Est. 1955

The unprecedented rate of long-range missile testing by North Korea

has added a new level of urgency to the Trump administration's review

AVIATIONWEE

of U.S. missile defenses.

Winner 2017

Grand Neal

Access exclusive online features from articles accompanied by this icon.

- 7 Feedback
- 8 Who's Where
- 9-10 First Take
 - 11 Up Front
 - 12 Going Concerns
 - 13 Inside Business Aviation
 - 14 Airline Intel
 - 15 Washington Outlook
 - 56 Classified
 - 57 Contact Us
 - 57 Aerospace Calendar

DEFENSE

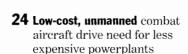
16 France and Germany propose a European answer to the F-35 and look at other military cooperation

COMMERCIAL AVIATION

- **18** Airlines are concerned Brexit could mean regulatory chaos for European air transport
- 19 Norwegian Air's ambitious expansion plans depend on overcoming multiple obstacles
- **21** U.S. legacy carriers delay widebody orders, weighing Boeing's New Midsize Airplane and other options

PROPULSION

24 Firefly returns, bolstered by new funding, to develop an upgraded small-satellite launch vehicle





26 Aquatic UAV technology developed for environmental sampling could be used for intelligence-gathering

CONNECTED AEROSPACE

28 Low-cost, long-haul carriers study cabin connectivity options to draw passengers and drive profits

AERONAUTICAL ENGINEERING

30 NASA develops an airliner concept that could reduce noise by 90% and enable continued capacity growth

SPACE

31 Small satellites are popular, but industry analysts warn that their revenue potential is uncertain

DEFENSE

- **32 MiG-35 steals** spotlight at MAKS air show near Moscow as Russian aerospace pivots to next generation
- **34** Austria aims to replace its Eurofighters by 2020 with supersonic-capable aircraft
- 35 Agricultural aircraft are taking on the role of low-cost, longendurance strike platforms
- **37** Japan makes progress on its Future Fighter engine, which will be much larger than predecessor
- **39** South Korea is close to deploying * 1 1 a ballistic missile featuring a ำฟิลัทeuverable reentry vehicle



ON THE COVER

Loss of control and upset recovery remain a major concern in general aviation and at airlines. Senior Editor for Avionics and Safety John Croft reports on new symbology and techniques that might help. Cover photo by Nathan Richards/Barron Associates. Also in this issue: France and Germany plan Europe's answer to the F-35 (page 16), a new urgency to missile defense (page 40) and U.S. legacy carriers hold back on widebody aircraft orders (page 21).

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



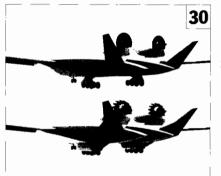


MISSILE DEFENSE

- **40 North Korea's** accelerated missile testing adds urgency to tests and upgrades of U.S. interceptors
- **42 First ICBM target** intercept by the Ground-Based Midcourse Defense system, illustrated step by step

INTERVIEW 44 CEO says acquisition of $\mathrm{B/E}$

Aerospace will make Rockwell Collins a leader in smart airplanes



GENERAL AVIATION

- **46 Aviation Week** flight tests a new upset recovery guidance system to help prevent loss of control
- **48** New aftermarket autothrottle manages power and observes

limits for non-Fadec turboprops

50 Electrics and new regulations combine to open the way for a revitalization of general aviation



- 50 Sikorsky boosts marketing for its versatile and rugged twin-engine turboprop built by PZL Mielec
- turboprop built by PZL Mielec

 53 Airbus plans to fly its urban air

mobility demonstrator by 2018 and production prototype by 2023

AIRLINES

54 Lessors owned by low-cost carriers target third-party business as the next phase in their evolution

EDITORIAL

- **58 UK leaders need** to quickly figure out how to preserve their enviable aerospace sector as Brexit looms
- **58 U.S. Space Council** reestablishment is encouraging, but NASA needs a new administrator now

