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January 2012: Global Traffic Results



In January 2012, the global traffic results for aviation showed a 5.7% rise in passenger demand but an 8.0% decline in air freight compared to the same month in 2011, according to the International Air Transport Association (IATA). The 5.7% rise in passenger demand was a slight acceleration from the 5.6% year over year increase recorded for December 2011. Regarding the freight market, there was a 2.5% fall from December to

January a fact that could be attributed to the impact of the reduced industrial activity of Chinese factories due to the Chinese New Year. The region with the biggest traffic growth was Middle East, where airlines recording showed a 14.5% increase. African airlines showcased the worst performance reporting a 3.6% decline in demand.

As it is already mentioned, Middle East was the region with the best performance, experiencing a double-digit traffic growth of 14.5%. Additionally, capacity rose to 10.6% making load factor to climb by 2.7 points to 78.5%. Latin American carriers experienced a traffic rose of 7.9% in January compared to the same month last year, becoming the second region in traffic growth. The region's capacity increased by 7.4% and the load factor was 79.9%. Actually Latin America showcased the biggest load factor of all regions.

Asia-Pacific airlines experience a 6% traffic rise in January compared to 2011. Capacity climbed by 6.4%, exceeded the traffic rise by 0.4 and made the load factor to slightly dip to 77.5%. Europe, once again paid the price of the persisting economic crisis. European carriers experienced a 5.3% gain in traffic versus January 2011, a result that is positive but they considerable drop from the 9.5% growth recorded in December. Capacity increased by 2.7% and the load factor was 75.7%.



North American and African airlines reported a decline in demand. North America had a 0.3% decrease in passenger traffic, but capacity dropped 0.9%, pushing load factor up to 77.6%. Finally, airlines in the African region reported a 3.6% decline in demand and a 0.8% decline in capacity, showcasing the lowest load factor of all regions by 64.8%.

Undoubtedly, the increase in passenger demand during January 2012 represented a positive sign for the new year and it remains to be seen if this trend will continue till the end of the year.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Airlines: Global Traffic Results for April



On May 30th, 2012 the International Air Transport Association (IATA) announced global traffic results for April. According to this report the total passenger demand rose 6.1% while freight demand was down 4.2% compared with April 2011. It is important to notice that despite the economic downturn several regions of the world are currently experiencing, demand of air

travel is still high and growing. The 6.1% overall growth is above the 20-year trend. Additionally, limited capacity expansion, which have been noticed for April have pushed load factors to 79.3% which is actually a record high for an April load factor. Regarding the decline in air freight markets the 4.2% contraction noticed is somehow misleading as during 2012 we cannot record a steady trend. Air freight market may experienced a decline of 4.2% compared to April of 2011 but compared to November 2011 cargo levels stood at about 2% higher. The majority of this improvement (about 80%) has been captured by Middle Eastern airlines. Air freight for the Asia-Pacific, European and North American carriers continue to show weakness.

International air travel rose 7.4% in April compared to the year-ago period. Significant differentiations have been observed between different regions. For example European airlines experienced a 5.9% passenger demand growth whereas Middle East Airlines experienced a 16.0% gain in passenger demand.



The European airlines' figure of 5.9% growth is 7.4% global average and is significantly lower than the 8.7% growth recorded in March. Nevertheless, demand was stronger than the 3.4% capacity expansion something that pushed load factors to 80.7%.

| April 2011 | Passengers' Demand | Capacity Expansion | Load Factor |
|---------------|--------------------|--------------------|-------------|
| Europe | 5.9% | 3.4% | 80.7% |
| Middle East | 16% | 12.7% | 78.3% |
| North America | 1.6% | -1.5% | 80.8% |
| South America | 9.0% | 5.3% | 78.6% |
| Asia Pacific | 9.3% | 4.6% | 78.1% |
| Africa | 7.0% | 8.5% | 65.9% |

On the other hand Asia Pacific and Middle Eastern carriers recorded the strongest year-on-year growth at 9.3% and 16% respectively. For both regions capacity surpassed the growth in demand with the Asia Pacific carriers growing their capacity by 4.6% and Middle Eastern carriers by 12.7%. Load factors stood at 78.1% for the Asia-Pacific carriers and at 78.3% for the Middle Eastern carriers. We most notice that the strong performance Asia Pacific

carriers showcasing is somehow distorted as in April 2011 Asia-Pacific markets were particularly weak in the aftermath of the Japanese earthquake and tsunami. If we take this fact into consideration the “real” region’s growth is estimated to be about 6%.

