The values of the type have fallen slightly but only a modest amount. The arrival of new types of varying capability ensures that demand does not exceed supply. The turboprops are once again major competitors.
CRJ900 (U.S.)	2002 2005	19.2 24.5	B-	The ability to offer operators lower unit costs is particularly important in a market that is facing higher fuel bills. Despite the competitive imperatives that now surround operators in the U.S., there continues to be restrictions on the size and number of larger regional jets than can be flown. As such agreements are renegotiated in the coming years, the demand for such aircraft as the CRJ900 can be expected to increase.
ERJ135ER (U.S.)	1999 2001	6.4 7.7	D+	The smaller commuter jets only really offered sufficient competitive advantage in an era of low fuel prices and high yields. The jet efficiency of the ERJ135ER still, however, remains for the longer sectors which prevents values from experiencing a major decline.
ERJ145ER (U.S.)	1996 2001 2003 2005	7.0 10.9 12.1 13.9	C--	While production continues in China, Embraer are now necessarily focused on new markets such as the Phenom and the expansion of the E-Jet range. The ERJ145ER is facing a measure of weakness as a result of this change in focus but demand in the used market is such that availability is virtually non existent.
Embraer 170Std	2003 2005	18.9 21.6	B--	The demand for larger equipment is growing but thus far values of the E170 have been only modestly impacted. The type continues to be held in high regard due to its mainline type interior. As with any new model, a number of defects were apparent in the early years but these have now been resolved.
Embraer 190	2005	25.9	B-	The values of the E190 have fallen slightly but this is more a reflection of airframes and engines declining to half life maintenance status. The type is proving itself a viable product in the regional jet sector with the E195 also in demand.
328JET	1999 2001	3.3 3.6	E-	Value convergence is all evident for this aircraft type. The market is fragile and values will continue to experience weakness as operators continue to ponder the alternatives. Yet a number have been converted for corporate use and as such values of more than $7 million are possible.

Fokker 70	**1995**	**3.2**	**E+**	**The values of the Fokker 70 have managed to achieve a measure of stability but only after a period of wringing of hands. Availability seems to be negligible though this can change at any time.**
Fokker 100	**1987** **1993**	**2.5** **3.5**	**E+**	**For once the values of the Fokker 100 are virtually unchanged. The support of the type is sufficient to allay concerns of operators and compared to the cost of modern alternatives represents something of a bargain.**
Commentary reflects changes from last update of September 2007				

Aircraft Value Review—MD87

MD87 Values Fail to Inspire

The number of MD87s in storage underlines the lack of attraction of the type.

Out of an original fleet of 75 there are at least 12 currently in storage. Values and rentals of the MD87 have therefore continued to slide as the type has been the focus of fleet replacement and increasingly faces concerns over noise, the preference for newer types and rising maintenance costs.

In the 1980s McDonnell Douglas sought to offer competition to the increasingly popular B737-300 by downsizing the basic MD80 series fuselage. Instead of incorporating a maximum of 172 passengers of other MD80 series aircraft, the MD87 can accommodate only a maximum of 139. The MD87 incorporated the cruise performance improvement package including a fillet fairing between the wing and fuselage as well as improved sealing on the horizontal tail and low drag flap hinge fairings. The MD87 was also offered with optional front and rear cargo compartment auxiliary tanks. The type was also the first to feature Electronic Flight Instrumentations System (EFIS) and a Head Up Display (HUD) as standard which has been used extensively by SAS.

MD87 Vital Statistics					
LAUNCH (MD80)	10/1977	STANDARD MTOW	140,00	LIST PRICE (IN 1992)	N/A
FIRST FLIGHT	12/1986	OPTIONAL MTOW	149,500	TYPICAL DISCOUNT	N/A
SERVICE ENTRY	10/1987	FUEL CAPACITY	5,779 USG	VALUE Y1987	$2.5m
ORDERS	75	FUEL - OPTIONAL	6,939 USG	VALUE Y1992	$3.8m
DELIVERIES	75	RANGE–130pax LGW	2,372nm	VALUE TREND	DECLINE
AVAILABILITY	1	RANGE- 130pax HGW	2,833nm	2010 F/V – Y1987	$1.5m
OPERATORS	8	CARGO	938 cu ft	2010 F/V – Y1992	$2.5m
ENGINE TYPES	JT8D-217C, -219	PAYLOAD	38,726lbs	LEASE RATE – DoM1989	$65,000pm
VARIANTS	PAX, EXEC	MZFW-STD	112,000	RENTAL TREND	STEADY
D CHECK COST	$0.9m	MLW-STD	128,000lbs	2010 LEASE RATE –DoM1989	$50,000PM
ENG O/H COST	$0.7-2.0m	CABIN WIDTH	142 inches	AIRCRAFT RATING	E

Even as a variant of the MD80 program, sales of the MD87 proved disappointing. A total of 75 were sold, delivered between 1987 and 1992. The type found favor among existing MD80 operators but for most, the B737-300 represented the most cost effective 120-130 seater. The type continues to be concentrated in the hands of just four operators – Aeromexico, Iberia, JAL and SAS. There are only another four operators though there are additional private operators.

