



News from the Boeing world



April 2010



Boeing Australia & South Pacific



Boeing has successfully met all test requirements during the 787 Dreamliner's ultimate load wing and fuselage bending test. On March 28, loads were applied to the test unit to replicate 150 percent of the most extreme forces the airplane is ever expected to experience while in service. The wings were flexed upward by approximately 7.6 metres during the test and the fuselage was pressurised to 150 percent of its maximum normal operating condition.

Boeing took another visible step toward full 787 Dreamliner production on April 5 by placing the first steel column for its new 92,903-square-metre 787 Final Assembly and Delivery facility in Charleston, South Carolina. Boeing Charleston currently fabricates, assembles and installs systems for 787 aft fuselage sections and joins and integrates midbody fuselage sections from other structural partners.

Boeing Defence Australia has signed a three-year contract worth \$4.5 million to provide the Royal Australian Air Force with support for F/A-18 Hornet aircraft technical publications. Boeing has provided F/A-18 technical publication services including management, production of amendments and additional support tasks as required to the RAAF for the past five years.

## Virgin Blue soars for Sky Interior

Virgin Blue will have the first Next-Generation 737s in Australia featuring the new 737 Boeing Sky interior when deliveries from this month's major order start arriving in mid-2011.

The new aircraft will deliver a further reduction in operating costs to manage the airline's future cost base, maximise reliability and continue to bring to market modern airline products and services.

The deal includes aircraft with the latest technology under the Boeing performance improvements, which will also help the carrier maintain its commitment to reducing its carbon footprint, via initiatives including engine improvement and enhanced aerodynamics.

The aircraft will be delivered with the new 737 Boeing Sky interior with inclusions such as newly designed seats and IFE which will complement Virgin Blue's 'Airline of the Future' initiative to be rolled out during 2011.

Drawing from years of research used to design the 787 interior, the 737 Boeing Sky Interior features new 787-style modern sculpted sidewalls and window reveals that draw passengers' eyes to the windows, giving passengers a greater connection to the flying experience.

The new design offers larger, pivoting overhead stowage bins that add to the openness of the cabin. The bins give more passengers room to store a carry-on roll-aboard near their own seat, adding both extra convenience and extra legroom.

Changes to the Next-Generation 737 are more than cosmetic: Boeing is targeting a 2 percent reduction in fuel consumption by 2011 through a combination of airframe and engine improvements. Aircraft structural improvements will reduce drag, reducing fuel use by about 1 percent. Boeing's engine partner, CFM, is contributing the other 1 percent fuel savings through hardware changes to the engines.

The Virgin Group already operates 60 Boeing Next-Generation 737-800s and 737-700s. The new aircraft are needed for growth and replacement of lease airplanes.



Virgin Blue will have the first Next Generation 737s in Australia featuring the new Boeing Sky interior.



*Australian Army personnel conduct a daily flight inspection of a CH-47D Chinook on the flightline at Kandahar Airfield, Afghanistan (Photo: Defence)*

### New Boeing CH-47 Chinook helicopters

Australia has signed a \$513.5 million contract with the U.S. Army to acquire seven Boeing CH-47F Chinook helicopters, two simulators and associated spares.

The aircraft will replace the existing fleet of six CH-47D Chinooks operated by C Squadron, 5th Aviation Regiment, in Townsville, Queensland.

The first two aircraft are planned to enter service in 2014, with all seven in service by 2017.

"The CH-47D fleet is providing outstanding support to the Australian Defence Force, particularly in Afghanistan," said Greg Combet, the Minister for Defence Personnel, Materiel and Science.

"This acquisition of seven new CH-47F Chinook helicopters by the Australian Government will strengthen our ability to support our soldiers in the future."

The contract to procure the aircraft through the U.S. Government Foreign Military Sales program was signed at a Australian Embassy ceremony in Washington on March 19.

## First Super Hornets arrive

The first five Boeing F/A-18F Super Hornets for Australia landed at Royal Australian Air Force Base Amberley on March 26, bringing the next generation in air combat capability to the multirole fighter's first international customer.