In North America airlines saw international demand expand by 1.6% in April 2012 compared to the same month of the previous year. Additionally, North American airliners cut capacity by almost 1.5% a fact that allowed the region’s carriers to post the strongest load factors at 80.8%.

Latin American carriers experienced a 9.0% expansion in international demand in April compared to the same month in 2011, outpacing the capacity expansion of 5.3%. Load factors stood at 78.6%.

African airlines reported a 7.0% increase in demand. It was the only region where capacity expansion (8.5%) outpaced demand growth. Load factors were the weakest and stood at 65.9%.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Global traffic results for May



On July 2, 2012, The International Air Transport Association (IATA) announced the global traffic results for May. The international associations' statistics show a downward trend. Passenger demand increased by 4.5% in comparison with May 2011, but was virtually flat compared to April 2012. Capacity

increased by 4.0% and load factors stood at 77.6% below the levels recorder in April. On the occasion of the release of the data Tony Tyler, IATA's Director General and CEO stated that: "The airline industry is fragile. Relief in oil prices provides some good news. Unfortunately, the softness in oil markets comes on the back of fears of deterioration in the European economy. Business and consumer confidence are falling. And we are seeing the first signs of that in slowing demand and softer load factors. This does not bode well for industry profitability. Airlines are expected to return a \$3 billion profit in 2012 on \$631 billion in revenues. That's a razor-thin 0.5% margin,"

Compared to May 2011 passenger demand showcased an increase of 5.6%, while it was well below the 7.1% growth recorded in April. Nevertheless, the capacity expansion of 4.1% resulted in the improvement of load factors from 75.9% in May 2011 to 77.0% for the current month.

| Region | Demand Growth (May 2012) | Load Factors (May 2012) |
|---------------|--------------------------|-------------------------|
| Europe | 4.1% | 78.5% |
| North America | 1.5% | 82.1% |
| Asia-Pacific | 5.5% | 75.4% |
| Middle East | 15.8% | 74% |
| Latin America | 7.4% | 77.1% |
| Africa | 9.7% | 62.9% |

Source: International Air Transport Association (IATA)

Apart from the Middle East carriers all the other carriers of the remaining regions showed a decline in passenger demand compared to April. Namely, European carriers posted 4.1% growth on international services when compared to the previous May, while this number was significantly below the 5.7% year-on-year growth recorded for April. Load factor was at 78.5%, 1.5% ahead of the global average.

North American airlines experienced a 1.5% increase on international demand in May compared to the previous year. This is slightly below the 1.6% year-on-year growth recorded in April. North America's load factor was the highest among the other regions, reaching 82.1%.

The Asia-Pacific region carriers showcased a 5.5% increase on demand compared with the same period of the previous year, while it was considerably lowered compared with the 8.6% annual growth recorded in April 2012. Load factors reached 75.4%.

Middle East carriers were the only that recorded growth compared to April. In May they showed an annual growth of 15.8% while in April reported a 15.2% growth. Despite this fact, load factor was the second-weakest among regions at 74.0%.

Airlines of Latin America, recorded a growth of 7.4%, increased by 1.4% points compared to May 2011 levels. Capacity expansion was at 5.5% and load factors at 77.1%. Finally, African airlines showcased demand growth of 9.7% compared to May 2011. Capacity expansion was at 11.8% and Load factors at 62.9%.



Kyriazis Vasileios,
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Epicos "Industrial Cooperation and Offset Projects"

Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

[For Further Information Press Here](#)

Manufacturing of composite material and thermoforming parts and components for the aerospace and defense industry

A company with significant experience in manufacturing parts and components using composite material technology is proposing, in the frame of an offset program, the cooperation with Prime Contractor or lower tier companies either locally or worldwide for

the manufacturing of composite material parts and components for to be used in specific aerospace and defense programs.

[For Further Information Contact our ICO Department](#)

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Fabrication of production tooling for defense plastic and/or stamped metallic parts manufacturing

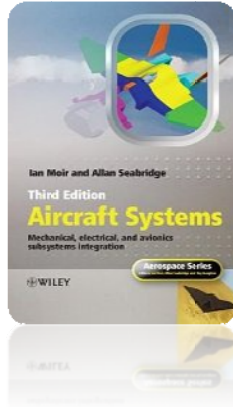
A company with significant experience in the production of high quality tooling for plastic parts manufacturing for the automotive and consumer goods industries is proposing the collaboration for the production of metallic tooling for defense equipment parts. More specifically, it calls for cooperation in the production of moulds for manufacturing plastic components and/or of stamping dies (press tools) for fabrication of metallic stamped parts.

