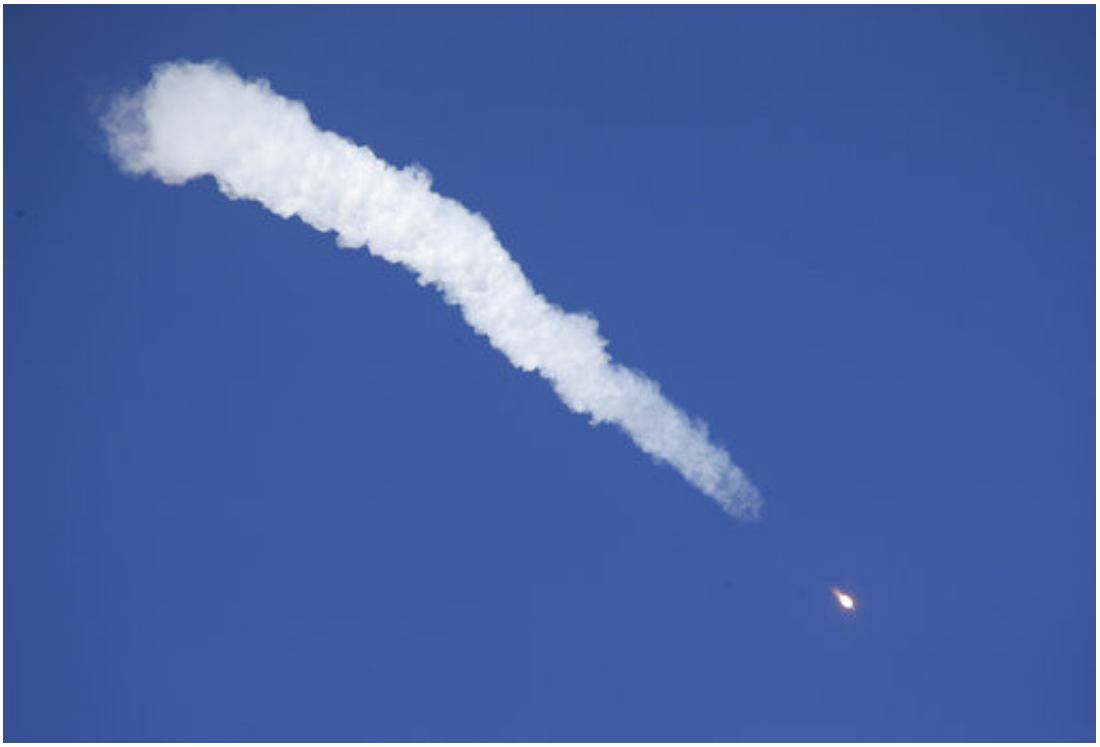
US, Russian astronauts land safely after rocket failure

October 11 2018, by Dmitry Lovetsky And Vladimir Isachenkov



The Soyuz-FG rocket booster with Soyuz MS-10 space ship carrying a new crew to the International Space Station, ISS, flies in the sky at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. The Russian rocket carries U.S. astronaut Nick Hague and Russian cosmonaut Alexey Ovchinin. The two astronauts are making an emergency landing after a Russian booster rocket carrying them into orbit to the International Space Station has failed after launch. (AP Photo/Dmitri Lovetsky)

The problem came two minutes into the flight: The rocket carrying an American and a Russian to the International Space Station failed Thursday, triggering an emergency that sent their capsule into a steep, harrowing fall back to Earth.

The crew landed safely on the steppes of Kazakhstan, but the aborted mission dealt another blow to the troubled Russian space program that currently serves as the only way to deliver astronauts to the orbiting outpost. It also was the first such accident for Russia's manned program in over three decades.

