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Third delay of the A380 “likely,” says ILFC chief

Steven Udvar-Hazy, the chairman of giant International Lease Finance Corp., said Friday that a third delay for the Airbus A380 is likely. Problems with the wiring systems required for customization of the complicated interior systems are reported to be worse than thought and that another delay may be announced soon.

ILFC is one of the launch customers for the A380. Deliveries of the company’s first airplanes, which are slated for Emirates Airlines, another launch customer, are already 13 months behind schedule. Hazy, appearing before a crowd of about 100 people Sept. 8 at a dinner sponsored by enthusiast magazine *Airways*, said a further delay is likely. There was a table of Boeing sales persons at the dinner, held at the Museum of Flight in Seattle.

We learned of the possible further delays earlier Friday. A meeting is said to be scheduled for September 18 for Airbus to decide how to deal with the new delays. Singapore Airlines, which is scheduled to receive the first A380 in December, may get the airplane in a ceremonial delivery, with the aircraft immediately returning to Airbus for further work, two sources said. As few as four airplanes, down from a revised schedule of seven, may be delivered next year, the two sources told Leeham Co., including one A380 customer.

We queried Airbus and got this response:

Christian Streiff [the new Airbus CEO] said at Farnborough that he would be conducting a thorough analysis of the program and report back to customers and others the results of that analysis by the end of September. Nothing has changed in this regard, and the analysis is continuing. I am not going to prejudge Mr. Streiff's conclusions by offering any opinions on what he might decide at the end of the month. Furthermore, Airbus does not make it a habit to respond to rumors.

An Airbus spokesman could neither confirm nor deny the September 18 meeting or the possibility of a “ceremonial” delivery to Singapore.

Reports, but no details, that the situation over the A380 problems was worse than expected surfaced when Charles Champion, a co-COO of Airbus and Head of the A380 program, was replaced September 4.

Production cost of the A380 estimated

A major study by an analyst for Morgan Stanley’s aerospace analyst in London provides a detail examination of the Airbus A380 program, including contributions by A380

supporter Prof. Philip Lawrence and A380 critic Richard Aboulafia. The study includes financial analysis of the program based on their scenarios plus a base-line scenario by the Morgan analyst, Scott Babka.

Among the items in the three scenarios Babka looks at is the direct production cost of the A380, a figure always held in strictest confidence by Airbus (and Boeing). Considered highly competitive information, the cost naturally has a direct bearing on what the manufacturers can charge for their airplanes and the affordable discounts.

We've posted the entire 35 page document on our web site, so we won't recap all the data in this column. To summarize, Babka concludes that the direct production costs per A380 between now and 2015 ranges from \$112 million to \$118 million. Allocation of research and development costs and depreciation of tooling, plus fixed costs, ranges from \$6.7 million to \$12.3 million per airplane over the same time period.

The financial analysis also includes forecasted EBITDA contribution from the A380 program, total free cash flow and more.

The report includes full-length arguments supporting the A380 program and opposing it. These speak for themselves in the full report. We did, however, spot a small error in Exhibit 26 on Page 21 of the report in the opposing analysis.

Comparing the numbers on the table with the Boeing specifications, the 747-400ER MTOW is understated as 875,000lbs (actually the -400 standard) instead of 910,000, an easy mistake to make when checking the Boeing web site if one doesn't scroll down far enough; and the 747-8 is understated as 960,000 vs. 970,000, probably a typo. These differences change the calculations slightly in favor of the A380 in the comparison, but not materially.

But the fallacy of all those numbers is that the airlines can put whatever number of seats they want into the plane. The 747-100s of American Airlines had something like 270 seats and a piano bar, for example—the size of the DC-10-10.

More to the point currently, Singapore Airlines, for example, is putting in just 474 seats in the A380 (hence the passenger count of the A380 of the recent 'full-service' flight test by Airbus). This, of course, balloons the A380 per-seat MTOW to 2604.

To even the playing field (an over-used term), if you max out the capacities in all-coach, you get far different comparisons for the per-seat MTOW:

The A380 comes in at 1447.

The 747-400 comes in at 1548.

The 747-400ER comes in at 1620.

The 747-8 comes in at 1470.

(We could not find on the Boeing website the maximum, single-class capacity of the 747-400/400ER [nor of the -8]. An inquiry to Boeing yields a figure of 565 for the -400 and an “exit limit” of 660 for the -8.