[For Further Information Contact our ICO Department](#)

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Aircraft Systems: Mechanical, Electrical and Avionics Subsystems Integration, by Ian Moir, Allan Seabridge



This third edition of Aircraft Systems represents a timely update of the Aerospace Series' successful and widely acclaimed flagship title. Moir and Seabridge present an in-depth study of the general systems of an aircraft – electronics, hydraulics, pneumatics, emergency systems and flight control to name but a few - that transform an aircraft shell into a living, functioning and communicating flying machine. Advances in systems technology continue to alloy systems and avionics, with aircraft support and flight systems increasingly controlled and monitored by electronics; the authors handle the complexities of these overlaps and interactions in a straightforward and accessible manner that also enhances synergy with the book's two sister volumes, Civil Avionics Systems and Military Avionics Systems.

Commercial Aircraft Projects, by Hans-Henrich Altfeld



Commercial aircrafts are by their nature extremely complex products and their development equally complex and challenging. This should require the highest level of project management sophistication but in reality it cannot be afforded. However, cost reductions can be achieved by concentrating on the essential elements of such disciplines, to maintain their principal strengths, and combining them in an intelligent and pragmatic way. This is why the management of commercial aircraft must be performed on the basis of affordable essentials taken from state-of-the-art management disciplines as well as through an integrated architecture. Where this book goes beyond management essentials found elsewhere is its treatment of architecture integration, necessary to interlink product, process and resources data.



Airlines need 33,500 new planes by 2030: Boeing

Global airlines will need 33,500 new planes valued at \$4.0 trillion by 2030, with Asia accounting for about 35 percent of the total, US aircraft maker Boeing stated.

Asia-Pacific carriers will require 11,450 new aircraft, worth \$1.5 trillion, during the same period, Boeing's vice president for commercial planes Randy Tinseth said at a news conference on the eve of the Singapore Airshow.

"This is the largest market in the world for single-aisle airplanes... for twin-aisle airplanes... for big airplanes. Any way you look at it, this is a big, big market, and this is a growth market," he said.

Tinseth, updating earlier Boeing estimates, said the biggest demand in the region will be for single-aisle aircraft that normally seat between 90 and 200 passengers -- the models most sought after in the budget-airline market.

Of the 33,500 new planes needed globally, about 60 percent will be required by airlines for fleet expansion, with the remainder to replacing ageing stocks.

In the Asia-Pacific region, 80.0 percent will be for fleet growth.

To meet demand, Tinseth said Boeing will ramp up production of models including the next-generation single-aisle 737 MAX, which will undergo the final phase of wind-tunnel testing next week.

Boeing is also considering rolling out a bigger version of its mid-size 787 Dreamliner to be called the 787-10X that can seat up to 320 passengers, or 40 more than the 787-9 model.

Mark Jenks, vice president of development of the 787 programme, said on Sunday that Boeing aims to ramp up production of the long-delayed Dreamliner to 10 planes a month by the end of 2013, up from the current two or three.

Boeing and its European rival Airbus have a major presence at the biennial Singapore Airshow, which runs from February 14-19.

Source: 2012 AFP, Agence France-Presse (AFP)

Boeing Projects \$450 Billion Market for Airplanes in the Middle East, Demand for 2,520 new airplanes over the next 20 years

Boeing (NYSE: BA) forecasts that airlines in the Middle East will need an estimated 2,520 airplanes worth \$450 billion by 2030. The forecast comes as the region's carriers continue to surpass global air traffic and capacity growth rates.

Boeing estimates that the Middle East's fleet of passenger airplanes will grow from a current fleet of 1,040 airplanes to a projected 2,710 airplanes, an increase of 160 percent. 34 percent of the projected demand will be for airplanes to replace current aircraft, while 66 percent will be part of fleet expansion plans as the region's airlines gear up for significant growth over the next two decades. "The Middle East has seen an unprecedented growth in capacity over the past 10 years and every indication points to a further, significantly large increase over the next 20 years," said Boeing Commercial Airplanes Vice President of Marketing Randy Tinseth, who presented Boeing's Current Market Outlook at the 2011 Dubai Air Show. "The region's airlines with their forward thinking approach have become a competitive force globally." Single- and twin-aisle airplanes will account for 90 percent of the Middle East's new airplane deliveries over the 20-year period, according to the Boeing forecast. An estimated 1,160 single-aisle jets, such as the Boeing 737 MAX, and 1,110 twin-aisle airplanes, such as the Boeing 777 and 787 Dreamliner, are expected to be delivered to the region during this time. The remaining ten percent is split between large airplanes such as the Boeing 747-8 Intercontinental and will account for 7 percent of projected demand, with an estimated 180 airplanes to be delivered to airlines in the Middle East. Regional jets will account for the remaining 3 percent.

