A MAGAZINE FOR AIRLINE EXECUTIVES 2008 Issue No. 2

ascend

Taking your airline to new heights

LEAPS AND BOUNDS

A Conversation With Pham Ngoc Minh, President and Chief Executive Officer, Vietnam Airlines, Pg 18.

Special Section

Record Aircraft Orders

38

wearelistening@sabre.com

Double-Edge Sword

While the two major aircraft manufacturers, Boeing and Airbus, expect to reach projected aircraft orders this year, the orders may be on the lower side of the plane makers' projected scope.

By Lynne Clark | *Ascend* Staff

Fleet planners worldwide are having the same conversations many families today are having when faced with higher fuel prices. Do they replace the old gas-guzzlers with newer, more fuel-efficient models? The answer for both groups depends on how cash strapped they are.

Global aviation is in crisis, with more than 20 airlines going bankrupt since the start of the year. But while soaring fuel costs are expected to send the airline industry into a collective loss of as much as US$6 billion this year, those same fuel costs are also forcing many carriers to consider buying new planes to help them retire older models.

"This crisis is a bit of a two-edge sword," Airbus Chief Operating Officer John Leahy told the *Seattle Post-Intelligencer* in June.

Both U.S.-based Boeing and Europe's Airbus say they still expect to hit earlier plane-sales projections for 2008, though the orders may end up coming in at the lower end of the companies' projected ranges.

Airbus' delivery of 453 jetliners in 2007 surpassed its previous year's total by 19. Delivery rates this year will reach 34 aircraft from its Airbus A320 single-aisle family each month, along with eight Airbus A330 and A340 wide bodies monthly and one Airbus A380 approximately every 30 days.

In its first quarter ending in March, the Boeing Company reported 115 aircraft

Photo courtesy of Airbus

While Airbus orders may end up on the lower end of its projections for the year, the aircraft manufacturer this year will deliver, on average, 34 aircraft from its Airbus A320 single-aisle family each month as well as eight Airbus A330 and A340 wide bodies monthly and one Airbus A380 approximately every 30 days.

deliveries, up from 106 deliveries during the same time last year. Most of the deliveries were for 737 next-generation aircraft, followed by 777, 747 and the 767 models. The company expects to deliver between 475 and 480 new aircraft by the end of the year.

Analysts for Boeing attribute the current upswing in airplane orders to the aviation market's growing geographic and business model diversity. These factors have been able to successfully counteract demand cycles driven typically by U.S. and European network carriers. The record number of orders during the past three years has been driven largely by low-cost carriers and requirements from emerging economies.

HIGHlight

Both U.S.-based Boeing and Europe's Airbus say they still expect to hit earlier plane-sales projections for 2008, though the orders may end up coming in at the lower end of the companies' projected ranges.

By 2017, North America will be responsible for less than one-third of new airliner deliveries, while China will be approaching 20 percent, predict aviation consultants with the Boyd Group.

Yet as deliveries loom, worldwide demand is slowing. The Official Airline Guide released figures in May that showed growth in Europe has slowed from 5 percent last year to 2.6 percent for the same period this year. U.S. airlines contracted also, offering 1.5 percent fewer domestic flights this May than last. Flights to and from Europe were more robust, up 9 percent and 5.2 percent, respectively, as airlines expanded focus on more lucrative long-haul international markets.

The slowdowns were biggest in China and India. Chinese airlines scheduled 153,000 domestic flights in May, up just 4.3 percent year over year. Indian growth was down nearly half, from 24.8 percent growth in May 2007 to 12.9 percent this year.

Underserved Markets Lead The Charge

Globally, there were more than 8,200 aircraft on order in May, a rise of just over 35 percent compared to May 2007. Asia/Pacific accounts for the largest share of new orders with plans for another 2,755 aircraft, according to the OAG. The Middle East is showing the largest year-on-year increase at 145 percent (458 more aircraft on order than a year ago), followed by Latin America and the Caribbean with an increase of 52 percent representing 174 more aircraft.

Driving demand in these areas is growing economic output. In 1970, China and India accounted for only 5 percent of the world economy in terms of purchasing power, and all of Asia operated only 5 percent of the global commercial airplane fleet, according to figures from Boeing.

