

WEEK

& SPACE TECHNOLOGY

Winner 2013

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THE WORLD

- 10 **Aero Vodochody** planning to offer new version of the L-39, based on an upgraded engine and avionics
- 12 **Planetary scientists** hope the Mars 2020 rover instruments will find evidence that life has existed there
- 12 **First two USAF** Geosynchronous Space Situational Awareness Program satellites now operating

ROTORCRAFT

- 22 **South Korea taps KAI** as preferred bidder for helo that may carry the country into the global market

SPACE

- 24 **ATV retirement**, debate on next-gen launcher put ESA's future support for the space station in doubt

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Investigators check debris at the crash site of Malaysia Airlines Flight 17 in eastern Ukraine. Major air transportation industry groups are moving to address systemic safety gaps exposed by the shutdown.

- 26 **European development** of an ATV-derived module to give ESA big role in U.S. manned space exploration
- 27 **USAF adoption** of a catalog procurement mechanism clears big hurdle for government hosted-payloads
- 49 **Terrestrial smartphone** technology finding its way back into space as low-cost, rapidly evolving equipment
- 51 **Lockheed Martin** expects more than half of A2100 satellite bus to be built through additive manufacturing

DEFENSE

- 28 **U.K. likely to move** soon to restore long-range maritime patrol and ASW capability that it lost in 2010

- 30 **Belgium begins** collecting information about replacement options for the air force's 54 F-16s
- 31 **USAF studying** the next generation of air capability as it eyes emerging threats amid constrained budget

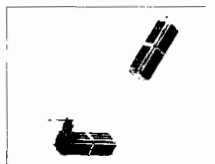
- 53 **British surveillance** aircraft system, scheduled for early retirement, is getting a new lease on life

AIR TRANSPORT

- 32 **Major aviation** groups discuss how to improve intelligence about potential military threats to airliners
- 33 **TRU beats** bigger players to win contract to the first flight-training equipment for the 737 MAX

IN THE COVER

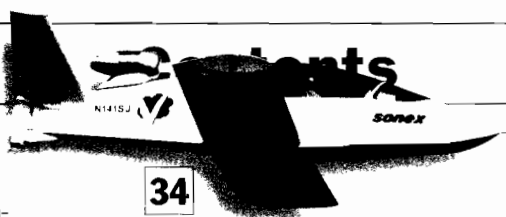
In the wake of a Malaysia Airlines Boeing 777 vanishing, aviation is working to make global flight-tracking a reality. A special report beginning on page 38 explains the technologies and details the latest work. In our cover photo, Michael Makin, a flight engineer warrant officer for the Royal Australian Air Force, searches for signs of MH370 in a Lockheed AP-3C Orion as part of Operation Southern Indian Ocean. The massive search spawned calls to overhaul how airlines and air navigation service providers track aircraft on oceanic routes. Royal Australian Air Force photo.



49 Terrestrial smartphone technology is finding its way back into space in the burgeoning small-sat movement.



22 South Korea gives its indigenous aircraft industry a chance by selecting KAI to develop a civil/military helicopter.



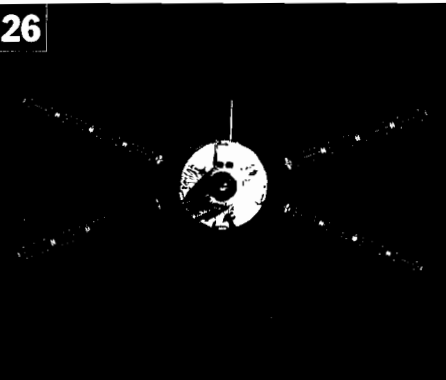
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AIRVENTURE 2014

34 Despite relaxed atmosphere at Oshkosh, much business does transpire and milestones are achieved

GLOBAL FLIGHT-TRACKING

38 Airline industry wants ICAO to mandate flight-tracking upgrades that may include data from 'black boxes'



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41 FCC denial linked to piecemeal tracking system the airline industry is attempting to modernize

42 New satellite-based system could play major role in improving aircraft-tracking in emergencies

44 New SAR satellite network, emergency locator transmitters to transform how distress signals are activated

46 Airline industry gravitating toward two midterm solutions for flight-tracking since MH370 went missing

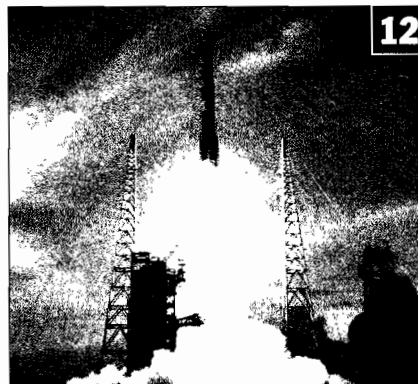
47 Shared computing paradigm could be long-term answer to the problem of global flight-tracking

BUSINESS

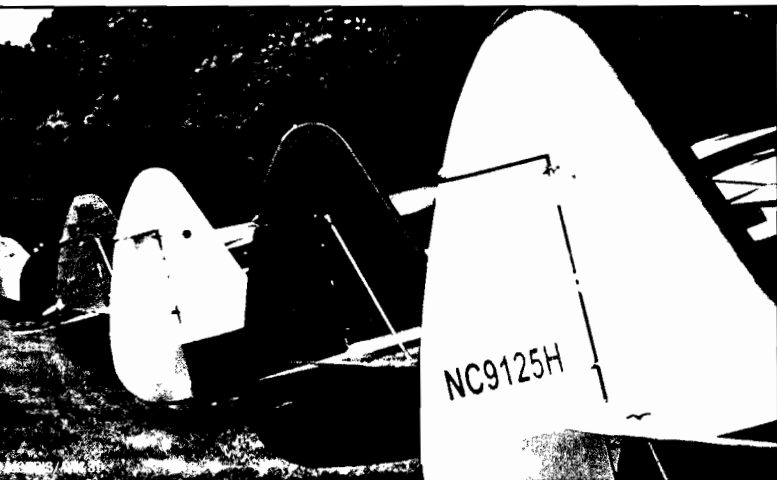
52 To see where the U.S. defense base is going, some say 'check your driveway' as the direction is global

VIEWPOINT

58 U.S. should bring Russia back into full compliance with Intermediate-range Nuclear Forces Treaty



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On the Web

A roundup of what you're reading on AviationWeek.com

Our team was on the ground and in the air at

Read our coverage beginning on page 34, then click over to our online show page to read articles and blog posts and

FIXING FLIGHT-TRACKING

Read our cover package beginning on page 38, then listen as Avionics & Safety Editor John Croft, Executive Editor Jim Mathews and *Air Transport World's* Aaron Karp

in our latest Check 6 podcast.

MEDIA MATTERS

Senior International Defense Editor Bill Sweetman was to talk about protecting commercial aircraft in the wake of the shutdown of Malaysia Airlines Flight 17,

Read his recap of the process and his frustrations (ow.ly/zNgvw).

Reacting to our online article "Boeing Urges International Action To Meet Pilot Shortage Challenge," 'Inspector' wrote: "

a well-managed one that allows the remaining behemoth airlines to hire pilots with less experience and qualifications, train them less and work them harder.

ow.ly/zNhom



The Aviation Week Intelligence Network has a dating to 1997.