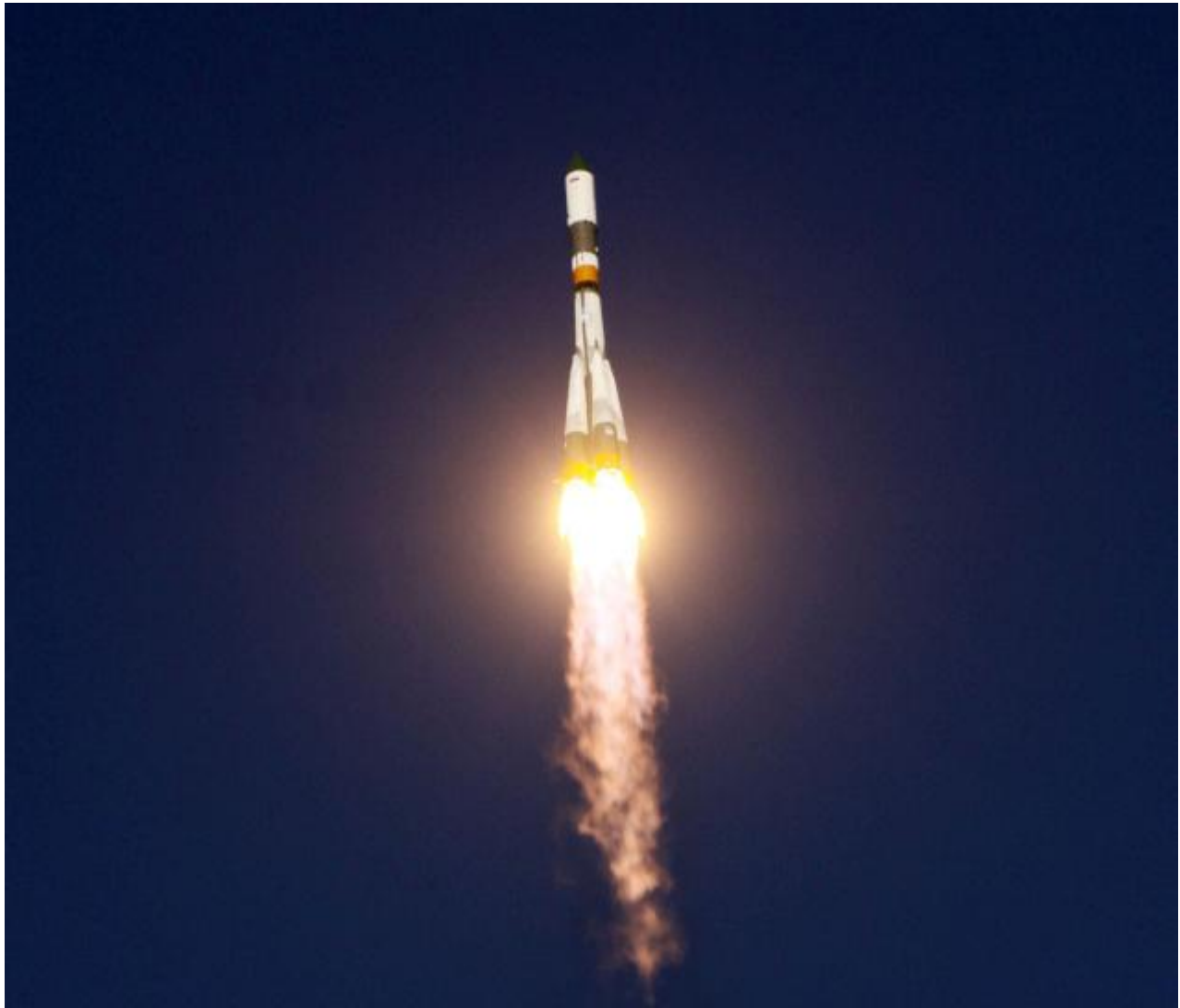


Setback to space programme?

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HOW RELIABLE? A Russian Progress-M-12M cargo ship carrying supplies for the International Space Station blasting off from the launch pad at the Baikonour cosmodrome on Wednesday, minutes before failure. Photo: AFP

A Russian cargo rocket ferrying three tons of food and fuel to the International Space Station broke down about five minutes after it blasted off on August 24, completing its flight by arcing into a Siberian forest rather than achieving orbit.

The crash of the unmanned craft, a Progress cargo ship on top of a Soyuz rocket, does not pose an immediate problem for the six crew members living at the space station, who are well stocked with supplies taken there in July by National Aeronautics and Space Administration's (NASA) last shuttle flight. But it raises questions about the reliability of this model of Russian rocket, a similar model of which is used for manned launchings.

Since the retirement of the shuttle programme last month, Russian-made Soyuz rockets are the only means of transport to space for American astronauts. NASA has contracted with the Russian Space Agency to fly Americans on these rockets for several years.

Under scrutiny

The crash on Wednesday will surely be closely scrutinised because of its implications for American manned space flight on the Russian rockets. If a quick diagnosis and fix elude Russian engineers, NASA and the other agencies collaborating on the space station could face difficult choices.

“We've always known this was a risk,” the manager of the space station for NASA, Michael T. Suffredini, said.

The next set of three crew members is scheduled to launch to the space station in September, and another three are to go up in December.

Further, the Soyuz capsules in which the crew members ride also serve as lifeboats in case of an emergency, and the capsules are allowed to stay at the station for up to 210 days.

It means that three crew members may have to return to Earth in one of the Soyuz capsules docked at the station by October at the latest. Without replacements, that would leave only three people to operate the station, greatly reducing the time they could devote to running experiments.

If the problem dragged on to the end of the year, the other three would also have to return to Earth, leaving the space station unoccupied.

Mr. Suffredini said the station could be operated from the ground and stay in orbit indefinitely as long as there were no major failures and other cargo ships continued to fly; a Japanese one and a European one are scheduled to be launched next spring.

The Progress and Soyuz have proven reliable until now. Forty-three of the supply ships have successfully flown to the space station. But the failure on Wednesday was the second in August from the Baikonur launching pad in Kazakhstan. The upper stage of a Proton rocket sent a telecommunications satellite into the wrong orbit on Aug. 18.

Russia has planned another Soyuz expedition on Thursday, from the Plesetsk launching pad in the far north of European Russia. That rocket is scheduled to carry a navigation satellite for the Glonass system, the Russian version of the American GPS.

But the Russian space agency said it might delay manned launchings on the Soyuz — the only means of reaching the station for astronauts and cosmonauts — if the reasons for Wednesday's crash were not quickly determined.

The Progress is a cargo spaceship that the Russians call a space truck, routinely launched to the space station carrying spare parts, fuel, food, oxygen, water and other items.

The Soyuz design is a 1960s holdover that jettisons four bulky booster rockets soon after liftoff, then flies in three stages to space. It carries both manned and unmanned spaceships to the space station. At the launching on Wednesday, the Progress lifted off as planned on top of a Soyuz rocket. A little more than five minutes later, however, the rocket's third-stage engine shut down sooner than it should have, before the spacecraft had enough velocity to reach orbit.

The rocket and Progress ship crashed in the dense Siberian forest. The Russian Ministry of Emergency Situations said rocket debris landed in three separate areas of the Altai region in southern Siberia, which borders Mongolia. The regional governor, Yuri Antaradonov, said the police had cautioned people to stay clear of the wreckage, as it could be contaminated with toxic

fuel. His only concern, he said, was that some people may have been camped in the forest at the time of the crash because “it is the season of collecting pine nuts” in that part of Siberia. — © **New York Times News Service**

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