

Rocket with three onboard heads for space station (Update)

December 19 2012, by Peter Leonard



The Soyuz-FG rocket booster with Soyuz TMA-07M space ship carrying a new crew to the International Space Station, ISS, blasts off at the Russian leased Baikonur cosmodrome, Kazakhstan, Wednesday, Dec. 19, 2012. The Russian rocket carries U.S. astronaut Thomas Marshburn, Russian cosmonaut Roman Romanenko and Canadian astronaut Chris Hadfield. (AP Photo/Dmitry Lovetsky)

A Soyuz spacecraft carrying an American, a Russian and a Canadian headed Wednesday for the International Space Station, where they will spend four months carrying out dozens of experiments.

The spacecraft launched from a Russian-leased manned-space facility in

the frigid steppes of Kazakhstan at 6:12 p.m. (1212 GMT). It took off atop a towering Russian rocket and went into orbit about 15 minutes later.

American Tom Marshburn, Russian Roman Romanenko and Canadian Chris Hadfield will travel for two days in the capsule, before docking with the mammoth space station where three other people are already on board.

Russian Federal Space Agency chief Vladimir Popovkin said the liftoff took place "without a hitch."

"We have finished off this year of launches on a good and handsome note. There is now only one operation left, and that is the docking, which we are positive we successfully take place Friday," he said.

The docking's timing—so close to Christmas—added to the high emotional valence of spaceflight for Hadfield. "There are certain times of the year and certain times in life that are special by everybody's traditions. In my family's tradition, this is maybe the most special time of the year," he said.



Expedition 34 NASA Flight Engineer Chris Hadfield of the Canadian Space Agency (CSA), top, NASA Flight Engineer Tom Marshburn and Soyuz Commander Roman Romanenko of Russia wave farewell from the bottom of the Soyuz rocket at the Baikonur Cosmodrome in Baikonur, Kazakhstan, Wednesday, Dec. 19, 2012. Marshburn, Romanenko and Hadfield will travel for two days in the capsule, before docking with the space station where three other astronauts are already on board. (AP Photo/NASA, Carla Cioffi)

The clear azure skies afforded a vivid view of the rocket as it took off, left a deep plume of white smoke and finally vanished into the distance as a vivid orange dot.

Among those watching was Hadfield's daughter, Kristian. "I'm feeling so

happy. I mean, my dad just went to space. It's amazing. I'm feeling amazing," she said.

The International Space Station is the biggest orbiting outpost ever built and can sometimes be seen from the Earth with the naked eye. It consists of more than a dozen modules built by the U.S., Russia, Canada, Japan and the European Space Agency.

Marshburn, Romanenko and Hadfield will spend four months aboard the space station to conduct some 50 scientific experiments including a test for a system aimed at predicting natural calamities.



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Baikonur cosmodrome, Kazakhstan, Wednesday, Dec. 19, 2012. The Russian rocket carries U.S. astronaut Thomas Marshburn, Russian cosmonaut Roman Romanenko and Canadian astronaut Chris Hadfield. (AP Photo/Dmitry Lovetsky)

Ahead of the launch, the space travelers posed for photos, ran final suit checks and chatted with relatives through glass designed to protect them from infection.

Romanenko was seen off by his father Yuri, who set a record for time spent in space during a mission in the 1970s.

"My dad carried out a spaceflight in a two-person crew ... on a similarly cold day 35 years ago and that was one of the first long-term flights," Romanenko said at a news conference on the eve of the launch.



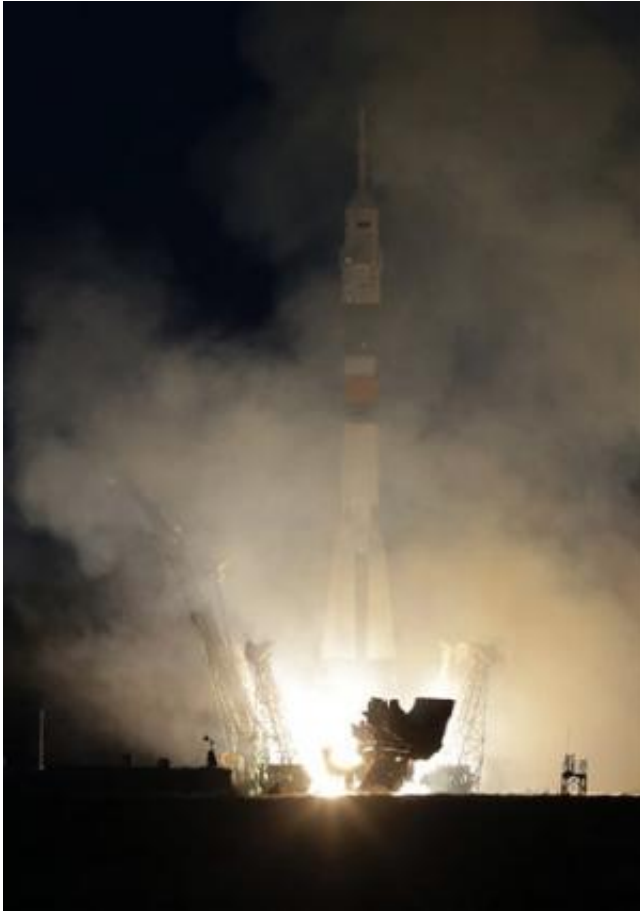
The Soyuz-FG rocket booster with Soyuz TMA-07M space ship transporting U.S. astronaut Thomas Marshburn, Russian cosmonaut Roman Romanenko and Canadian astronaut Chris Hadfield heads to the International Space Station after blasting off from the Russian leased Baikonur cosmodrome, Kazakhstan, Wednesday, Dec. 19, 2012. (AP Photo/Dmitry Lovetsky)

Typically, the crew performs a final outdoor salute to top space officials before mounting the bus taking them to the Soyuz, but the practice was forgone this time because of the cold; the temperature at launch time was -17 C (2 F). But before the astronauts were packed into the cramped capsule, they exchanged greetings with Popovkin.

Although space travel has long fascinated the general public, interest has flagged in recent decades as tightened budgets have constrained ambitions. But Hadfield expressed optimism about the future of the industry and said that the voyages to the moon, which last happened 40 years ago, set an important precedent.

"What we are doing today as a group is continuing through that door and learning the things we need to do and taking one small step at a time so that we can better understand where we are in the universe," he said.

Wednesday marked a return to use of the launch pad known as Gagarin's Start, where Soviet cosmonaut Yuri Gagarin blasted off in 1961 for the first human orbital space flight. Another launch site was used for the previous mission, which set off in October.



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The need for a back-up launch site became particularly acute with the decommissioning of the U.S. shuttle fleet. The Soyuz now is the only vehicle able to carry people to the space station.

Although the Soyuz has proven dependable, recurrent problems with the unmanned version of the craft have sown anxiety over NASA's excessive reliance on the Russian space program.

NASA announced last week that it was making progress toward the first test of its new generation Orion spacecraft in 2014.

Orion is a part of NASA's growing ambitions to extend its reach into space. NASA says it is being designed travel more than 3,600 miles (5,800 kilometers) above Earth's surface and return at a speeds almost 5,000 miles (8,050 kilometers) per hour faster than any current human spacecraft.

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