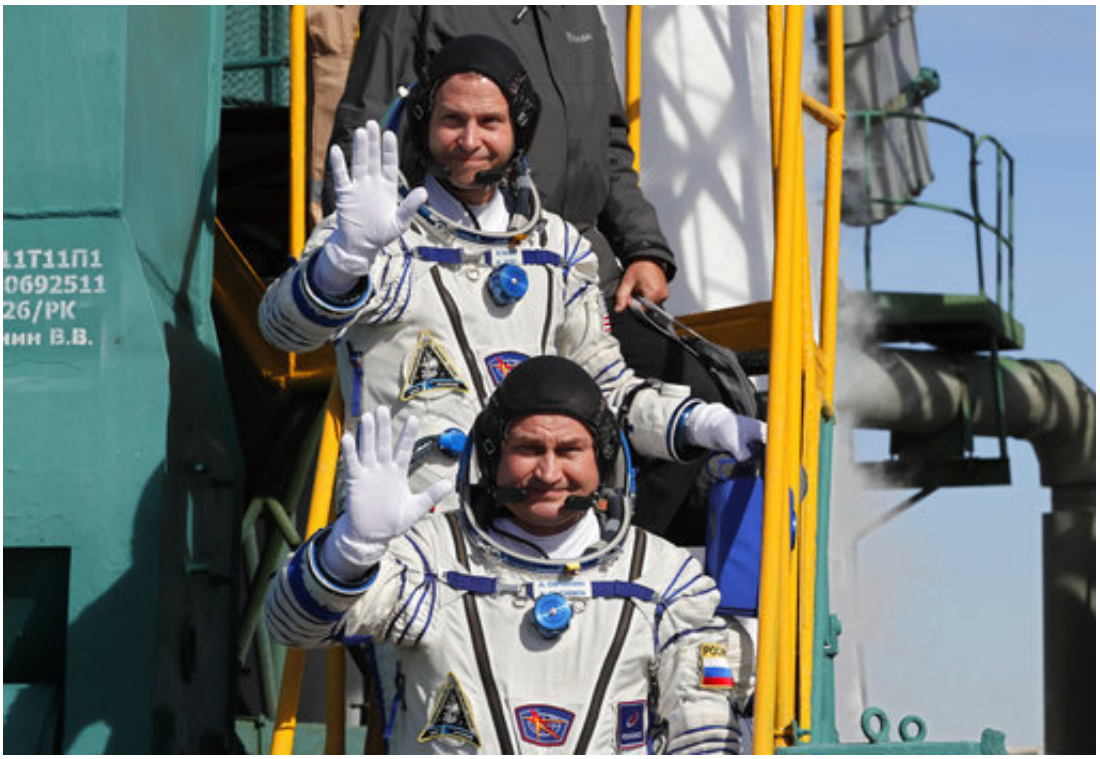
NASA astronaut Nick Hague and Roscosmos' Alexei Ovchinin had a brief period of weightlessness when the capsule separated from the malfunctioning Soyuz rocket at an altitude of about 50 kilometers (31 miles), then endured gravitational forces of 6-7 times more than is felt on Earth as they came down at a sharper-than-normal angle.

About a half-hour later, the capsule parachuted onto a barren area about 20 kilometers (12 miles) east of the city of Dzhezkazgan in Kazakhstan.

"Thank God the crew is alive," said Dmitry Peskov, the spokesman for Russian President Vladimir Putin.

All Russian manned launches were suspended pending an investigation into the failure, said Deputy Prime Minister Yuri Borisov.

New NASA Administrator Jim Bridenstine, who watched the launch at the Russian-leased Baikonur cosmodrome with his Russian counterpart, said Hague and Ovchinin were in good condition. He added that a "thorough investigation" will be conducted.



