

**ON THE RECORD****“It hit an iceberg and it sank. Get over it.”**

Explorer Robert Ballard, who found the *Titanic* in 1985, is unimpressed by the discovery of fresh wreckage from the ship.

**“If we are not careful, growing forests could make global warming even worse.”**

Climate scientist Ken Caldeira reveals results from computer models that suggest temperate forests absorb sunlight and warm the air.

Sources: *Associated Press, Carnegie Institution*

**SCORECARD****Flying saucers**

Guiyang in China's Guizhou Province has been given US\$20 million by a company in Taiwan to build a UFO research centre. The facility will investigate strange sightings in the area that occurred in 1994.

**Drunk elephants**

A mathematical model has debunked the popular myth that African elephants get tipsy by eating fermented fruit from the marula tree.

**Holy healing**

A Russian scientist has claimed that holy icons speed the recovery of sick mice, but an archbishop has declared his experiments to be sacrilegious.

**NUMBER CRUNCH**

The Census of Marine Life has unveiled findings from the first five years of its decade-long effort to catalogue all sea life.

**3.2 million** sightings were this year added to the Ocean Biogeographical Information System (OBIS).

**40,000** marine species are now represented by a record in OBIS.

**190,000** marine species known to science are not yet represented by an OBIS record.

**2.3 million** marine species in total are believed to exist.

Source: *Census of Marine Life*

S. SUBBOTIN/RIA NOVOSTI

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REASONS

On the up: Russian space scientists hope they will no longer take a back seat.

## Budget boost gets Russia back in the space game

Russia's long-suffering space scientists had reason to celebrate last week as a generous funding increase was approved for the national space agency, giving hope to missions that have long been on hold.

The State Duma — parliament's lower house — approved a budget of 23 billion roubles (US\$800 million) for Roscosmos in 2006, nearly one-third more than the agency received this year. Roscosmos's ten-year budget was set at 305 billion roubles. With oil revenues high, the Duma granted the Kremlin's request for increased spending, and the legislature's upper house is expected to follow suit.

The increase means that Russia may soon return to launching its own space science missions, rather than flying single instruments on European and US spacecraft. The nation's once active planetary programme has been in “miserable shape” for the past decade, following the loss of the Mars-96 orbiter, says Mikhail Marov of the Keldysh Institute of Applied Mathematics in Moscow. Russian space scientists often went unpaid as ideas for missions languished with no hope of reaching the launch pad.

One such mission, called Phobos-Grunt, now seems to be on track to launch in 2009. It will head for the martian moon Phobos, where it will land and collect a soil sample before returning to Earth. The mission has been scaled down — it will use conventional propulsion and launch on a Soyuz rocket, instead of the more expensive Proton — but it should still manage to land 45 kilograms of scientific instrumentation on Phobos.

Spacecraft engineers at the Moscow-based Lavochkin Association are laying plans for an

ambitious mission called Luna-Glob, which would deliver an orbiter and a network of instruments to the Moon for geophysical studies. This mission would probably get funding only after Phobos-Grunt is well under way, says Marov.

Meanwhile, another long-dormant mission, Spectrum, is aiming for launch in 2011 to conduct an all-sky astronomical survey at X-ray wavelengths. Mikhail Pavlinsky of the Space Research Institute in Moscow says the mission is similar “in name only” to a concept called Spectrum-X-Gamma floated in the 1990s, which involved scientists in several European countries and the United States. The list of those involved is now down to Russia, Germany and Britain, with some launch and tracking support from the European Space Agency. Germany hopes to contribute an instrument called eROSITA, originally developed for the International Space Station, to study black holes and other high-energy phenomena.

European space ministers cast the only shadow on this otherwise sunny picture by last week voting not to join Russia in building a new space vehicle. The ministers, who met in Berlin on 5 and 6 December, turned down a request for the €50 million (US\$60 million) needed to join a two-year study of the Clipper space plane proposed by Roscosmos. The ministers did not rule out future cooperation, however. And Russian space officials say they will go ahead with Clipper anyway — although the loss of Europe as a partner would be a major setback. ■

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