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NBAA Convention News®

Olympics Preparations

Plan ahead for 2012 Games
Business aviation airports in the UK are preparing for a traffic onslaught during next year's Olympics, and Signature will have a dedicated customer service team. **Page 19, 24**

Bizav grows in Japan

Narita embraces bizav
The efforts of Japan's business aviation group are starting to bear fruit, and Narita International Airport will get its first dedicated executive aviation terminal next year. **Page 20**

CMC hooks up EFBs, iPads

Tandem boosts EFB utility
The software lets pilots do their planning off-airport, then transfer the data from the iPad to electronic flight bags mounted in the airplane. **Page 38**

Another Kind of NextGen

Pilot inspires students
Barrington Irving, the youngest pilot to fly around the world, returned to the NBAA show with MHIA to get young people interested in flying and aviation. **Page 45**

Today on AINonline

> **Pre-owned market is stronger than it seems**
> **Gulfstream Elite cabin has beauty and brains**
> **Video news headlines from AINtv**

Design has begun on Dassault's new SMS

by Liz Moscrop

Dassault Falcon kicked off its traditional Falcon Family breakfast at NBAA '11 with a message from chairman Charles Edelstenne that the industry must unite to combat threats to its development. He stressed that business aviation is not a luxury, rather, it buys time, which he described as an essential competitive advantage in today's world.

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Is China riding to the rescue of aviation?

User fees, depreciation schedules and instability in world financial markets have called for some tough talking at NBAA 2011. One country, however, seems to be promising great rewards for those who dare enter. China seems to be the golden land, the new Wild East set to save the industry from oblivion.

Several consultants held press conferences during the show, highlighting incredible opportunities in China. Jason Liao, CEO of China Business Aviation Group, said he foresees a

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CY CYR

China Business Aviation CEO Jason Liao predicts that 1,000 bizjets will grace Chinese skies in 10 years.

As evidenced by the lines of people waiting to self-register for the 64th annual NBAA Convention, Las Vegas drew 25,861 attendees by day two of the world's biggest business aviation show.

CY CYR

Boeing bizjets are bigger and backlog is growing

by Mark Huber

Boeing has sold 205 Boeing Business Jets based on all of its aircraft models, including its two newest: the widebody 787VIP twinjet and 747-8VIP Intercontinental, the latest iteration of its iconic jumbo quad jet.

Twin-aisle jets now represent the majority of the Boeing Business Jet backlog. VVIP customers have ordered nine of the $318 million (green) 747VIPs and 12 of the $185 million 787VIPs. "Right now our backlog of twin-aisle airplanes is larger than our backlog of 737-based airplanes," said Boeing Business Jets president Steve Taylor. "I don't think any of us saw that coming."

The original 737-based BBJ remains the company's best seller by unit volume, with 154 sold by Boeing through mid-year; 15 were BBJ2s and about nine BBJ3s. The BBJ was created in 1996 in partnership with General Electric, joint maker with Snecma of the CFM56 series engines for newer 737s.

The BBJ matches components from two 737 models–the main fuselage of the 737-700 and the larger wing and the center fuselage section and the landing gear of the 737-800. The belly of the airplane can be outfitted with from three to 10 auxiliary fuel tanks, giving it a maximum range of nearly 6,200 nm or 14 hours in the air with eight passengers.

BBJ2 Introduced

With all those extra fuel tanks there isn't much room in the baggage hold, so in 2005 Boeing began offering the BBJ2, with 25 percent more cabin volume, and an even bigger BBJ3, based on the 737-900ER, with 1,120 sq ft of cabin floor space. Compared to the original BBJ, the BBJ3 is 28 feet longer, has 35 percent more cabin volume and weighs nearly 17,000 pounds more.

Steve Taylor, BBJ president, said if there is a BBJ Max reengining program, he sees deliveries beginning around 2017.

Changes made to the original BBJ aircraft include avionics upgrades, winglets and an upgraded pressurization system that lowers cabin altitude to 6,500 feet at the maximum cruising altitude of 41,000 feet.

