

AVIATION WEEK
& SPACE TECHNOLOGY

Winner 2013



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THE WORLD

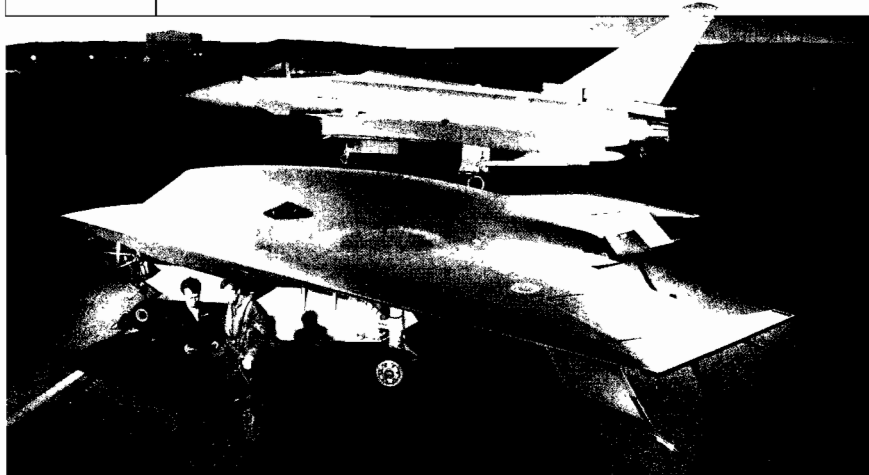
- 12 Shutdown suspected** as Malaysia Airlines 777-200 crashes from cruise into ground in Ukraine
- 12 New space** companies to take prominent roles in the first phase of Darpa's XS-1 spaceplane program
- 14 Farnborough ceremony** honors winners in Aviation Week's 2014 Top-Performing Companies rankings
- 14 Aviation Week** writers take home five of the 10 prizes at the 2014 Aerospace Media Awards

FARNBOROUGH 2014

- 22 A330neo unveiling** brings full circle the medium widebody competition between Airbus and Boeing
- 25 Latest 787** and XWB engine technology provides jumping-off points for seventh Trent variant

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Data from low-observability trials of Britain's Taranis unmanned combat air vehicle (UCAV) demonstrator (foreground) are set to feed into studies that could result in an Anglo-French UCAV in the 2030s.



- 26 Pratt & Whitney** testing and verifying a 'more robust' oil system for the CSeries' PW1500G engine
- 26 Russians do not** bring military aircraft to Farnborough, see their delegation halved by visa problems
- 27 While grounded,** F-35s were being updated with modifications slated for use later in the test program
- 28 Eurofighter hopes** adding AESA radar will improve sales and export prospects for the Typhoon
- 29 Taranis back** in the U.K. undergoing maintenance, ready for a possible third round of flight tests

31 After the SpaceX protest, U.S. Air Force seeks more-competitive opportunities for launches

DEFENSE

- 32 Japan rolls out** its ATD-X Shinshin fighter technology demonstrator, is considering buying more F-35s
- 34 Israel creating** an eighth Iron Dome battalion to counter on-going rocket attacks from Gaza

SPACE

- 35 Modified versions** of the Cygnus freighter launched to the ISS may see similar duty around the Moon
- 52 Images collected** by the Curiosity Mars Rover and other probes, show what awaits explorers



ON THE COVERS

This week, Aviation Week publishes two editions. On the far left cover is an Airbus concept for the A330neo, the reengineered and upgraded widebody the airframer announced at the Farnborough air show (page 22). The dog that did not bark at Farnborough was the F-35 fighter (page 27). Also in both editions are articles on Japan's fighter choices (page 32) and the resurgence of space in the U.K. (page 30). On the cover of our Defense Technology Edition is a BAE Systems photo of its Taranis unmanned combat air vehicle demonstrator flying over its classified Woomera flight-test site in Australia. Taranis has completed its second series of flights, in stealth configuration with the nose boom and conventional antennas removed, the company announced at Farnborough (page 29).

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AIR TRANSPORT

38 Boeing preparing a software update for the 737's flight control computer to prevent certain nose-high upsets

40 Honeywell, Rockwell Collins developing intelligence on growing list of threats to help pilots in flight

42 Asian flag carriers confronting legacy costs and management practices, and cutthroat LCC competition

45 Senior ANA executive stresses that further expansion is essential for both of Tokyo's gateway airports

46 WestJet plans to acquire four wide-bodies, signaling it is preparing to enter more overseas markets

47 Boeing sees great opportunity to introduce more robotics technology with 777X and 737 MAX debuts

UTILITY AIRCRAFT

48 'Re-life' program and gross weight increases boost market prospects for hundreds of aging Twin Otters

50 Vietnamese navy close to completing its first fleet of fixed-wing aircraft with Viking Air Twin Otters

ROTORCRAFT

54 Two teams designing advanced U.S. Army rotorcraft to be selected to build demos to fly by late 2017

VIEWPOINT

58 Space community faces problem of too many people using a shared resource without adequate rules

Aviation Week's editors at the Farnborough air show are caught in a rare moment not in motion. Seated around a table in the magazine's chalet are, clockwise from far left, Los Angeles Bureau Chief Guy Norris, Editor-in-Chief Joe Anselmo, Managing Editor for Civil Aviation Jens Flottau, Senior Pentagon Editor Amy Butler, International Military Editor Bill Sweetman, Managing Editor for Defense, Space and Security Jen DiMascio, London Bureau Chief Tony Osborne, Paris Bureau Chief Amy Svitak and Rupa Haria, director of digital content strategy.



On the Web

A round-up of what you're reading on AviationWeek.com

was on the ground at last week's report starting on page 22, then go to a special to hear our editors discuss key developments at the show.

. Read our special for more updates, photos and

Tap the icons in the digital edition to view our videos:



A350 FLYING DISPLAY: COCKPIT VIEW

The made its Farnborough debut. Watch filmed during the validation flight ahead of the air display.

AIR DISPLAY Boeing's 787-9 was the with a vertical climb that stunned showgoers. Watch this and other highlights from the air display.

BIG STORIES Joe Anselmo takes a look at the

SCORPION TALK Amy Butler talks to test pilot Andy Vaughan, who

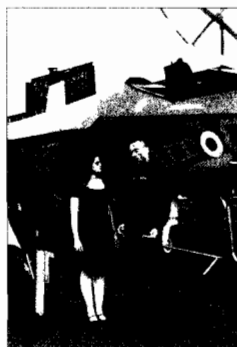
ENGINE TECHNOLOGY Guy Norris looks at the on display at the show.

GREAT BRITISH COMMENTATOR Rupa Haria talks to Capt. Stratton Richey, a British Airways 747 pilot who has been at Farnborough for the past 40 years.

COMING TOGETHER Rupa Haria talks to John Tabbron, a NATS air traffic controller at as validation taking place ahead of the air show.

TEST PILOTS TALK ABOUT THE F-35

Amy Butler speaks with Lockheed Martin F-35 test pilot Billie Flynn and BAE Systems test pilot Pete 'Wizzer' Wilson about the



BREAKING DOWN THE 787-9

Guy Norris explains the salient features of , a stretch version of the 787-8.

