



News from the Boeing world



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Boeing Australia & South Pacific



The fourth Boeing 787 Dreamliner joined the flight-test fleet on March 14, 2010, with the completion of the first flight of ZA003. ZA003 is the only 787 in the flight test fleet that will include elements of the passenger interior features including cabin and crew support systems. In addition to demonstrating that the interior meets certification requirements, ZA003 will be used to conduct tests on systems, noise performance, flight-deck operations, avionics, electromagnetic effects, high-intensity radio frequency response and extended operations (ETOPS).

The US Air Force has increased its order for Boeing-built Joint Direct Attack Munition (JDAM) kits, contracting Boeing for more than 6,000 JDAM kits. The modification increases the overall value of this phase from \$72 million to \$229 million. The kits will be delivered in 2011 and 2012. JDAM is a low-cost guidance kit that converts existing 500-, 1,000- and 2,000-pound unguided free-fall bombs into accurately guided "smart" weapons. Its modular design allows customers to easily upgrade the weapon in the field to provide additional capability, such as laser guidance and extended range. Boeing has produced more than 210,000 JDAM kits since 1998.

Third big bird takes to the skies over Seattle to join 747-8F flight test program

This week, the third and final Boeing 747-8 Freighter flight test aircraft took its first flight from Paine Field in Everett, Washington.

With three aircraft in the flight test program for the 747-8 Freighter, Boeing is running approximately 3,700 hours of testing both on the ground and in the air in the lead up to the planned first delivery of the plane by the fourth quarter of this year.

The third aircraft, RC 521, completed a two and half hour flight, reaching 30,000ft and an airspeed of 245 knots, or about 454km/h. This aircraft has several tests scheduled including fuel-mileage testing; while testing by the second test aircraft will focus on community noise, environmental control systems and extended operation performance standards.

"The airplane is performing as expected in the initial stages of flight test," said Mo Yahyavi, vice president and general manager of the 747 program, Boeing Commercial Airplanes. "That's a tribute to the men and women who helped design and build this airplane."

Since the first flight in early February, the program has conducted 13 flights, achieving several key accomplishments. The program has completed approximately 33 hours of flying. Initial stall tests and other dynamic manoeuvres have been run, as well as an extensive checkout of the aircraft's systems. Seven pilots have now flown the latest Boeing freighter.

In the weeks ahead, the 747-8 Freighter will reach an altitude of more than 43,000ft and a speed of Mach 0.97. Subsequent testing will push the aircraft beyond expected operational conditions.

Boeing has 108 orders for the 747-8, 76 of which are for the new freighter. Cargolux, Nippon Cargo Airlines, AirBridgeCargo Airlines, Atlas Air, Cathay Pacific, Dubai Aerospace Enterprise, Emirates SkyCargo, Guggenheim and Korean Air all have ordered 747-8 Freighters.



Second Boeing 747-8 lands at Boeing Field in Seattle



Boeing and United Airlines finalise 787 order

Boeing and United Airlines finalised an order for 25 787-8 jetliners in late February. The agreement includes the opportunity to purchase another 50 Dreamliners.

"Boeing and United Airlines share an 80-year partnership," said Jim Albaugh, president and CEO of Boeing Commercial Airplanes. "United, which launched the Boeing 777, now begins a new chapter with the 787 Dreamliner, the most technologically advanced commercial jetliner ever built."

The order is valued at \$4.2 billion at average list prices.

"United's Boeing 787 order represents a substantial investment in our future and will enhance the significant progress we are making in improving the global competitiveness of our company while providing the opportunity to open new profitable markets and serve a broader range of international destinations," said John Tague, president of United Airlines.

United expects to take delivery of the 787s at the same time it will begin to retire its Boeing 747s and 767s operating on international routes.

Including United Airlines, 57 customers around the world have ordered 876 Dreamliners, making the 787 the fastest-selling new commercial jetliner in history.

Boeing to offer NewGen Tanker to US Air Force

Boeing will offer the Boeing NewGen Tanker in the competition to supply the U.S. Air Force with a multi-mission aerial refuelling aircraft that will meet all the war fighter's mission requirements for the next several decades.

Dennis Muilenburg, president and CEO of Boeing Defense, Space & Security, said the Boeing NewGen Tanker will satisfy all mandatory Air Force requirements and offer an American-made tanker that will be capable, survivable, and combat-ready at the lowest cost to the taxpayer.

"Having supplied tankers to the Air Force for the past 60 years, Boeing has drawn on its unmatched aerial-refuelling experience to thoroughly review and evaluate the KC-X solicitation issued by the Air Force," Muilenburg said. "We respect and understand the KC-X requirements, and appreciate the importance of this program for the United States and its war fighters. We intend to bid for the honour to work with our Air Force customer to replace the existing fleet of KC-135 aircraft with a new-

generation, multi-role tanker in a fair and transparent acquisition process."

Boeing studied the mission requirements closely to determine the optimal airframe size that would deliver the most capability for the lowest cost to own and operate. The result was the NewGen Tanker, a wide body, multi-mission aircraft based on the proven Boeing 767 commercial aircraft, updated with the latest and most advanced technology and capable of fulfilling the Air Force's needs for transport of fuel, cargo, passengers and patients.

More cost-effective to own and operate than the larger, heavier Airbus airplane, the Boeing NewGen Tanker will save American taxpayers more than \$10 billion in fuel costs over its 40-year service life because it burns 24 percent less fuel. The Boeing NewGen Tanker program also will support substantially more jobs in the United States than an Airbus A330 tanker that is designed and largely manufactured in Europe.



