

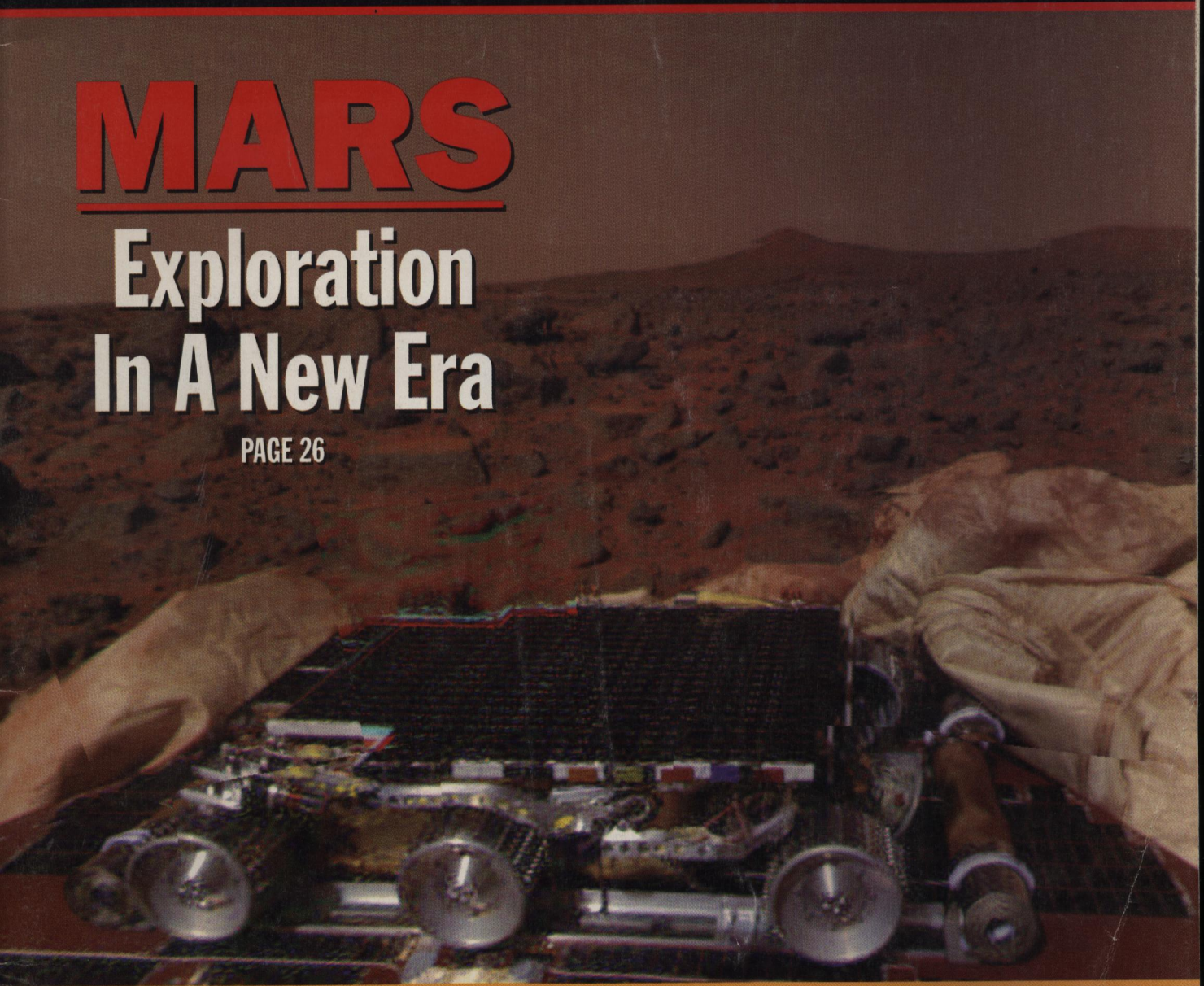
AVIATION WEEK & SPACE TECHNOLOGY

A PUBLICATION OF THE MCGRAW-HILL COMPANIES • \$5.00 • JULY 14, 1997

MARS

Exploration In A New Era

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*Technology
Innovation
Awards*



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AVIATION WEEK & SPACE TECHNOLOGY

About the Cover

Sojourner, the first vehicle to travel over the surface of another planet, sits in its predeployment configuration on a petal of the Mars Pathfinder shortly after landing in Ares Vallis on July 4. (see p. 26). NASA photo by Imager for Mars Pathfinder team.