The Super Hornets, piloted by RAAF aircrews, departed U.S. Naval Air Station Lemoore, California, on March 18 and made scheduled stops in Hawaii, Pago Pago and New Zealand on the way to Amberley.

The Australian Minister for Defence, Senator John Faulkner, welcomed the RAAF Super Hornets to Australia at a ceremony on the base.

"The Super Hornet program has been a huge success. A lot of hard work has been done to bring this project to the point where RAAF aircrew are flying the first jets to Australia," he said.

Dennis Muilenburg, President and CEO of Boeing Defense, Space & Security, joined Faulkner at the event.

"The men and women of Boeing are honoured to provide the next generation in air combat capability to the RAAF and proud to deliver it on time and on budget for all Australians," Muilenburg said.

"The arrival of these Super Hornets marks a new chapter in a partnership

between Boeing and Australia that has endured for more than 80 years.

"The exceptional collaboration and teamwork between Australia's Defence Materiel Organisation, the RAAF, the U.S. Navy and the Hornet Industry Team was the foundation that ensured these new Super Hornets are now ready to begin their RAAF service."

Among the other officials attending the event were Australian Defence Secretary Ian Watt; Air Chief Marshal Angus Houston, Chief of the Defence Force; Air Marshal Mark Binskin, Chief of Air Force; and U.S. Navy Rear Adm. Mark Skinner.

Australia announced its intent to acquire 24 Super Hornets in March 2007. The remaining 19 aircraft, each equipped with the Raytheon-built APG-79 Active Electronically Scanned Array radar, will arrive in Australia throughout 2010 and 2011.

"The on-schedule arrival of the new Australian Super Hornets marks the beginning of a new generation of air power for the RAAF," said Group Captain Steven Robertson, Officer Commanding the Super Hornet Wing.

"The multirole Super Hornet is an advanced, networked weapons system that provides a major leap in capability for the RAAF."



*The first five RAAF Super Hornets at RAAF Base Amberley (Photo: M. Lawrence)*

## Production Parts enters Super Hornet production chain



*Air Combat Officers test out the newly installed Vigilare equipment at Tindal. (Photo: Defence)*

### Boeing completes Vigilare site acceptance testing

Boeing's Project Vigilare, a Network Centric Command and Control System solution for the Royal Australian Air Force, has passed Site Acceptance Testing at the Northern Regional Operational Centre at RAAF Base Tindal, Northern Territory.

The system successfully demonstrated its ability to manage multiple datalinks concurrently from the site by using assets deployed over a vast geographic area, both in the Northern Territory and the East Coast of Australia. These datalinks connected test assets as well as operational assets such as RAAF F/A-18 Hornet aircraft.

"With data feeds from more than 45 different sensors and agencies using an enhanced Department of Defence communications network, the Vigilare SAT demonstrated an integrated, high-fidelity command and control system capability," said Tim Malone, Defence Materiel Organisation project director for Project Air 5333 Vigilare. "This is the culmination of many years of hard work by operational specialists, engineers and logisticians to build a system that arguably will be the benchmark for Network Centric Warfare systems in the ADF for some time."

Operational testing is scheduled to begin in June, before Vigilare is accepted at NROC by the Commonwealth of Australia.

Leading Melbourne-based engineering firm Production Parts has won a contract to build rudder pedal kits for the F/A-18E/F Boeing Super Hornet.

With a workforce of just over 70, Production Parts started life in 1946. Today its core focus is aerospace and defence manufacture from components to sub-assembly, through life support of defence equipment, consumable tooling, jigs and fixtures. Based near Essendon and Melbourne Airports, this highly skilled business already exports around 80 per cent of its output.

The path to its first Boeing contract started with Production Parts attending the spring sector conferences organised by the Boeing Office of Australian Industry Capability in St Louis, U.S., in December 2008.