U.S. astronaut Nick Hague, right, and Russian cosmonaut Alexey Ovchinin, crew members of the mission to the International Space Station wave as they board the rocket prior to the launch of Soyuz-FG rocket at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (Yuri Kochetkov, Pool Photo via AP)

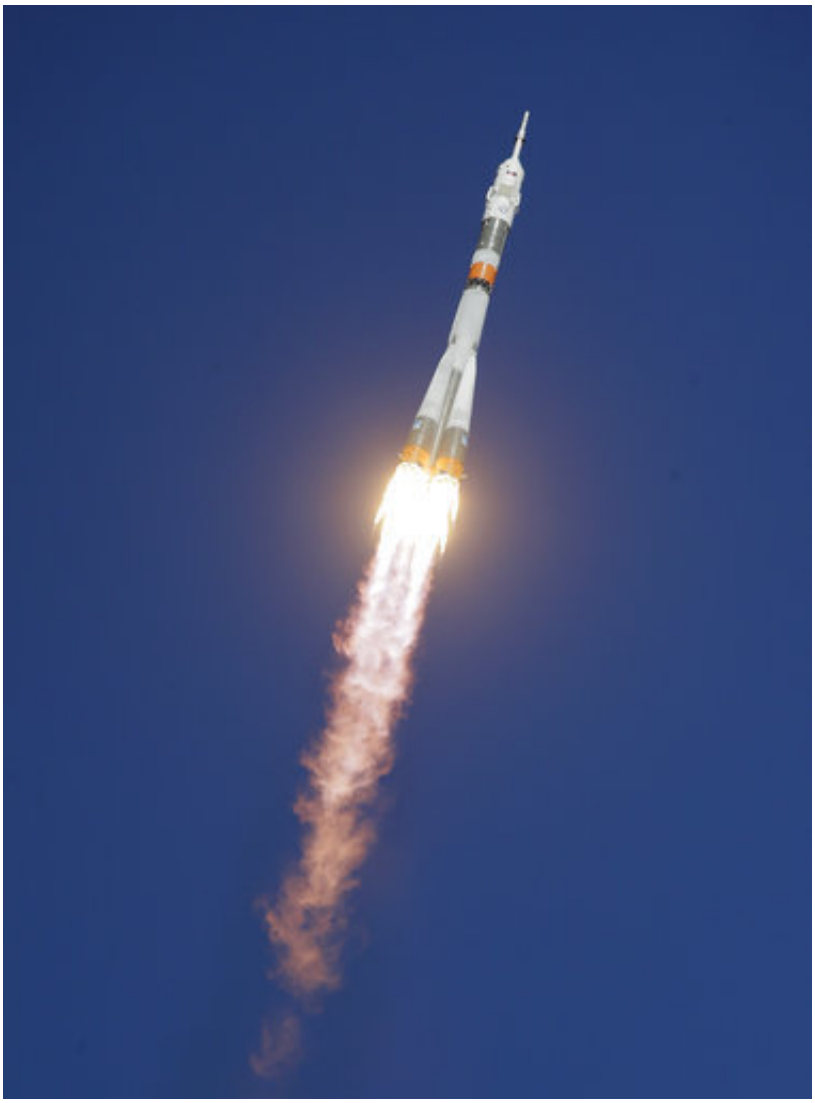
Hague, 43, and Ovchinin, 47, lifted off at 2:40 p.m. (0840 GMT; 4:40 a.m. EDT). The astronauts were to dock at the space station six hours later and join an American, a Russian and a German on board.

But the three-stage Soyuz rocket suffered an unspecified failure of its second stage two minutes after launch. Russian news reports indicated that one of its four first-stage engines might have failed to jettison in sync with others, resulting in the second stage's shutdown and activating the automatic emergency rescue system.

For the crew in the capsule, events would have happened very quickly, NASA's deputy chief astronaut Reid Wiseman told reporters at NASA's Johnson Space Center in Houston. An emergency light would have come on and, an instant later, the abort motors would fire to pull the capsule away from the rocket.

Wiseman said the only thing that went through his mind was "I hope they get down safe."

Search and rescue teams scrambled to recover the crew, and paratroopers were dropped to the site. Dzhezkazgan is about 450 kilometers (280 miles) northeast of Baikonur, and spacecraft returning from the space station normally land in that area.