"The collective capacity of three airlines, Emirates Airline, Etihad Airways and Qatar Airways has grown by an average of 23 percent annually over the past decade and we expect this trend to continue well into the future. All three airlines base their growth strategies on the principle that newer, more efficient airplanes will provide a competitive advantage over their rivals from Europe and Asia," Tinseth said. "This visionary approach of investing in the future has allowed the region's airlines to stay ahead of the competition."

"With a range of airplanes that fulfill the region's requirement for capacity expansion and improved operating efficiencies, Boeing is well positioned to meet the region's needs," he added. As of September 14, 2011, Boeing had a backlog of 300 airplanes in the Middle East. Customers in the region count for a large share of Boeing's twin-aisle backlog, accounting for 26 percent of 777s and 15 percent of 787s on order. Boeing currently has a total of 47 customers in the region that operate an estimated 1,200 flights per day on 425 Boeing airplanes.

The full Boeing Current Market Outlook report can be found at www.boeing.com/cmo.

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Source: Boeing

Boeing: Estimations for the Global Aircraft Market



On July 3, 2012, Boeing made an estimation of a potential \$4.5 trillion market for 34,000 new airplanes over the next 20 years. Vice president of Marketing, Boeing Commercial Airplanes Mr. Randy Tinseth said that: "The world's aviation market is broader, deeper and more diverse than we've ever seen it. It has proven to be resilient even during some very challenging years and is driving production rate

increases across the board". According to Boeing's estimations, airline traffic is projected to grow at a 5% annual rate over the next two decades, with cargo traffic projected to grow at an annual rate of 5.2%. Single- aisle airplanes with 23,240 future deliveries accounting for almost \$2,030B dollars are the most predominant type of airplane that will be sold in the future.

New Airplane Deliveries: 2012-2031

| Airplane Type | Total Deliveries | Dollar Value |
|---------------|------------------|--------------|
| Single-aisle | 23,240 | \$2,030B |
| Twin-aisle | 7,950 | \$2,080B |
| Large | 790 | \$280B |
| Regional jets | 2,020 | \$80B |

Source: Boeing

Robust growth in China, India and other emerging markets is a major factor in the increased deliveries over the next 20 years. The main reason is that aviation becomes more accessible to those in emerging markets. It is indicative that people in China take just 0.2 trips per person per year, whereas in the USA they take on average nearly (2) trips per person per year. In India this number is just 0.1. Increasing wealth in countries like China will automatically increase the need for more aircrafts in the area of Asia- Pacific as more people will have access to air travel.

Another reason in the increased deliveries is the strong demand to replace older, less fuel efficient airplanes. Soaring oil prices will force airlines to replace current airplanes in order to save on fuel. Boeing forecasts that replacement will account for 41% of new deliveries.

New Airplane Deliveries: 2012-2031

| Region | Airplanes |
|---------------|-----------|
| Asia Pacific | 12,030 |
| Europe | 7,760 |
| North America | 7,290 |
| Latin America | 2,510 |
| Middle East | 2,370 |
| C.I.S. | 1,140 |
| Africa | 900 |
| World Total | 34,000 |

Source: Boeing

The region of Asia Pacific will lead the global demand with 12,030 new airplanes estimated to be bought for the next twenty years. Europe and North America will follow, with 7,760 and 7,290 airplanes.

Regarding the freighters market Boeing projections is that the world freighter fleet will nearly double from 1,740 aircraft today to 3,200 at the end of 2030. Additions to the fleet will include 940 new-production freighters (market value of \$250 billion) and 1,820 airplanes converted from passenger models. Large (more than 88.2 tons capacity / 80 tonnes) freighters will account for 680 new-build airplanes. Medium (44.1 to 88.2 tons / 40 to 80 tonnes) freighters will total 260 airplanes. No new standard-body freighters (49.6 tons / less than 45 tonnes) will be required, but there will be 1,120 standard-body conversions.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Source: Epicos S.A

Boeing raises forecast for airliner demand by \$500 bn

The US aircraft maker Boeing raised its 20-year forecast for global demand for airliners by \$500 billion (396 billion euros) on Tuesday.