By 2000, the combined economies of India and China had grown to 17 percent of the global economy, on par with the economic output of Europe. North America and Europe together still operated 71 percent of the world's commercial fleet, but Asia's share of the fleet had grown to 17 percent.

Projections for the year 2012 show China's share of the global economy pulling ahead of Europe's to match the United States' share at 18 percent. India and China together will generate more than a quarter of the world's total economic output. Asia's share of the world's commercial airplane fleet will become equal to Europe's share at 24 percent. Demand for airplanes will be shared more evenly between three major economic regions, rather than just two, Boeing statistics show.

In the Middle East, local carriers and airports are undergoing massive capacity expansion plans thanks to the removal of market restraints instituted more than a half century ago to protect usually inefficient national airlines.

"What we are witnessing is a change of seismic proportions, not merely an evolution that can be tracked by traditional measures," said Peter Harbison, executive chairman of the Centre for Asia Pacific Aviation, who addressed attendees at the Inaugural Middle East Aviation Outlook Summit held in Abu Dhabi in February.

"We will see not only the rapid fire growth of locally based airlines," he said. "We will also see major foreign airlines establish in the Middle East in order to use it as a springboard for their future development. Under the emerging regulatory regimes, this will be possible, where it was not before."

"The geographic location of Abu Dhabi and the region as a whole, situated

Photo courtesy of Boeing

During Boeing's first quarter, the aircraft manufacturer reported 115 aircraft deliveries, up from 106 during the first quarter 2007. The majority of the orders were for the 737 next-generation model.

between the major economies of the east and west has helped drive the huge increase in demand for passenger and cargo capacity," said Khalifa M. Al Mazrouei, chairman of the Abu Dhabi Airports Company, at the Middle East Outlook Summit.

Europe And North America Lagging

When even the world's largest airline in terms of international passengers, Ryanair, warns that fuel costs will wipe out its operating profit next year, it is clear these are exceptional times for the airline industry.

Still, Ryanair took delivery of 16 Boeing aircraft through May. Those deliveries are among a total of 45 delivered to European customers this year including Air France, Air Europa, KLM Royal Dutch Airlines, Pegasus Airlines, SkyEurope, SunExpress, Turkish Airlines and TUI.

Airbus deliveries during May included all four members of the A320 family. One A318 was received by LAN Airlines, six A319s went to CIT Leasing (for Avianca), Boutsen Aviation, Hamburg International, easyJet, Germanwings and a private customer.

Lufthansa German Airlines received two Airbus orders in May — a wide-body A330 and an A340-600 jetliner. Finnair also took delivery of an A340-300.

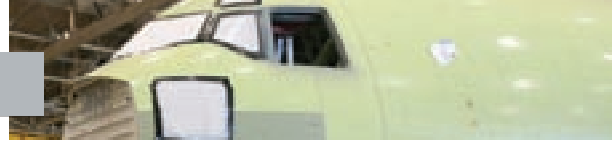
Through May, Boeing had received 10 2008 commercial aircraft orders for European carriers, including Air France (four 777-300 ERs), Blue Air (two 737-800s and 737-900 ERs) and SAS (one 737-800).

Orders for Airbus during May included Air France's order for 12 A320s and six A321s, adding to the major Airbus fleet of this carrier. Other single-aisle aircraft orders included two A320s for British Airways. In addition, Lufthansa ordered two A330-300s.

In North America, Boeing orders were anemic January through May. Boeing received only 43 orders from three U.S. carriers. American Airlines placed an order for one 737-800. Continental ordered 20 737-700s and six 777-200ERs, while Southwest placed orders for 17 737-700s.

