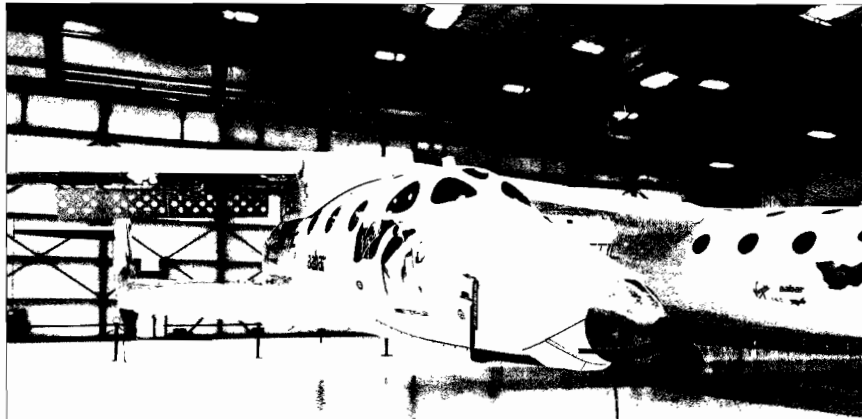


AVIATION WEEK
& SPACE TECHNOLOGY

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Virgin Galactic says it is finally on the verge of full-duration powered test flights and on track to start commercial suborbital operations in 2015 with Scaled Composites' SpaceShipTwo after propulsion-related changes to the spacecraft interrupted powered flight-testing early this year.

THE WORLD

- 13 Suborbital space** vehicle developer XCOR begins final assembly of prototype two-seat spaceplane
- 14 Air France pilot** strike cost the airline €500 million and left a lot of strategic questions unanswered

SPACE

- 24 Virgin Galactic's bid** to establish first suborbital spaceline service may have slowed, but has not stalled
- 26 Busek test-fires** tiny RF gridded-ion thruster for CubeSat apps, using 'solid' iodine as fuel
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- 31 Raytheon's investments** in Gallium Nitride paying off in victories in large radar competitions

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- 32 Virgin Atlantic's** decision to shutter Little Red follows shift toward transatlantic services
- 33 Etihad stepping up** its efforts to become a global force by introducing an alliance-like system
- 34 Boeing and Airbus** begin rolling out safety features designed to help locate a troubled aircraft

- 35 Boeing ramping-up** 777X preparations by awarding manufacturing contracts, announcing sites
- 37 Moscow ensures** that banks back struggling Superjet program despite Western sanctions
- 38 Pratt & Whitney** closes on test engine deliveries while CSeries flight rate accelerates

- 38 Mitsubishi performing** pre-rollout system checks on first MRJ in preparation for initial flight

PROPULSION

- 40 Next-generation CFM** engine development marks key milestone with start of Leap-1C flight tests
- 42 As CFM prepares** to introduce Leap, it faces faster production rates for its new engine as well as the CFM56

ON THE COVERS

This week, Aviation Week publishes two editions. On the cover far left is CFM's Leap-1C engine on the wing of General Electric's 747 flying testbed in Victorville, California. The next-generation powerplant was launched five years ago when China's Comac selected it for the C919 airliner and made its first flight last week. Including versions in development for Airbus and Boeing, almost 8,000 units have been ordered, making it the fastest selling jet engine in history (see page 42). On the cover of our Defense Technology International Edition is a Gray Eagle UAS flying with a U.S. Army AH-64 Apache helicopter at Dugway Proving Ground, Utah. Pilots on the Apache can control the UAS's sensors and flight path (see page 46). Elsewhere in both editions are updates on the 777X, MRJ, CSeries and Superjet (pages 35-39) and reports on Virgin Atlantic (page 32) and Japan's UAS plans (page 52).



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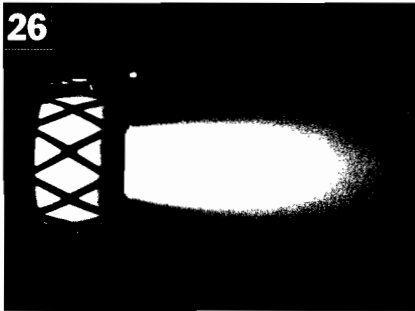
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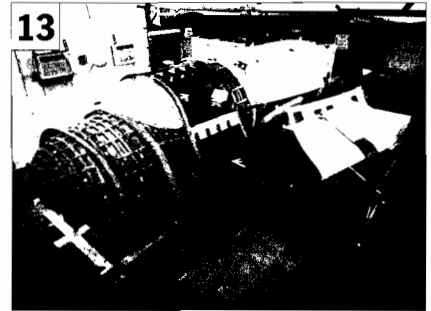
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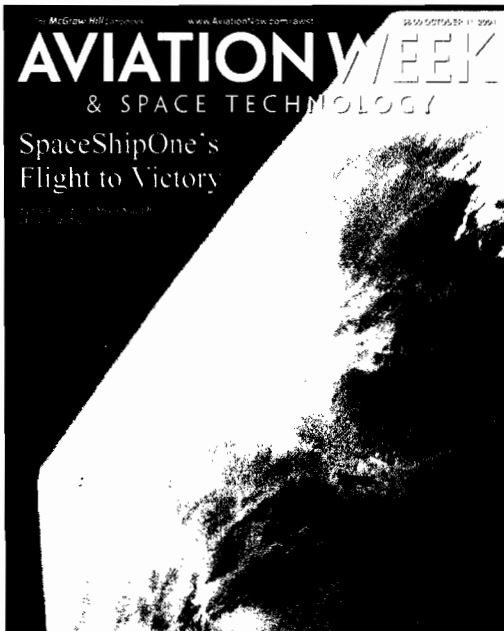
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On the Web

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

Why it's the U.S. Air Force's three-dimensional expeditionary long-range radar, of course. Read Senior Pentagon Editor Amy Butler's award behavior that indicates then link to her Ares post about post-contract ow.ly/CvKDt



ON THE GROUND

Last week brought you the latest from our conference in Madrid. This week, we're at AUSA in Washington. Visit daily for updates from the show.

Last week's Viewpoint, "Yes, There Is a Pilot Shortage," drew mostly negative comments from our online readers. Goforride wrote: "There is no pilot shortage for the major carriers. There is a pilot shortage for the 'commuters' that want someone to take on \$50,000 of educational debt to get a job that pays \$25,000 a year."

ow.ly/CvbFF



Information on suppliers, systems specs and archived articles for more than 150 key programs are available to AWIN subscribers.

This 2004 cover shows the view from SpaceShipOne's historic flight a decade ago. Read the original story along with comments from Senior Propulsion Editor Guy Norris. Among other notables in

our **From the Archives** feature: a 1991 article on the MiG-31's debut at the Paris air show, with reflections from Senior International Military Editor Bill Sweetman.