Boeing said it now saw the global market doubling to 34,000 airliners worth \$4,500 billion, from 33,500 aircraft worth \$4,000 billion which it had forecast last year.

"The world's aviation market is broader, deeper and more diverse than we've ever seen it," said Randy Tinseth, vice president of marketing at Boeing Commercial Airplanes.

"It has proven to be resilient even during some very challenging years and is driving production rate increases across the board," he added in a statement.

Boeing based its forecast on an assumption that airline traffic would grow by five percent each year for the next two decades. Its main rival, the European manufacturer Airbus, also expects traffic to increase at about this rate.

The biggest increase in deliveries will be to the Asia-Pacific region.

Boeing expects that about one third of all airliners built, or about 12,030 planes, will be delivered there.

"As the market continues to grow, especially in emerging economies, air travel will become affordable to even more people," Tinseth explained.

The company highlighted demand for single-aisle aircraft such as its 737 model, which is being transformed into two new versions and which Boeing expected to continue posting "robust growth" in sales.

At an estimated 23,240 aircraft over the period in question, that segment represented almost three times more than twin aisle jets, at 7,950, though the forecast market value of twin aisle jets was slightly greater, at 2.08 trillion dollars.

Large jets like the double-decker Airbus A380, for which Boeing makes no equivalent model, were estimated by the US manufacturer at a much more modest 790 aircraft worth 280 billion dollars.

Meanwhile, Boeing lowered its forecast for deliveries of cargo planes owing to a slowing of the market for air freight.

Even so, it said that the market for cargo aircraft would almost double from 1,740 planes in 2012 to 3,200 in 2031.

Boeing also reacted to news that Airbus planned to build its rival to the 737, the Airbus A320 series, in the United States to ward off the negative effects of the euro's value against the dollar.

Tinseth said that "it's not about the address on your business card" but the quality of the aircraft a company offers that would decide whether US clients bought more of their jets from one company or another.

"The first lever is the product, the capability, the quality and the price of the product, If you have the right product, you'll be successful," he told a telephone news conference.

Source: 2012 AFP, Agence France-Presse (AFP)

China: Future Air Transport Industry Growth



China is the second largest economy of the world after the United States. Additionally, it is the fastest-growing major economy, with growth rates averaging 10% over the past 30 years. Finally, China is also the largest exporter and second largest importer of goods. As it is clearly understood air transport plays a vital role in the economic structure and development of

the country. Mr. Tony Tyler IATA's Director General and CEO said at the China Civil Aviation Development Forum 2012 in Beijing regarding this issue: "China is looking to increase its share of world trade from 10.4% to 15%. Aviation connectivity will be critical to making that happen. Already it is prioritizing investments in airport and air navigation infrastructure. The challenge is to keep pace with rapidly growing demand, based on the global standards which underpin safe and efficient global connectivity".

Today China already ranks high for the size of its air transport industry as it is the second in the world for domestic passengers, seventh for international and fourth for international cargo. The positive trend is expected to continue as according to Mr. Tony Tyler IATA's

Director General and CEO the 877 million additional global air travelers expected to fly in 2015 compared to 2010 and from these more than 212 million will be on journeys within or connected to China.

The main reason is that today, despite the fact that the country has sufficient aviation infrastructure the people of china take just 0.2 trips per person per year, whereas in largest domestic aviation market in the world, the US citizens take on average nearly 2 trips per person per year. In the upcoming years increasing wealth will have as a result the increase of travels in the country. That is mainly the reason why the Airbus forecast predicts that the greatest demand for passenger aircraft will come from airlines in the United States and the People's Republic of China.



According to International Air Transport Association (IATA), China's authorities have to tackle with two main priorities in order to enable the country's aviation industry to further expand. The first one is to enhance the infrastructure capacity of the country as air navigation infrastructure must keep pace with demand and growing airport capacity. The second is that China should further align with international standards. IATA highlighted the fact that currently is in a dialogue with the Civil Aviation Administration of China (CAAC) to align China's charges for infrastructure with global standards, as China's air navigation service charges are among the highest in the world.

Kyriazis Vasileios,
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Source: Epicos S.A