The Soyuz-FG rocket booster with Soyuz MS-10 space ship carrying a new crew to the International Space Station, ISS, flies in the sky at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. The Russian rocket carries U.S. astronaut Nick Hague and Russian cosmonaut Alexey Ovchinin. The two astronauts are making an emergency landing after a Russian booster rocket carrying them into orbit to the International Space Station has failed after launch. (AP Photo/Dmitri Lovetsky)

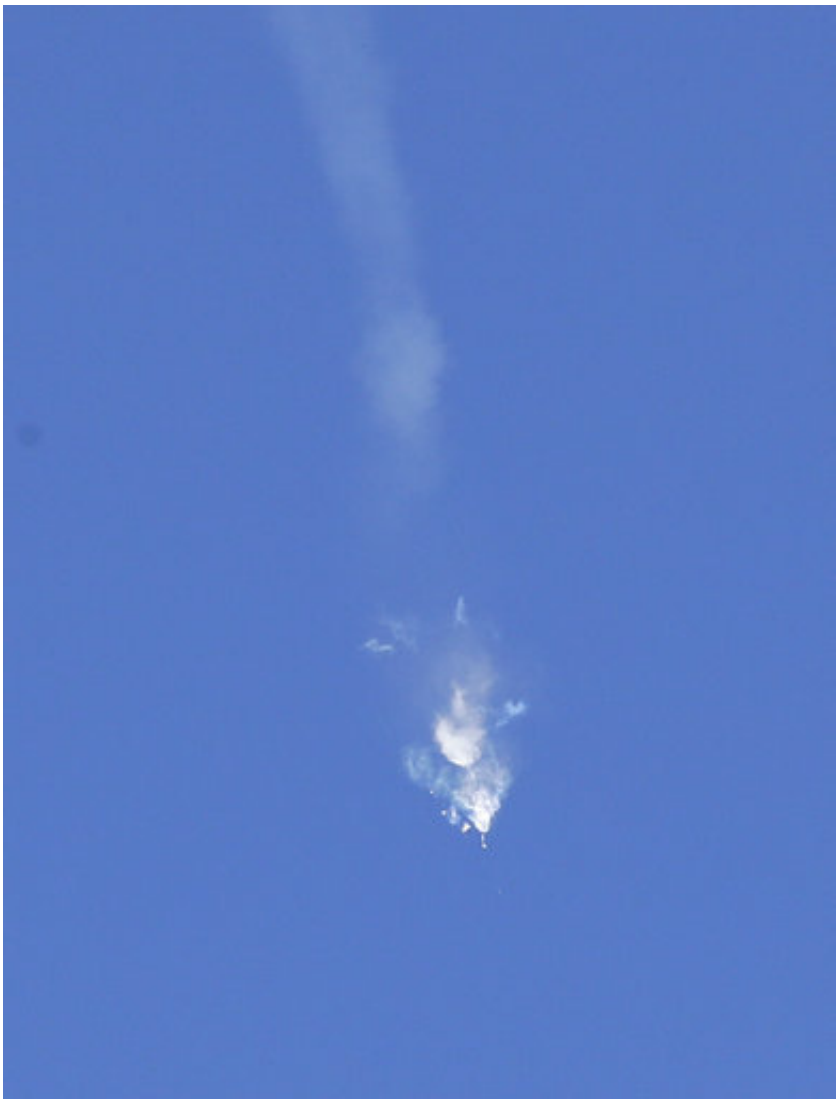
Back at Baikonur, Bridenstine acknowledged in a NASA TV interview that "for a period of time, we didn't know what the situation was."

Hague's wife and parents anxiously awaited word at Baikonur, accompanied the whole time by a NASA astronaut who was in the same class as Hague. They all behaved admirably, according to Bridenstine, adding that Hague's wife, Catie, is an Air Force officer like her husband and also a public affairs officer.

"It was a tough day, no doubt, but at the end of the day, the training paid off for everybody," he said.

