

Russia's Mars probe will crash to Earth in January

December 16 2011, By VLADIMIR ISACHENKOV , Associated Press



In this Wednesday, Nov. 9, 2011 file photo, the Zenit-2SB rocket with Phobos-Grunt (Phobos-Ground) blasts off from its launch pad at the Cosmodrome Baikonur, Kazakhstan. Russia's space agency says a probe bound for a moon of Mars that instead got stuck in Earth's orbit will plummet down to Earth next month. The agency said Friday Dec. 16, 2011 the unmanned Phobos-Ground probe that got stranded after its Nov. 9 launch will come crashing down between Jan. 6 and Jan. 19. (AP Photo/Oleg Urusov, pool)

A Russian spacecraft bound for a moon of Mars and stuck in Earth's orbit will come crashing back next month, but its toxic fuel and radioactive material on board will pose no danger of contamination, the

Russian space agency said Friday.

Between 20 and 30 fragments of the probe with a total weight of up to 200 kilograms (440 pounds) will survive the fiery plunge and shower the Earth's surface, Roscosmos warned in a statement.

The agency said the unmanned Phobos-Ground spacecraft will plummet to Earth between Jan. 6 and Jan. 19, and the rough area of where the fragments could fall could only be calculated a few days ahead of its plunge.

As of now, it said only that the probe's fragments could rain down anywhere along a broad swath between 51.4 degrees north to 51.4 degrees south, which would include most of [land surface](#).

While the agency had lost contact with the probe following its launch on Nov. 9, this was the first time acknowledged that the \$170-million craft has been lost and will come crashing down.

Since its November launch the engineers in Russia and at the [European Space Agency](#) have attempted unsuccessfully to propel it away from Earth's orbit and toward its target.

Phobos-Ground weighs 13.2 metric tons (14.6 tons), which includes 11 metric tons (12 tons) of highly toxic fuel. Experts had warned that if the fuel has frozen, some could survive entry into Earth and pose a serious threat if it falls over populated areas.

But Roscosmos said it is sure that all fuel will burn on re-entry some 100 kilometers (330,000 feet) above the ground and pose no danger. It said that 10 kilograms (22 pounds) of Cobalt-57, a [radioactive metal](#) contained in one of the craft's instruments, will not pose a threat of [radioactive contamination](#).

The Phobos-Ground was Russia's first interplanetary mission since a botched 1996 robotic mission to Mars, which failed when the probe crashed shortly after the launch due to an [engine failure](#). Mars has two moons, Phobos and Deimos, and the latest spacecraft aimed to take ground samples on Phobos.

It was one of the most challenging unmanned interplanetary mission ever. Scientists had hoped that studies of Phobos' surface could help solve the mystery of its origin and shed more light on the genesis of the solar system. Some believe the crater-dented moon is an asteroid captured by Mars' gravity, while others think it's a piece of debris from when [Mars](#) collided with another celestial object.

The failed mission was the latest in a series of recent Russian launch failures that have raised concerns about the condition of the country's space industries. Officials have blamed the failures on obsolete equipment and an aging workforce.

©2011 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Russia's Mars probe will crash to Earth in January (2011, December 16) retrieved 25 April 2024 from <https://phys.org/news/2011-12-russia-mars-probe-earth-january.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.