Passenger Flights by Region	May 2004	May 2005	May 2006	May 2007	May 2008	Growth '08 vs. '07	
Worldwide	2,243,013	2,367,951	2,399,815	2,513,642	2,553,657	40,015	2%
To/From Africa	20,232	22,491	24,446	27,759	30,067	2,308	8%
Within Africa	46,693	51,844	49,647	51,695	59,282	7,587	15%
To/From Asia/Pacific	37,666	40,189	45,151	48,079	54,647	6,568	14%
Within Asia/Pacific	410,887	445,483	479,550	517,685	534,964	17,279	3%
To/From China (inc. HK & Macao)	27,299	30,543	33,023	38,689	42,464	3,775	10%
Within China (inc. HK & Macao)	94,891	110,453	124,471	147,348	153,634	6,286	4%
To/From India	8,480	10,120	12,408	13,243	17,369	4,126	31%
Within India	21,731	23,318	34,761	43,392	49,002	5,610	13%
To/From Central and South America	52,307	54,577	55,336	55,437	57,687	2,250	4%
Within Central and South America	171,949	172,144	179,438	185,711	188,868	3,157	2%
To/From Europe	72,669	78,230	84,963	90,730	98,867	8,137	9%
Within Europe	522,448	557,321	582,536	611,746	627,521	15,775	3%
To/From Middle East	24,343	27,029	31,247	33,720	40,310	6,590	20%
To/From North America	78,365	82,622	84,719	86,573	91,038	4,465	5%
Within North America	922,810	961,537	914,431	940,306	925,936	(14,370)	-2%

According to the Official Airline Guide, worldwide demand is slowing, thereby potentially impacting current and future aircraft orders. The greatest impact lies in China and India. China grew by only 4 percent from May 2007 to May 2008, and India's growth was down almost half, from 24.8 percent to 12.9 percent year over year.



Boeing delivered 61 aircraft to North American carriers including Air Canada, AirTran Airways, Alaska Airlines, Continental Airlines, Delta Air Lines, Southwest Airlines and WestJet.

Through May, North American total aircraft orders for Airbus aircraft families were 1,228 and 901 deliveries were scheduled.

U.S. airline fleets are some of the oldest in the world — an average of 18.5 years old at Northwest Airlines; about 15 years at American Airlines; almost 14 years at United Airlines and Delta Air Lines; and about 10 years at Continental Airlines.

During the next decade, major U.S. airlines are facing a potentially crippling bill running more than US$100 billion to upgrade their aging fleets, according to industry experts at the aviation consultant group Ascend. They say airlines face being stuck with old aircraft for years to come because they currently do not have enough firm orders to replace them. Order backlogs at Boeing and Airbus means there is unlikely to be any quick fix.

"Given the state of the U.S. airline industry, who is going to pay for these aircraft?" asked Chris Tarry, a British aviation consultant quoted in a recent *BusinessWeek.com* article. "The manufacturers won't want to provide financing."

Despite the gloomy economic setting, at least one analyst is optimistic. Joe D'Cruz, a management professor at the University of Toronto, said Canadian airlines are in "reasonably good shape."

"In Canada, the industry is insulated by a couple of things," D'Cruz told CTV.ca in June, noting that the overall Canadian economy is in better shape than its American counterpart.

"We don't have the intense [airline] competition," he said. "There is competition, but the airlines refrain from destructive competition. [And they] seem to pass on increases in high oil prices to travelers. They are hurting, but they are not in a disastrous shape."

D'Cruz said that even in the United States, there have been much worse times for the industry.

"For example, after the dot-com bust in the 1990s — when business travel was the main profit engine of the industry — that era was much worse than the current era," he said.

Soaring fuel costs, grounding of planes by some airlines and declining capacity will likely have a substantial impact on the world's largest aircraft manufacturers, even if they reach their expected aircraft orders for the year.

Lynne Clark can be contacted at wearelistening@sabre.com.

+count it up

4.8
The average annual percentage in which air travel grew during the past 20 years, despite two major world recessions, terrorist acts, the Asian financial crisis of 1997, the severe acute respiratory syndrome outbreak in 2003 and two Gulf wars, according to Boeing.

40
The percentage increase of revenue passenger kilometers airplanes will carry in 2027 versus what aircraft today carry, according to Boeing.

5
The average annual percentage in which passenger travel will grow during the next 20 years, according to Boeing. Cargo is estimated to grow 5.8 percent a year during the same period. The fastest-growing economies are expected to lead the transformation into a more geographically balanced market.

4
The average annual percentage airline passenger numbers will grow during the next two decades, according to Boeing.

10.5 million
The minimum weight in tons of CO_2 the International Air Transport Association's four-pillar strategy saved last year. IATA's target is a 25 percent improvement in fuel efficiency by 2020.

800+
The number of new aircraft scheduled for delivery to various airlines in China by 2016, according to Ascend Online.