"We met lots of people at the conferences," said Peter Nicholls, managing director, Production Parts. "More importantly it really put us in front of the right people and was crucial in us capturing this contract. Nicholls speaks highly of the OAIC,

which was established by the Defence Materiel Organisation and Boeing in 2007 to help qualified Australian defence suppliers enter the global aerospace supply chain by identifying bid opportunities and providing them with aerospace-focused training and mentoring.

"This assistance has enabled Production Parts to bid and win work with one of the world's largest defence primes, and we look forward to a long-term relationship and further opportunities with Boeing," Nicholls said.

"This contract not only demonstrates the global competitiveness of Australian companies, but also is a testament to the success of the Australian government's OAIC program. The time we received the request for quote through to bidding and proposing the work, was just 15 months," he said, adding the contract was for the FY10 build of Super Hornets with options out as far as 2015.

The first article will ship in August of this year.



*The first five RAAF Super Hornets fly in formation over RAAF Base Amberley (Photo: M. Elford)*

## Environmental Health and Safety leader appointed

Virginia Wheway (*pictured below right*) has been named Environment, Health and Safety director of Boeing Australia, making her the company's first EHS leader appointed outside the United States.

Wheway will lead Boeing Australia's EHS strategy, develop and maintain environmental stewardship initiatives and ensure the implementation of environmental regulatory actions and compliance.

"Her appointment underscores the importance Australia places on environmental governance, and this region's leadership in development of sustainable alternative aviation fuels," said Ian Thomas, President Boeing Australia & South Pacific.

Mary Armstrong, Boeing VP EHS, said Wheway was an ideal choice because of her extensive research & development experience in aircraft health monitoring, academic background and professional expertise.

She will be based at Boeing Australia's Sydney head office.

[www.boeing.com.au](http://www.boeing.com.au)

## Velocity

Editor: Ken Morton  
Content: Gail D'Arcy  
Emma Hodsdon  
Fiona Tristram  
Jenny Waller  
Photos: Mark Lawrence  
Michael Elford  
Boeing

E-mail: [emma.hodsdon@boeing.com](mailto:emma.hodsdon@boeing.com)

Phone: +612-9086 3300

# Summit highlights sustainable biofuel progress

Potential for the first biofuel powered commercial passenger flights in the next year grabbed the spotlight at the second Boeing-hosted Aero Environment Summit in Sydney, Australia, on Tuesday, April 13.

The summit drew 80 airline, airport, engine manufacturer, academic and regulatory body and media stakeholders to discuss progress on initiatives to reduce aviation's impact on the environment. At the last summit two years ago many of the initiatives discussed were simply ideas that have since become reality.

Chief among those initiatives was proving biofuel capable of replacing jet fuel. Sustainable biofuels offer about an 80 per cent reduction in carbon dioxide emissions compared with fossil fuels.

Billy Glover, BCA Managing Director Environmental Strategy, said the industry was moving forward rapidly with biofuel commercialisation. "I predict the first commercial flight powered by sustainable biofuel will occur in the next year," he said.

The prediction follows several biofuel test flights, one which Air New Zealand participated in and previewed at the 2008 summit. It also comes after a recently announced world-first study in Australia to determine the carbon footprint of sustainable biofuel production.

The study, led by the CSIRO, is supported by the Sustainable Aviation Fuel Users Group including Boeing, Air New Zealand, Virgin Blue and Qantas – all of which presented at the summit.

Other participants included Rolls-Royce, Christchurch Airport – the first carbon neutral airport in the southern hemisphere, GE Aviation and the Tourism & Transport Forum.

Mary Armstrong, Boeing VP EHS led the presentations with an overview of Boeing's efforts to pioneer environmentally progressive technology and reduce its environmental footprint.

Presentations from the summit are available at [www.boeing.com.au](http://www.boeing.com.au)



*Inspecting biofuel samples at the summit are (from left) Virginia Wheway, Boeing Australia EHS Director, Mary Armstrong, Boeing VP EHS, and Peter Broschofsky, Head of Environment and Fuel Conservation, Qantas Airways.*