

AVIATIONWEEK
& SPACE TECHNOLOGY



Digital Extras Access exclusive online features from articles accompanied by this icon.

- 7 Feedback
- 8 Who's Where
- 10-11 First Take
- 12 Up Front
- 14 Going Concerns
- 15 Inside Business Aviation
- 16 Airline Intel
- 18 Leading Edge
- 20 In Orbit
- 21 Washington Outlook
- 71 Classified
- 72 Contact Us
- 73 Aerospace Calendar

SPACE

22 **"American footprints"** vision of Trump would be possible, if NASA human exploration funding grows

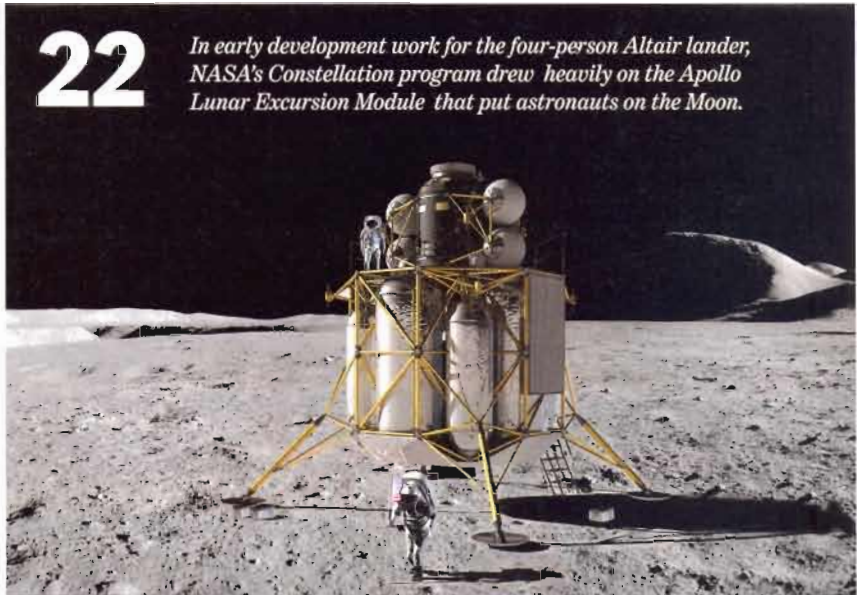
24 **Lunar cargo lander** key to Blue Origin plan for Moon bases as jumping-off points to deeper space

26 **Blue Origin** aims for "new equilibrium" in commercial satellite industry with New Glenn launcher

37 **SpaceX** develops and flies first rocket booster autonomous destruction system on Falcon 9

BELL 505 PILOT REPORT

28 **Jet Ranger X** meets Bell's goals for reentering light turbine market, Aviation Week's pilot finds



22

In early development work for the four-person Altair lander, NASA's Constellation program drew heavily on the Apollo Lunar Excursion Module that put astronauts on the Moon.

COMMERCIAL AVIATION

32 **Airlines and lessors** press Boeing to launch New Midsize Airplane as 737 MAX family progresses



65

34 **Established airlines** move to unbundle offerings as new LCCs disrupt Latin American markets

35 **Aireon surveillance** payloads on Iridium NEXT satellites detect first aircraft ADS-B transmissions

TECHNOLOGY

36 **Stratospheric** balloon specialist plans to offer edge-of-space passenger flights by 2020

DEFENSE

39 **U.S. Air Force** seeks to lower F-35A cost by 2019 by persuading non-U.S. customers to join block buy

40 **Short on funds** for new tankers, U.S. Air Force considers survivability upgrades for KC-135s

42 **Three industry teams** offer bizjet and commercial airliner platforms to replace U.S. Air Force J-Stars

44 **Russia challenges** Washington with violation of Intermediate-Range Nuclear Forces Treaty

45 **U.S. Air Force** entices engine manufacturers with plan to upgrade or replace B-52 engine

ROTORCRAFT

47 **Real-time health** and usage monitoring system data access could help save lives offshore



ON THE COVER

The new Bell 505 Jet Ranger X is a more powerful, updated version of the 206B. Aaron Smith reports on his evaluation flight (see page 28). Bell Helicopter photo by Sheldon Cohen, Cohen Pictures. Also in this issue: Boeing's next mid-market airplane (page 32), renewed interest in Moon missions (page 22), new Russian cruise missiles (page 44) and our annual Laureate awards (page 54).

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

48 FC-X concept expresses Bell's vision for the future and its aspiration to take market lead



AEROSPACE IN SWITZERLAND & AUSTRIA

- 50 Chinese partner Xian** and tech acumen boost expansion plans of Austrian supplier FACC
- 52 Ruag draws on** its composites technology portfolio to gear up for next-gen narrowbody program



53 Building on strong turboprop sales, Pilatus looks to make its name in business jets, despite weak market

LAUREATES 2017

54 Aerospace industry's best and brightest celebrated with 60th annual Aviation Week awards



TRAINING

62 New technologies from Thales use physiological data from pilot to help reduce human factors errors

63 ATR aims to replace dozens of aging Saab turboprops being operated by U.S. regional airlines

EJECTION SEATS

- 64 Martin-Baker** is requalifying its US16E seat for the F-35 to accommodate new helmet
- 65 UTC Aerospace Systems** regains momentum in escape system market with ACES 5 contracts
- 67 Lightweight seats** for small aircraft will be next growth area, hopes market leader Martin-Baker

LOW-COST CARRIERS IN ASIA

68 AirAsia Group and Singapore Airlines subsidiaries plan network and fleet expansion this year



70 Japan's LCC sector could see big changes this year with consolidation and new player

VIEWPOINT

74 The case for privatization of U.S. air traffic control is weak: Airlines can control causes of most delays