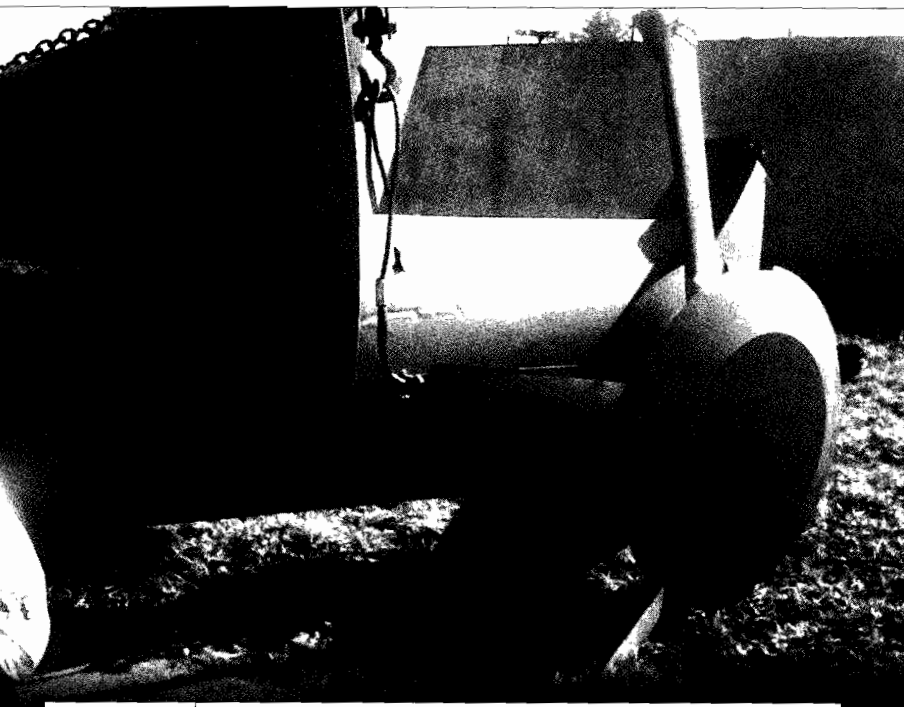


# AVIATION WEEK

## & SPACE TECHNOLOGY



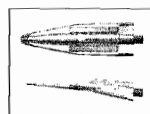
# 22

*Previously unseen stealth-like enhancements to rotorcraft are credited with playing a critical role in the U.S. mission to take down Al Qaeda leader Osama bin Laden.*



**52 Northrop Grumman** plans to unveil its Firebird optionally piloted aircraft this month at the Pentagon's Empire Challenge

*exercise. Firebird is designed to carry up to four intelligence-collecting sensors and is aimed at the General Atomics MQ-9 Reaper and Hawker Beechcraft C-12 markets. In this configuration, Firebird is carrying the tactical common datalink (under the nose), an electro-optical and infrared sensor (below the cockpit), and a synthetic aperture radar (under the fuselage). Each wing also contains a single hard point suitable for weapons deployment. Northrop Grumman photo.*



**41 Follow-on hypersonic vehicle tests** are accelerating.



**44 Airports evolve** into dynamic commercial centers.

- 8-9** Feedback
  - 10** Who's Where
  - 14-15** The World
  - 16** The Inside Track
  - 18** Airline Intel
  - 20** In Orbit
  - 21** Washington Outlook
  - 55** Classified
  - 56** Contact Us
  - 57** Aerospace Calendar
- 12 Downturn outlasts** 'retiring' Cessna CEO Pelton as Textron chief takes over Wichita reins temporarily
- 14 Russian air force** begins flight testing the Su-35S, the latest upgrade to the Su-27 Flanker
- 15 Virgin Blue Group** to unify international and domestic operations under Virgin Australia brand

- 22 U.S. raid on bin Laden** was so important to justify the risk of exposing stealth-like technology
- 22 Success may bolster** the massive U.S. investments in intelligence, surveillance and reconnaissance
- 24 Government and industry** agencies exploring ways to streamline airline passenger security processing
- 26 USAF crafting plan** to stimulate competition for Evolved Expendable Launch Vehicle product family
- 27 Finmeccanica aiming** to generate stronger returns, rather than just expanding through acquisitions

- 28 European carriers** face sustained economic weakness and fuel prices back on an uphill trajectory
- 30 Some U.S. airline execs** believe price elasticity, prudent capacity control will still produce annual profits
- 31 With first deliveries** of 787 and 747-8 in sight, Boeing sharpens its focus on ramping up production
- 32 Recovery of flight** data and cockpit voice recorders increase prospects for finding AF447 crash cause
- 33 Union says Boeing** is using lobbying power to threaten labor board's authority in bargaining case
- 34 Boeing Phantom Ray** stealth-shaped unmanned aircraft demonstrator makes its first flight at Edwards

**35 China shows off** its J-15 Flying Shark fighter, which is intended for the country's first aircraft carrier

**36 Downselect in high-profile** Indian fighter competition raises an unusual number of questions

**42 Australia will need** its new flight training system to handle more pilots for ops with new aircraft

#### SPACE SCIENCE

**38 Gravity Probe B** pushed spacecraft technology to the limit—and perhaps a little beyond it

#### ROTORCRAFT

**40 Helo orders** from the Russian military are up and commitments for new types are on the horizon

#### PROPULSION

**41 First hypersonic** flight experiment yields positive data as intense test series of seven evaluations looms

#### AIRPORTS

**44 Commercial airports** diversifying to meet the needs of an increasingly sophisticated marketplace

**46 Three metropolitan** U.S. airports are trying to reinvent themselves using markedly different strategies

**48 U.S. airports focus** on renovation as greenfield sites bloom in Middle East and Asia-Pacific

**50 Oman shelves airport** design plan that called for tunnels, other vulnerable underground structures

**51 Forced sale** of London Stansted may defy skeptics of airport owner cooperation with fractious airlines

#### ISR AIRCRAFT

**52 Northrop Grumman giving** General Atomics a run for its money in the MALE unmanned systems market

#### EDITORIAL

**58 Requirement to cut** U.S. defense spending will make the new secretary's job even harder

