

Russia blames radiation for space probe failure

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In this Wednesday, Nov. 9, 2011 file photo the Zenit-2SB rocket with the Phobos-Ground probe blasts off from its launch pad at the Cosmodrome Baikonur, Kazakhstan. The head of Russia's space agency Roscosmos Vladimir Popovkin said Tuesday, Jan. 31, 2012, cosmic radiation was the most likely cause of the failure of a Mars moon probe that crashed to Earth this month. (AP Photo/Russian Roscosmos space agency)

The head of Russia's space agency said Tuesday that cosmic radiation was the most likely cause of the failure of a Mars moon probe that crashed to Earth this month, and suggested that a low-quality imported component may have been vulnerable to the radiation.

Vladimir Popovkin also said a manned launch to the International Space Station is being postponed from March 30 because of faults found in the Soyuz capsule.

The statements underline an array of trouble that has afflicted the country's vaunted space program in recent months, including the August crash of a supply ship for the space station and last month's crash of a communications satellite.

Since the end of the U.S. space shuttle program last year, Russian craft are the only means to send crew to and from the ISS.

The unmanned Phobos-Ground probe was to have gone to the Mars moon of Phobos, taken soil samples and brought them back. But it became stuck in Earth orbit soon after its launch on Nov. 9. It fell out of orbit on Jan. 15, reportedly off the coast of Chile, but no fragments have been found.

The failure was a severe embarrassment to Russia, and Popovkin initially suggested it could have been due to foreign sabotage.

But on Tuesday he said in televised remarks that an investigation showed the probable cause was "localized influence of heavily radiated space particles."

Popovkin, speaking in the city of Voronezh where the report was presented to Deputy Prime Minister Dmitry Rogozin, said two units of the Phobos-Ground probe's onboard computer system went into an energy-saving "restart" mode, apparently due to the radiation, while the craft was in its second orbital circuit.

It was not immediately clear why the units could not be brought out of that mode.

Popovkin said that some microchips used on the craft were imported and possibly of inadequate quality to resist radiation. He did not specify where the chips were manufactured.

Yuri Koptev, a former space agency head who led the Phobos-Ground investigation, said 62 percent of the microchips used in the probe were "industrial" class, a less-sophisticated level than should be used in space flight.

Popovkin said the craft's builder, Moscow-based NPO Lavochkin, should have taken into account the possibility of radiation interfering with the operation and said Lavochkin officials would face punishment for the oversight.

Popovkin later announced that a March 30 planned launch of three astronauts to the space station will be postponed "likely until the end of April" because of problems with the capsule. He did not specify, but the state news agency RIA Novosti cited the director of Russia's cosmonaut-training program as saying leaks had been found in the capsule's seals.

It would be the second significant postponement of a manned Russian launch in the past year. The August crash of the supply ship pushed back a manned launch to the ISS because the booster rocket that failed in the crash was similar to the ones used in manned missions.

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