The limited number in service and restricted operator base has inevitably had a detrimental impact on values. Even during the boom period of the late 1980s, the MD87 was perceived to be much less attractive than the increasingly ubiquitous B737-300. Limited remarketing potential has therefore translated into weaker values and rentals. During the current period of growth, the MD87 has still failed to capitalize on the improved market conditions and the absence of alternative equipment while the appetite for the B737-300 has seen a recovery in values and lease rentals.

Arguments put forward to support stronger current values place emphasis on family commonality. The concept of a family is indeed important for the integrity of values. However, such integrity comes from adding value to other family members. Such value comes from providing sufficient individual economic performance and operational flexibility to counter the competition on a virtual stand-alone basis. These attributes should then translate into a reasonably diverse operator base. With only some 60 units in commercial service, the MD87 must be considered a marginalized variant with all the negative connotations that such designation bestows. Yet there exists some validity in expecting that the limited number of MD87s in service could see at least some stability should there be demand from a single source. A revival of interest in the type as an executive transport is a possibility though conversions will be few in number.

Future values of the MD87 in a commercial passenger configuration have therefore continued to decline as predicted. Even though the oldest Stage 3 MD87 is only just over 20 years of age, the same as the youngest B737-200ADV, the two types are placed into the same category.

Aircraft Asset Assessment
The MD87

Market Presence. The MD87, though incorporating some refinements when compared to the standard MD82, nonetheless is considered to belong to an older generation. The MD87 features EFIS and HUD that improve cockpit efficiency. The structure may be sound, building upon the integrity of the DC9, but systems are showing their age. The engines in particular are the most vulnerable components in the current period of rising fuel costs and noise issues even though a Chapter 4 hushkit is now available. The operational capability of the MD87 at just over 2,300nm, was improved by the optional incorporation of a higher MTOW and additional fuel tanks. The size and range performance of MD87 made it more attractive to the executive market. Only the JT8D powers the MD87. The –217C was the standard but the –219 could be selected as an option. Most MD87s are powered by the –219. The MD87 sought to compete against the B737-300 as well as provide a means of upgrading from the DC9 series. The MD87 now competes against the A319, B737-700 and B737-300.

Market Outlook. The MD87 failed to compete effectively against the B737-300. Even as an upgrade to the DC9, which possessed an expansive operator base, the 75 orders reflected a severe lack of interest. The operator base of the MD87 is severely restricted though some carriers are long standing operators. Attraction has become relevant to existing operators rather than the financial community. Those that are seeking to finance the aircraft are likely to be focussing on lease rentals as the source of profitability rather than residual value. At one time, the type seemed destined to become an executive transport. Although a few MD87s are used in the executive role, the availability of a wider range of modern corporate jets is serving to limit its potential in this role. As a passenger aircraft, the MD87 will continue to see some demand but like all MD80 series, the variant is finding the changing market structure difficult to cope with.

B747-400 Residuals Need to Reflect Retirement in Favor of Newer Types

The values of B747-400s are currently riding high, buoyed by the delay in the service entry of the A380 and exceptional demand from the freighter sector, but with a number of operators considering replacements residual values need to reflect future market realities.

The values of the B747-400 have enjoyed a significant improvement over the course of the last three years. Offer prices of below $25 million for B747-400s were sometimes accepted during the depths of the last recession due to a lack of appreciation that the market would rebound. Despite advancing age, today pricing of less than $40 million for similar aircraft is a rarity. Demand for the aircraft has recovered as a consequence of foreseeable events; the need to replace ageing freighters; the expansion of the international markets; and to a lesser extent, the lengthy delay in the service entry of the A380. With no new deliveries of the B747-400 passenger version since 2005, the type is currently in short supply. Airlines that had previously sold -400s have since been forced to lease the same type to meet demand.

Such demand for the B747-400 will not last forever. With 189 orders for the A380 and a sizeable backlog of 214 for the B777-300ER, the prospects for the B747-400 are likely to be negative in the medium to long term. All Nippon Airways (ANA) has announced that it intends to retire all 19 of its B747-400s by 2012. Even the A380 is being considered by the operator. British Airways, now able to record consistent profits, is expected to announce a decision on its long-haul replacement by the end of the year. BA currently has one of the largest B747-400 fleets numbering nearly 60. Even if conversion slots could be secured, such a fleet could not be easily absorbed by the freighter market.

Residual values of the B747-400 are therefore expected to decline in the medium term. Some estimates for a mid 1990s passenger B747-400 already show a 40 percent fall in value over the course of the next five years while others show a more modest 25 percent.