RETURN TO MARS

Mars—a big bounce back

In first of nine Mars missions over next decade, NASA's low-cost bet on novel technologies pays off

Rover outing yields clues to Mars crust

Pathfinder scientists beginning to question some generally held beliefs about crust melting cycles

Airbags provide option for high-risk landings

However, propulsive descent is probably leading candidate for Mars landings beyond '98 mission

Airbag passes test on Mars

Went through about 30 design iterations to meet stringent abrasion requirements

HEADLINE NEWS

NATO keeps door open as it expands eastward

Inks special agreement with Ukraine, inaugurates consultative council with neutral countries 37

Clinton, Senate duel over NATO expansion

Advocates say greater European market will create defense jobs; opponents say purchases will hurt area's recovery 38

Mir repair to yield only partial power

EVA to restore power is being delayed to give crew more time to practice connection of cables 39

<http://www.awgnet.com>

Aviation Week's Web site offers selected articles from the current issue, as well as daily news updates, the Safety Resource Center, a gallery of photos and features from special issues. It's also a great jumping off spot for surfing to other aerospace sites. We're available on CompuServe, too; just GO AWG.

U.S. plays out merger endgame

'Preemptive' move on Northrop Grumman is likely to spark debate over remaining competition 6

Acquisition would create formidable EW giant

Both companies are developing next-generation directed-energy IR countermeasures systems 6

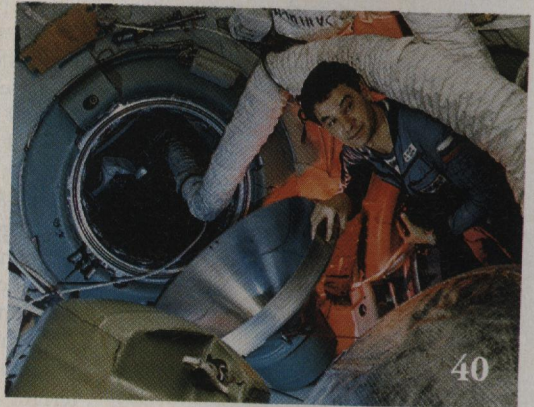
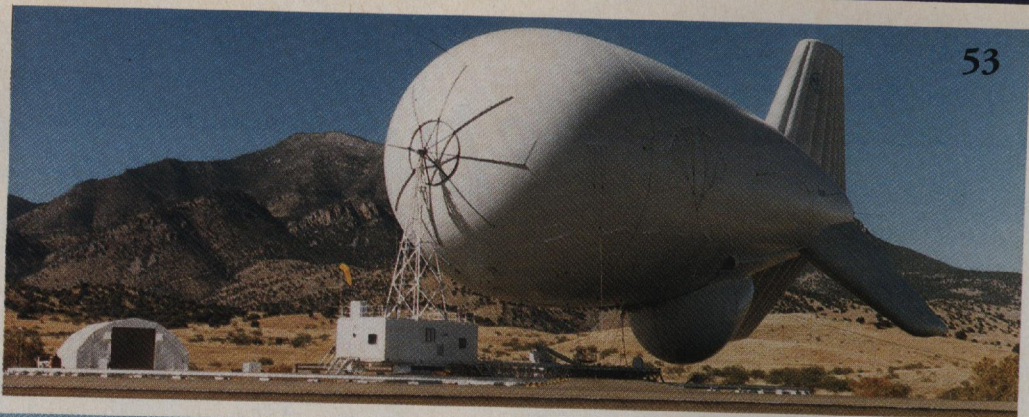
Europe ups ante over Boeing merger

EC threatening to penalize companies if they follow through with their merger as currently envisioned 6

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NTSB faults pilots for Illinois airport collision

Failure to use proper communication and 'see-and-avoid' procedures cited 4



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U.S. military leaders say attack by stealthy missiles would overwhelm air defenses 44

Stealth, cheap technology complicate defense schemes
In response to defenses equipped with new sensors and weaponry 47

BMDO links ballistic, cruise missile defense
Promises Pentagon a list of essential components needed 50

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War games to include cruise missile threats
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