Still, Bridenstine said: "We are thrilled that even though it was a launch failure, all of the safety systems worked."

The astronauts were returned to Baikonur for medical checks and to see their families. They were spending the night there before heading to Star City, Russia's training center outside Moscow.



Smoke rise as the boosters of first stage of the Soyuz-FG rocket with Soyuz MS-10 space ship carrying a new crew to the International Space Station, ISS, separate after the launch at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. The Russian rocket carries U.S. astronaut Nick Hague and Russian cosmonaut Alexey Ovchinin. The two astronauts are making an emergency landing after a Russian booster rocket carrying them into orbit to the International Space Station has failed after launch. (AP Photo/Dmitri Lovetsky)

It was to be the first space mission for Hague, who joined NASA's

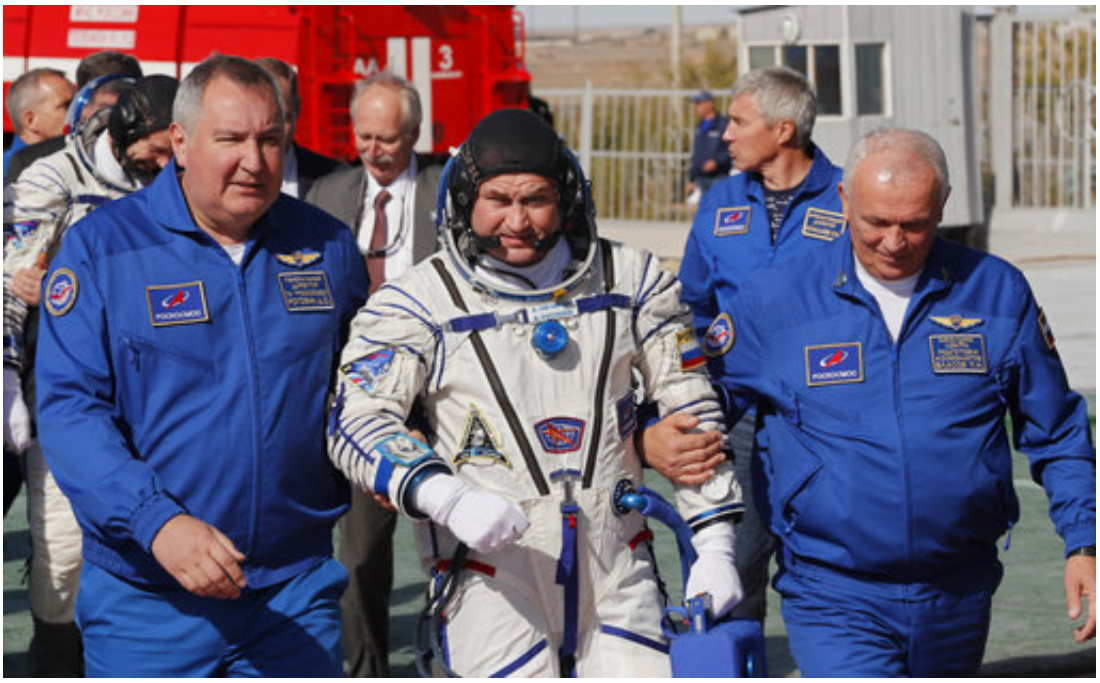
astronaut corps in 2013 and might have to wait awhile for another shot. Ovchinin spent six months on the orbiting outpost in 2016.

Oleg Orlov, the head of Russia's main space medicine center, said the crew was trained to endure higher-than-usual gravity loads and were tightly strapped into their custom-made seats to help withstand the pressure.

Flight controllers kept the three space station residents informed, assuring them, "The boys have landed."

"Glad our friends are fine," space station commander Alexander Gerst, a European Space Agency astronaut from Germany, tweeted from orbit. "Spaceflight is hard. And we must keep trying for the benefit of humankind."

