

47th Annual Aerospace Laurels



AVIATION WEEK

& SPACE TECHNOLOGY

The McGraw-Hill Companies

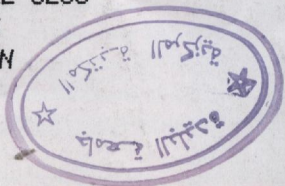
www.AviationNow.com/awst

\$6.00 FEBRUARY 2, 2004

Opportunity
Rocks!

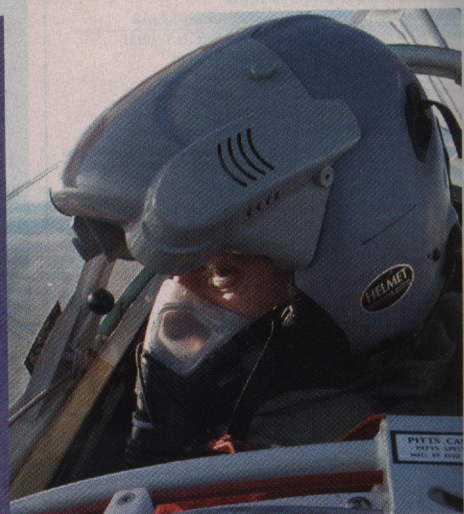
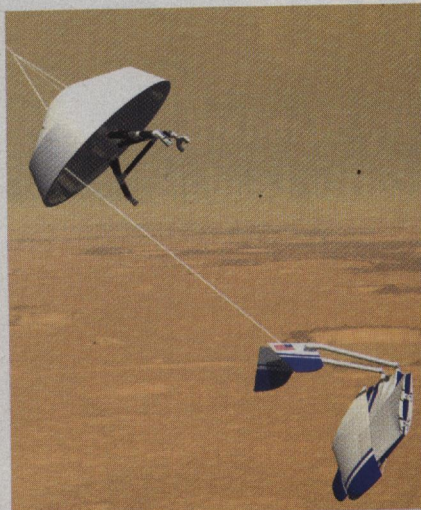


000019850970 JUL 04 002
CADC APPEL DU LIBRE 3206
CDE 02/113 CLIENT 6
105 RUE DE CHARENTON
75012 PARIS
FRANCE



Contents

Volume 160 Number 5



41 Bush space vision sparks new round of creative thinking.

48 High-energy laser may be adapted to thwart SAMs near airports.

59 Helmet-mounted display for F-35 undergoes testing.

DEPARTMENTS

- 6 Correspondence
- 8 Who's Where
- 10-11 Market Focus
- 13 Industry Outlook
- 15 Airline Outlook
- 17 In Orbit
- 18-19 World News Roundup
- 21 Washington Outlook
- 63 Classified
- 64 Contact Us
- 65 Aerospace Calendar

WORLD NEWS ROUNDUP

- 18** Transport groups protest new EC passenger rights
- 18** British Airways to embark on further round of cost cuts

- 19** Defense orders keep Boeing on track in fourth quarter
- 19** Ryanair warns of decline in financial performance

LAURELS 2003

- 22** AW&ST names Laureates, Laurels and Legends for '03

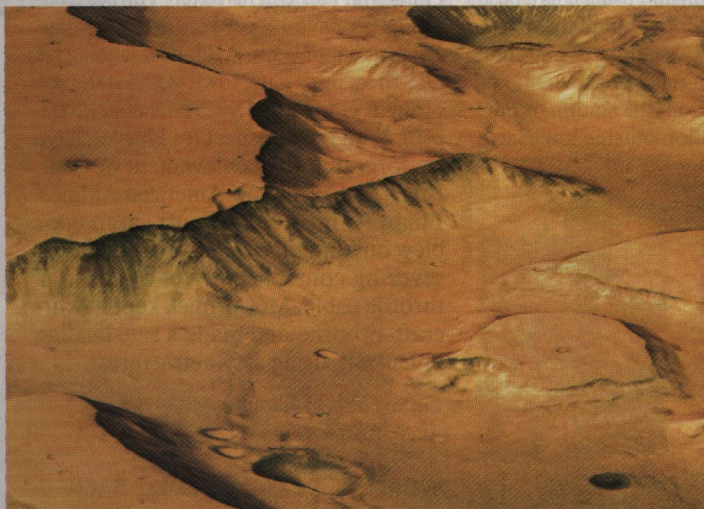
WORLD NEWS & ANALYSIS

- 28** EADS wins U.K. tanker battle, needs finance contract
- 29** Increased Pentagon spending bolsters profits in 2003
- 31** U.S. Defense budget boosted, but long-term risks seen
- 32** Opportunity rover scores a planetary hole-in-one
- 36** Spirit engineers cautiously planning new science ops
- 38** European scientists shrug off lander loss

ABOUT THE COVER

The mysterious dark gray soils of Meridiani Planum and scientifically exciting Martian bedrock (right), which are possibly 3-4 billion years old are imaged by the NASA Jet Propulsion Laboratory/Cornell Panoramic Camera on the Mars rover Opportunity, which landed Jan. 24 (see p. 28). Note the bowl shape of crater walls and how the soil color brightens to red where disturbed by lander airbags. The rover will sample the soils and bedrock and then drive out of the crater. Low gain antenna is at right.

- 40** NASA plans to seek more Euro ATVs for ISS support
- 40** Space plan triggers exploration-technology ideas
- 42** Italian agency chief plays down ESA launcher dispute
- 43** Tactics, defenses in Iraq shift to meet advanced missiles
- 44** Innovations take surges out of medical air evacuations



38 European scientists tally imaging results from Mars Express orbiter.

28 EADS moves to clinch deal to supply tankers to Royal Air Force.

www.Aviationnow.com/awst

FREE TO SUBSCRIBERS

For the complete current issue, archives and more, go to:

www.Aviationnow.com/awst

45 Iran reveals cruise missile based on Chinese design

AIR TRANSPORT

46 United's union concedes pace cost reductions

47 French grow impatient with pace of data on charter crash

48 Ground-based Manpads defenses gain attention

49 AvCraft plans to deliver first newly built 328 by year-end

50 Airports slugging it out for share of service to Moscow

50 757 sale may wreak havoc in Russian aviation market

AVIONICS

52 Digital revolution eliminating lots of cockpit paperwork

DEFENSE

55 Helo vulnerability interests Pentagon's test community

56 Upgraded platforms trickle into Russian air force fleet

57 Gorshkov brings MiG-29s, new strength for India's navy

AERONAUTICAL ENGINEERING

59 Flights aimed at gaining pilot reactions to helmet design

59 University evaluates antennas for U.S. Navy missiles

AEROSPACE CAREERS

60 U.S.' nuclear labs rebuilding science, technology teams



52 Class 3 EFB is installed in a Boeing 777.

SPACE TECHNOLOGY

61 U.S. details military space plans for 2006 and beyond

VIEWPOINT

66 U.K. aerospace shouldn't pin hopes on alliances with U.S.