Winner 2016

AVIATIONWEEK

& SPACE TEC



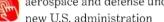
Est. 1955

Digital Extras Tap this icon in articles in the digital edition of **AW&ST** for exclusive features.

- 7 Feedback
- 8 Who's Where
- 10-11 First Take
 - 12 Going Concerns
 - 13 Up Front
 - 14 Inside Business Aviation
 - 16 Airline Intel
 - 17 Leading Edge
 - 18 In Orbit
 - 19 Washington Outlook
 - 63 Classified
 - **64** Contact Us
 - 65 Aerospace Calendar

THE TRUMP ERA

20 What to watch in aviation, aerospace and defense under a



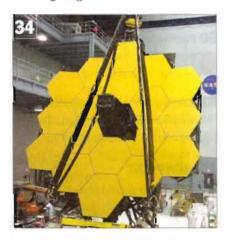
22 European leaders wonder which Trump posturing will become policy and which will fade away

DEFENSE

- **24** U.S. Air Force F-35s prepare for first overseas deployment as part of theater security package in 2017
- **26** Raytheon demos high-power microwave technology that could reduce military threat from drones
- **41 RAF Eurofighter** Typhoons prevailed in exercise against Malaysian Flankers, UK says



42 Turkey accelerates arming of indigenous tactical UAVs, targeting Kurdish militants



COMMERCIAL AVIATION

28 CFM assembly sites are readying for an unprecedented production increase as Leap engine rates rise

- **30** Safran's top priority in moving the Leap engine program forward is to reduce supply chain costs
- **31 Airbus A350** and Boeing 777X may be stretched further, into ultrahigh-capacity territory
- **52 Faltering demand** and political uncertainty take a toll on profits of Emirates and Turkish Airlines

SPACE

- **32 China's Casic** is moving into the launcher and propellant domains of sibling state group CASC
- **34 Webb Telescope** will have grapple targets for in-space repair, but NASA does not plan to use them



ON THE COVER

Lockheed Martin Sikorsky's S-76B SARA autonomy testbed flies with a modified Cessna Caravan over the ground-station van at Poughkeepsie, New York, in a demonstration of advanced cockpit automation under DARPA's ALIAS program (page 57). Sikorsky photograph by Ted Carlson. Elsewhere in this issue are columns and analysis of the implications of Donald Trump's election as U.S. president (pages 13, 16, 18-22 and 66), a special report on the growing practice of hiring contractors to test the mettle of military pilots (page 36) and a look at a truly portable and remainly all elevations (page 55).

Aviation Week publishes a digital edition every week. Read it at Aviation Week com/awst and on our app.

MILITARY TRAINING



36 New breed of aircraft collector is training Air Force, Marine Corps and Navy combat pilots

- **36** Fighter training sites across the U.S. are pooling requirements for adversary-air support aircraft
- **40** Germany and France are leading the way in investing in commercial adversary air training



ROTORCRAFT

43 With Brazilian upgrades under its belt. Helibras looks to collaborate with Airbus on more regional work

AIRLINES IN LATIN AMERICA

- **44 Copa Holdings** is setting up ultralow-cost carrier Wingo as part of Copa Airlines Colombia subsidiary
- 45 New bilateral agreement opens more competition in Mexico, may free slots for low-fare carriers

46 Many U.S. carriers have opted to postpone initial flights to Havana, citing airport and training issues

PROPULSION

53 Rolls-Royce's power gearbox and ceramic matrix composites work are in future airliner engine plan

TECHNOLOGY

- **54 NASA looks** at anomalies to help researchers develop an unmanned aircraft traffic management system
- **55** Avionics software that is portable and reusable between aircraft. platforms is now within reach
- 57 DARPA program aims to build pilots' trust in autonomy through cockpit assistance

SIMULATION AND TRAINING

- **60** Positive training upgrades are expected by both U.S. Army and Navy despite differing flight needs
- **61 Airbus and Boeing** develop palette of options to help avoid pitfalls that have led to airline tragedies

VIEWPOINT

66 How Trump should restart U.S. space momentum that slowed during the Obama administration