There was no immediate word on whether the space station crew might need to extend its own six-month mission. Two spacewalks planned for later this month were off indefinitely. Hague was supposed to be one of the spacewalkers.



Director General of the Russia state corporation Roscosmos Dmitry Rogozin, right, accompanies Russian cosmonaut Alexey Ovchinin, crew members of the mission to the International Space Station, ISS, to the rocket prior the launch of Soyuz-FG rocket at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (Yuri Kochetkov, Pool Photo via AP)

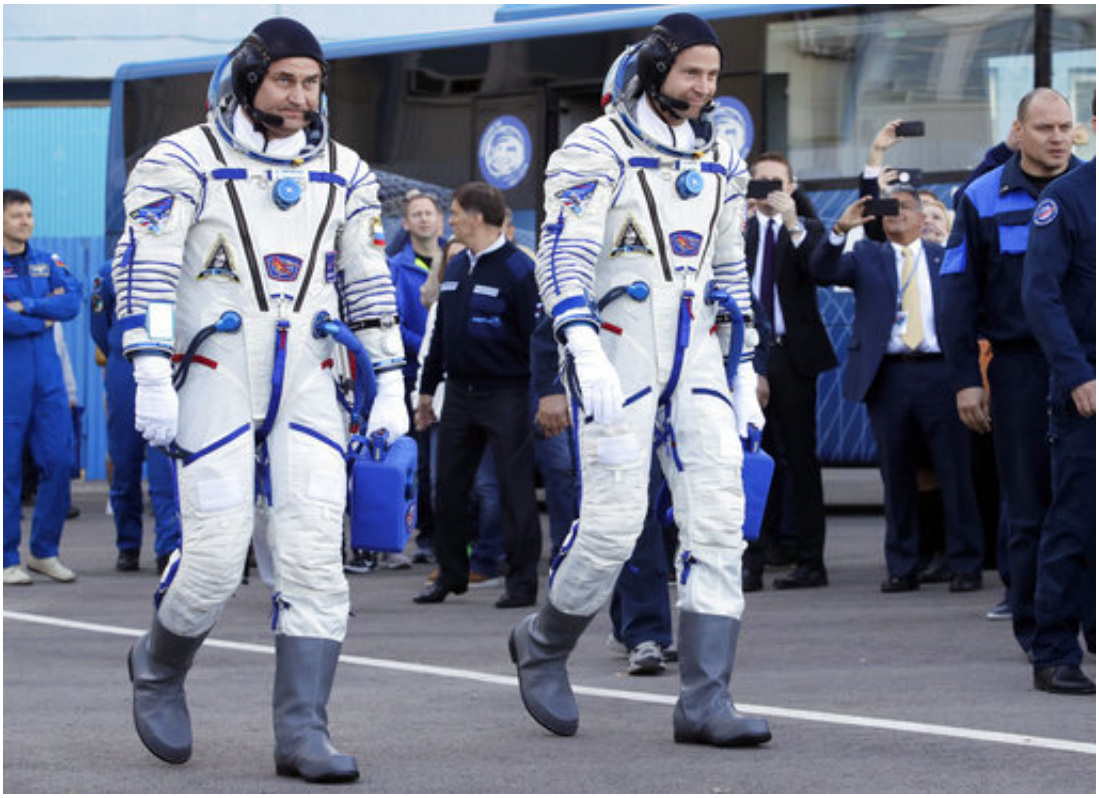
NASA said it's dusting off its plans for operating the space station without a crew, just in case the Russian investigation drags into next year.

Kenny Todd, a space station manager, said from Houston that the space station crew can stay on board until January. That's just a month beyond their expected mid-December return. Their Soyuz capsule is good for about 200 days in orbit.

If the Russian rockets remain grounded until it's time for the crew to come home, flight controllers could operate the station without anyone on board, Todd said.

It could operate like that for a long time, barring a major equipment failure, he added. But it will need to be staffed before SpaceX or Boeing launches its crew capsules next year, Todd said. Given that the space station is a $100 billion asset, Todd says it needs to have someone on board for the arrival of the commercial demo missions, for safety reasons.

