

THE RED PLANET THE PROBLEMS WITH BEAGLE 2 HAVEN'T PUT OFF EVERYBODY. **SCOTT SNOWDEN** REPORTS ON A NEW SPACE RACE

Mars in their eyes

In 1938 Martians panicked America. Orson Welles' infamous radio adaptation of *The War Of The Worlds* – HG Wells' tale of a Martian invasion of Earth – had thousands of people fleeing their homes.

This is probably the best-known illustration of our long-held fascination with our nearest planetary neighbour and the little green men that may, or may not, reside there. It's why probes such as the ill-fated Beagle 2 have been sent into the void.

Taking the myth

The modern myths surrounding Mars originated with Italian astronomer Giovanni Schiaparelli's discovery of 'canali' or channels on the planet. Mistranslated into English as canals, they led to widespread speculation about artificial waterways built by an intelligent civilisation. They were, in fact, random surface features that formed into lines when viewed through a certain type of lens.

When the first robotic spacecraft visited Mars in 1976, close-up images revealed no vegetation whatsoever, but a barren, hostile wilderness. Since then, Mars has been visited by more spacecraft than any other planet, providing a tantalising glimpse of a world that could once have had water, oceans and life.



Shape of things to come: a computer-generated image of Spirit plunging into the Martian atmosphere

The primary mission of Beagle 2 was to perform experiments crucial in determining whether the inhospitable surface of Mars was once able to support life. Unfortunately, it seems that although this plucky probe may have touched down in its designated

landing zone, it may have tumbled down the slopes of a crater. Attempts to secure communications with the British probe continue.

Mars attracts

Does this race to the fourth rock from the sun mean that mankind is going to colonise other planets?

President Bush says he will expand the US space programme: missions to the Moon, a new reusable vehicle for space flights and possibly even a manned trip to Mars are under consideration. The announcement came soon after China declared it was planning manned missions to the Moon and not long after the Oriental superpower became only the third nation to have put their own man in space.

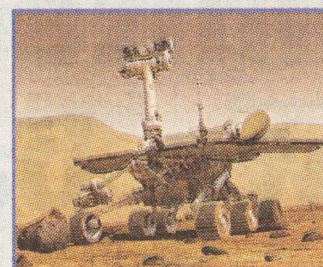
Analysts say a Chinese-American

space rivalry may prove healthy and lead to other benefits such as new pioneering research, but other White House representatives see Beijing's space programme more as a warning. Rumours abound that China could use a space base to test new rockets or other technology that may prove threatening to the United States at some later date.

Though the White House is not pleased some of the proposals have been leaked – possibly by Nasa officials keen to push the programme forward – it has given cause for enthusiasm among space visionaries.

■ www.beagle2.com
www.esa.int/export/SPECIALS/Mars_Express/ – European Space Agency Mars Express website
www.nasa.gov – M2K4 (Mars 2004) site for the two NASA missions

MARTIAN CHRONICLES



Rover: US lander, Spirit

Mars is currently the closest it has been to Earth in about 60,000 years, and five probes have been scheduled to either land on, or begin orbiting, the Red Planet

1. Nozomi – orbiter, December 2003

The Japanese-built Nozomi (which means 'hope') had to be diverted away from the Red Planet after last-ditch attempts to fix an onboard electrical fault caused by unusual solar flare activity failed.

2. ESA Mars Express – orbiter, January 2004

The European-built Express orbiter carried Beagle 2. Its own mission is to photograph the Martian surface to a resolution of two metres. It uses radar that can penetrate up to three miles.

3. Beagle 2 – landed December 25, 2003

The British team behind this small-scale spacecraft spent six years and £50million developing a highly sophisticated machine that would analyse the Martian surface looking for evidence of life, past or present.

4. Nasa Spirit – landed January 3, 2004

The first of two roving robot geologists: each is approximately the size of a golf cart and weighs 827kg.

5. Nasa Opportunity – due to land January 24, 2004

The second remote-controlled device will transmit back to Earth throughout its journey via an older Nasa spacecraft called Mars Global Surveyor. Opportunity is heading for the Meridiani Planum, an area of mineral deposits possibly formed by water.

BEAGLE 2: WHAT'S GONE WRONG?

1. Something failed or was damaged as a result of the stresses during entry, descent or landing.
2. Beagle 2 landed safely on Mars, but in a crater, obscuring the radio signal.
3. The lid and antenna are pointing in the wrong direction due to rocks lodged underneath.



4. A computer error on landing has affected the timing for switching on the transmitter.
5. Communications system failure between probe and orbiting Mars Odyssey.
6. Solar panels may be affected by dust storms, reducing the amount of energy generated.

Absolutely no soggy
teabags or
cucumber slices
need be worn.

Detox easy style.
Just drink 1.5 litres of water a day.

That's it. Your New Year's solution.