Thus, we see the per-seat MTOW for the -400 and the -400ER are well above the A380. The 747-8 is not materially different but still higher than the A380.

The wider A380 has a far more comfortable coach cabin and upper deck than the 747.¹

According to an Airbus study for its 2004 GMO, the average seating capacity for the 747 was not the Boeing-published 416 but rather 378 (see our column of Aug. 29). In this case, the 747-400 per-seat MTOW comes in at 2314 vs. the A380’s 555 at 2224.

The critique of the A380, suggests that Airbus could reasonably add “a few dozen” more coach seats to the 555 capacity. We don’t know what “a few” means, but assuming it’s 24, taking the capacity to 579, then the per-seat MTOW is 2132, below the (corrected) per-seat MTOW of 2156 for the 747-8 and below the (corrected) figure of 2188 for the -400ER.

Since the A380 at 10 abreast might find it weird to put 12 or 24 more seats in, let’s say an even 20 (two rows) of seats are added. This then produces a per-seat MTOW of 2147, still a favorable comparison to the 747-400ER and -8. Seat pitch is largely unaffected with one more row on the upper and main decks, Airbus tells us.

It will be interesting to see Boeing’s revised MTOW numbers for the 747-8i stretch, the passenger version that will be the same length as the freighter, seating 496 in 3-class.

(Continued next page.)

¹ At the maximum 10-across coach seating, the A380 seat width is 19 inches and the 747-400/400ER and -8 is 17.2 inches. The 747 upper deck is, in its best description, cozy, and at its worst, cramped. The A380 upper deck is comparable to the lower deck.

Curious, we added every 747 model (except –SP) for comparison since the original -100 series. Here are the results:

	2 Class	3 class	Max Pax	MTOW	Wt/Seat 2 class	Wt/Seat 3 class	Wt/Seat Max Pax
A380	N/A	555	853	1234580		2224.468	1447.339
A380	N/A	474		1234580		2604.599	(1)
747-100	452	366	539	735000	1626.106	2008.197	1363.636
747-200	452	366	539	833000	1842.92	2275.956	1545.455
747-300	496	412	565	833000	1679.435	2021.845	1474.336
747-400	524	416	565	875000	1669.847	2103.365	1548.673
747-400		378		875000		2314.815	(2)
747-400ER	524	416	565	910000	1736.641	2187.5	1610.619
747-8	537	450	660	970000	1806.331	2155.556	1469.697
(1) Singapore configuration (2) Average capacity 2004, computed by Airbus in Global Market Outlook 747-8 Max Pax of 660 is "exit limit"							

What’s the point of this exercise? The manufacturers, analysts and pontificators such as ourselves can plug in any numbers we want, whether reasonable (like adding a mere 20 more seats to the A380) or unreasonable (like going to maximum capacity in all examples, something only the Japanese airlines did when operating 747s domestically) to get almost any result desired. Thus the reader of all data, whether from Boeing, Airbus or anyone else, should be taken with a certain amount of skepticism. Until the planes are actually in service, the projections are simply that.

Even accepting the math that suggests the A380 is 69 lbs heavier per seat than the 747-8 at the respective capacities of 555 and 450, as a coach passenger we’d rather spend 12 hours in a 19 inch seat than a 17.2 inch seat. There’re just no butts about that.

Finally, critics of the A380 program continue to cling to the forecast that only 300-400 of these will be sold over 20 years. This ignores Boeing’s own VLA forecasts, revised upwards, of 990 VLAs during this time period. Boeing’s 747 program head, Randy Tinseth, says Boeing will claim 50% of this market. Airbus claims it will have 50% of the VLA market. If one accepts these numbers, that’s 990 divided by two is 495. By this standard, the A380 is already doing better than the pessimistic forecasts.

A380 program head ousted

Last week was a busy week in aviation leadership: Boeing’s Alan Mulally goes to Ford, Scott Carson gets elevated from his chief sales position to succeed Mulally, James Jamieson returns from Boeing headquarters to join Carson’s CEO spot in a newly created position of COO and Airbus CEO Christian Streiff removes Charles Champion as Airbus COO and Head of the A380 program.

Champion was named a special advisor to Streiff, following a similar move when Airbus CEO Gustav Humbert stepped down in July, also being named a special advisor.