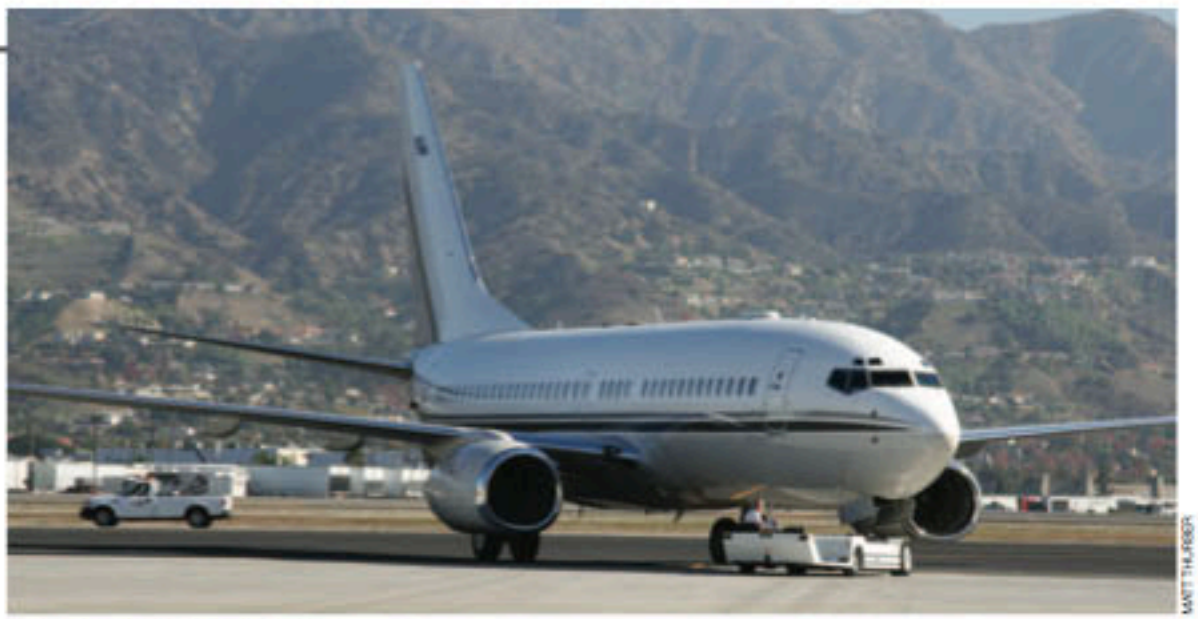
Leap-X Engines

While the backlog for twin-aisle Boeing Business Jets is larger, demand remains for the 737-based BBJs and could even increase, depending on when the aircraft becomes eligible for the new, more efficient Leap-X engines that Boeing will soon be fitting on the airliner versions, called the 737 Max.

The Leap-X builds on CFM56-5B/7B engines with new technologies developed under the Leap56 program. The new engines are expected to feature advanced technologies including a single-forged blisk fan, a twin annular preswirl combuster and increased used of composites. Variants are expected to product thrust in the 18,000- to 35,000-pound range and to be 16 percent more fuel efficient than the current CFM engines.

If there is a corresponding "BBJ Max" program, Taylor sees deliveries happening somewhere around 2017. Leap-X engines could increase a BBJ's range by 6 to 10 percent, he says. Meanwhile, customers continue to gravitate to the BBJ for its large cabin; 11 feet, seven inches wide and seven feet, one inch tall. The space enables the installation of staterooms, full bathrooms with showers and large gourmet galleys.

While BBJ completions proceed fairly smoothly now, it wasn't always so. Early ones were plagued with huge delays and cost overruns that flipped several completion centers financially upside down and frustrated aircraft owners. Over the years Boeing has worked the kinks out of the process via closer cooperation with the centers and better data sharing, and the centers developed considerable data and expertise in finishing the aircraft. Most completion centers now use digital design programs.



MATT THURBER

The original 737-based BBJ remains Boeing's best seller by unit volume, despite the majority of new orders being for the twin-aisle VIP versions of Boeing Business Jets. At right is an example of a lounge outfitted for a single-aisle BBJ by interior designer Edese Doret.

One BBJ completion house, Associated Air Center in Dallas, recently purchased a used 737 fuselage to use for fit checking interior components before the actual aircraft arrives. Associated estimates this will cut up to one month off the time required for interior installation. For Associated, this kind of expertise comes with experience. The company has delivered 21 completed 737 BBJs and has three more in work. For completion centers working on the new 787VIPs and 747VIPs, the stakes are much higher. Boeing has worked hard with them leading up to initial aircraft deliveries that could begin late this year or early next.

The completion tabs for those aircraft, especially those being prepared for heads of state, could easily top $70 million for the 787 and $200 million for the 747-8I. These aircraft offer an unprecedented amount of cabin space and range: the 747 will have a 4,786-sq-ft cabin, range of 9,260 nm with 100 passengers and top speed of up to 614 mph; the 787 with have a 2,400-sq-ft cabin, carry 24 to 35 passengers and fly 9,590 nm nonstop. The 787-9 follow-on will add 300 sq ft of cabin floor space and fly 400 miles farther. ❑

Aussie system monitors flight facts

Flight Data Systems (Booth No. C7015) is at this year's NBAA show highlighting its line of ground-support equipment, which interfaces with flight-data recorders to download data files for flight analysis and replay. It makes not only data download equipment but also flight replay software that includes 3-D flight path reconstruction.

The Melbourne, Australia-based company operates from a new facility that incorporates a clean room environment for avionics and instrument work and extensive office and training spaces. A warehouse facility provides additional storage and supports expanded manufacturing capacity as required. Flight-data monitoring services for both military and airline customers are performed from a new secure flight-data analysis center, located near Melbourne Airport.

The company specializes in the process known as flight-data monitoring (FDM), a key element of a flight operational quality assurance (FOQA) program. FDM involves analysis of flight data, which allows safety managers to identify trends and fully investigate the circumstances behind events that have been flagged so that flight operations procedures and training can be improved.

Flight Data Systems provides FDM replay services, operation and support of FDM systems and complete FDM systems, including training and consultancy. For operators not wishing to operate their own FDM systems, the company offers a web-based FDM replay service. This includes secure transfer of data, transcription and analysis, validation of results and formal presentation of results and statistics in accordance with ICAO requirements.

The company also works closely with NeST Aerospace, provider of a wide range of FOQA tools, to analyze and monitor flight data for maintaining flight safety standards, for performance monitoring and for accident investigation. It is an authorized facility to repair, maintain and certify flight recorders.

The HR Smith Group, purveyor of airborne antenna systems and emergency location and rescue equipment, distributes and supports Flight Data Systems products in the European Union region. Airinc, which specializes in air incident prevention and air accident investigation, is a distributor of Flight Data Systems ground-support equipment in the Americas region. Hawker Pacific provides aviation sales and product support in Australasia, Asia, the Pacific and the Middle East, while Glendale International distributes Flight Data Systems from Essex, England. ❑