Boeing NewGen tanker flies with boom extended, ready to refuel a receiver aircraft

RAAF C-17 pilot training begins at Amberley

Boeing and the Royal Australian Air Force (RAAF) have welcomed the first class of C-17 Globemaster III student pilots at RAAF Base Amberley.

Four RAAF student pilots entered Pilot Initial Qualification (PIQ) training in February, and Boeing Defence Australia instructors will provide them with 350 hours of programmed training over 100 days, including 120 simulated flight hours in the C-17 Globemaster III Aircrew Training System's (ATS) realistic, full-motion Weapons Systems Trainer (WST).

The students will graduate following five flights at the controls of a real C-17 and acceptance by the RAAF's No. 36 Squadron.

"Becoming a RAAF C-17 pilot is my ultimate goal, and being able to carry out my PIQ training under Boeing instructors at RAAF Base Amberley is a huge advantage," said Pilot Officer Stephen Maunder, one of the first two RAAF student pilots who began training.

Prior to the RAAF commissioning the C-17 ATS in November, all RAAF C-17 pilots and aircrew trained in the United States.

"Now the C-17 WST is operational, the strategic opportunities presented by a locally based training system include removing substantial travel costs and providing increased capability through reduced aircraft training hours, making way for increased tasking," said Squadron Leader Brent Taylor, 36 Squadron Training Flight Commander.

"The Boeing Defence Australia instructors have strong aviation backgrounds in military and civilian operations, and I look forward to a long and rewarding relationship and have no doubt the in-country training will be of the highest standard."



Hugh Webster, Principal Engineer, operating at Vigilare console (Photo: H. Snowdon)

Project Vigilare completes first data transmission with Wedgetail

Project Vigilare, a Network Centric Command and Control System (NC3S) solution for Australia, recently completed its first data transmission with a Royal Australian Air Force (RAAF) Wedgetail Airborne Early Warning & Control (AEW&C) aircraft using Link 16.

The transmission took place between the Vigilare system installed at the RAAF's Northern Regional Operations Centre, Northern Territory, and an airborne Wedgetail AEW&C over Australia's east coast.

"As Vigilare is an extremely complex system-of-systems project requiring the merging of data from a large number of dynamic and disparate sources, the successful demonstration via Link 16 was a good indication of the progress. This is a further risk reduction activity ahead of the operational test this year," said Air Commodore Steve Sheedy, Director General - Surveillance and Control branch of the Defence Materiel Organisation.

Link 16 capability will enable the RAAF to transfer and receive critical tactical data from Australian Defence Force platforms including Wedgetail AEW&C aircraft, F/A-18 Hornets, F/A-18E/F Super Hornets, and naval assets, as well as future platforms.



RAAF Flight Lieutenant David Whyte and Pilot Officer Stephen Maunder inside the C-17 Weapons Systems Trainer at RAAF Base Amberley (Photo: H. Snowdon)

World first sustainable aviation fuel study launched in Australia and New Zealand

A world first study aiming to accelerate the development and commercialisation of sustainable aviation fuel in this region has been commissioned by Air New Zealand, Virgin Blue and Qantas, together with Boeing and the Defence Science and Technology Organisation (DSTO).

Commencing on 23 March in Sydney, the 'Roadmap' study is being convened by the Australian and New Zealand group of the Sustainable Aviation Fuel Users Group (SAFUG), and will be carried out by CSIRO. The study will build on international developments but focus on the unique advantages - and challenges - of the Australia and New Zealand region. Specifically, it will look at addressing barriers to a commercial and scalable sustainable aviation fuels industry.

Please note - all the latest environmental initiatives in the aviation industry in this region will be discussed at the Aero Environment Summit on April 13, in Sydney. For more information, contact [Emma Hodsdon](#)

Lean times for Office of Australian Industry Capability lead to opportunities for Australian business

The Office of Australian Industry Capability (OAIC) at Boeing is getting busier and busier helping Australian industry gain skills and win international business, with the team recently training a number of Small-to-Medium Enterprises (SMEs) in Perth, Adelaide, Brisbane, Melbourne and Sydney on Lean manufacturing principles.

Lean production is one of the most important concepts for manufacturing businesses within Boeing and therefore it is crucial that companies who work within the supply chain understand the requirements of how to eliminate waste within their operation, while delivering better quality work to their customers. All of this, of course, has a positive effect on the bottom line.

"If a supplier can demonstrate they understand how to implement Lean production principles, it can really

give them an edge in winning future contracts," said Ian Thomas, President, Boeing Australia & South Pacific.

There have also been multiple bid opportunities sent to several potential Australian suppliers as a result of a recent visit to Australia of a select group of procurement managers and executives from around the world. The companies represented Boeing; Boeing Defence Australia; Spirit; Spirit Malaysia; LMI; and Precision Machine Works and visited machining, sheet metal and tooling companies in Adelaide, Melbourne and Brisbane.

Ian Thomas added, "It's great to see such a fast response as a result of these assessments of Australian SMEs, and we anticipate even more bid opportunities arriving in coming months."

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Velocity

Editor: Ken Morton
Content: Gail D'Arcy
Emma Hodsdon
Sarah Wills
Photos: Heidi Snowdon
Boeing

E-mail: emma.hodsdon@boeing.com

Phone: +612-9086 3300



Boeing conducts a Lean workshop with employees at Ferra Engineering in Brisbane