It's been noted by several observers that former Airbus Chairman Noel Forgeard received no such consideration when he resigned over the furor of the A380 delays and charges of insider trading, which are now under investigation by securities authorities in Europe.

BAE decides to go ahead with stock put to EADS

BAE Systems, stunned earlier this year with a lower-than-expected valuation of its 20% shareholding in Airbus, nonetheless decided to recommend to its shareholders that the company exercise its put option to sell the shares to Airbus parent EADS.

BAE announced its intent to dispose of its shares in April. Since then, the delays of the A380 program were announced, which will cost Airbus \$2.5 billion in cash flow over the next five years. A complete redesign of the A350 was also announced, nearly trebling the development costs of this airplane to an estimated \$10 billion.

We've previously written about these cash requirements on top of the \$3.5 billion now needed by EADS to buy the BAE shares. We've speculated that as a result of the cash flow pressures that Airbus will tap government launch aid for the A350 development.

So we posed several questions to EADS' home office in Munich and got the answers as follows:

- Airbus cash requirements amount the billions of dollars over the next several years with the development of the A350XWB, A400M, A320E, potentially the successor to the A320, and the short-fall due to the A380 program. Airbus provides most of the cash flow to EADS. How will EADS pay for US\$3.5bn to buy back the BAE shares? (Officials had previously stated EADS may issue stock or use cash.)

Answer: First of all: For the A400M we receive payments at defined customer milestones. Furthermore a lot of EADS cash flow comes from the various defence businesses. With regard to the payment of the BAE shares: EADS-CFO Hans-Peter Ring indicated at the H1/06 analyst call in July, that EADS will most probably pay in cash. We currently have more than 5bn Euros net cash.

- Given the additional cash outlays required, has this approach changed? Will debt be issued? Will assets be sold?

Answer: Since then nothing has changed. EADS has a strong balance sheet. It is not planned to issue debt. As we are continuously looking at what we really have to do in-house, we cannot exclude that on the long-term the one or other asset could be sold. One recent example is SOGERMA.

- Will Airbus tap launch aid for the A350 to ease the internal cash requirements?

Answer: This question is to be answered as part of an industrial launch decision for the A350 XWB programme. Preparation of this decision is ongoing. Various options are being considered.

- EADS had approximately US\$5bn in free cash at Dec. 31. What is the current level?

Answer: Net Cash has been 5.25 bn Euros on June 30, 2006 compared to 5.49 bn Euros on December 31, 2005.

Airways Magazine dinner

Airways, an enthusiast magazine, dipped into new territory by hosting a cocktail party and dinner, the first of what it hopes will be a tradition, at the Museum of Flight in Seattle. Entertaining photos of airlines and airplanes past and present, a hallmark of the magazine, were presented in slide shows set to Madonna and other pop artists. But the headliners were Bill Ayer, chairman of Alaska Air Group, and Steve Udvar-Hazy, chairman of giant International Lease Finance Corp. Alaska, Boeing and Aviation Partners Boeing were among the sponsors of the event.

Ayer noted that Alaska Airlines is approaching its 75th birthday and presented four retro color schemes for vote by the audience (through applause) for application on a new Boeing 737-800. A final vote will be held by employees.



All photos from Airliners.net

Ayers clearly liked the Golden Nugget scheme, while the audience preferred the silver-metal livery of the Douglas DC-3 that hangs in the Museum of Flight. (Hazy suggested Alaska paint four airplanes and so did we.)

Hazy received top billing for the event, and aside from the news leading off this column about the potential third delay of the A380, *Airways* editor John Wegg interviewed Hazy about his childhood (he and his family fled Communist Hungary when he was a young boy), how he developed his interest in aviation (seeing airplanes in Hungary and realizing they represented freedom) and his early entry into commercial aviation (as a 22-year old with a post office box purporting to be a seasoned airline consultant).

Hazy's first airplane deal was arranging the sale of a Lockheed Electra from Air New Zealand to Reeve Aleutian Airlines in Alaska. From this early transaction, his dream was to own a Mustang convertible and earn \$100,000 a year.

Today Hazy has 9,000 hours as pilot-in-command of his own corporate jet, a company with billions of dollars in revenue and more than 800 modern jets.

By Scott Hamilton, September 12, 2006