While the Russian program has been dogged by a string of problems with other kinds of launches in recent years, Thursday's incident marked its first manned launch failure since September 1983, when a Soyuz exploded on the launch pad.



U.S. astronaut Nick Hague, right and Russian cosmonaut Alexey Ovchinin, member of the main crew of the expedition to the International Space Station (ISS), walk prior the launch of Soyuz MS-10 space ship at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri

Lovetsky, Pool)

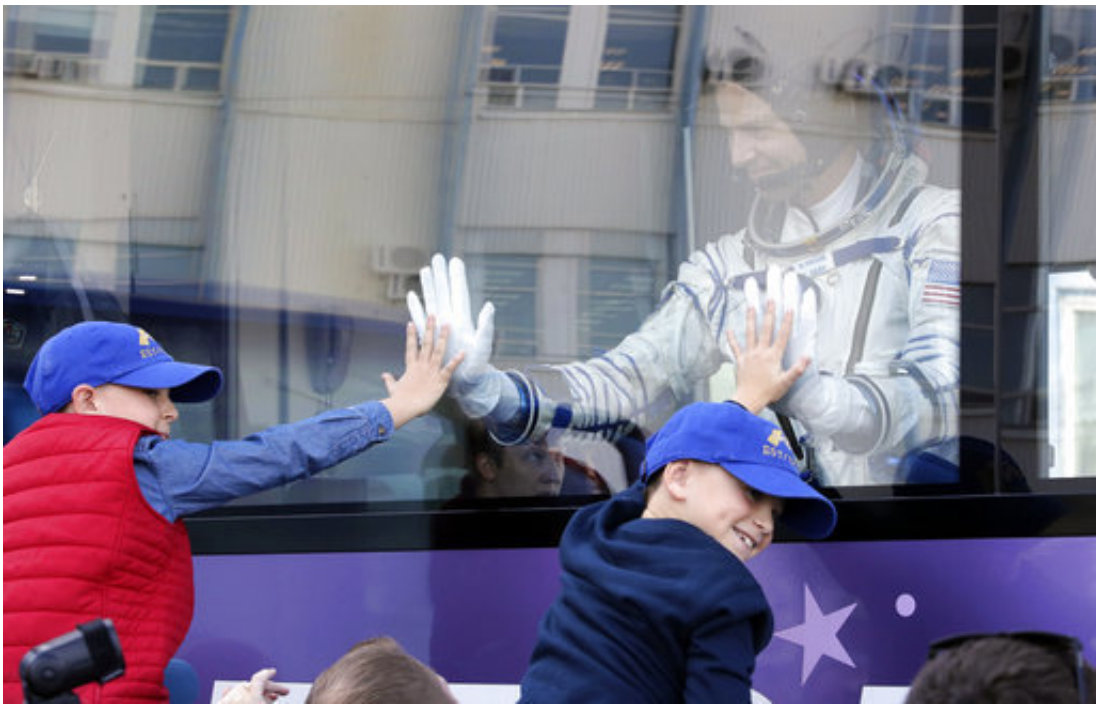
Borisov said Russia will fully share all relevant information with the U.S., which pays up to $82 million per ride to the space station.

"I hope that the American side will treat it with understanding," he said.

NASA's Bridenstine emphasized that collaboration with Roscosmos remains important.

Relations between Moscow and Washington have sunk to post-Cold War lows over conflicts in Ukraine and Syria, and allegations of Russian meddling in the 2016 U.S. presidential vote, but they have kept cooperating in space.

The Russian Soyuz spacecraft is currently the only vehicle for ferrying crews to the space station following the retirement of the U.S. space shuttle fleet. Russia stands to lose that monopoly with the arrival of SpaceX's Dragon and Boeing's Starliner crew capsules.



U.S. astronaut Nick Hague, member of the main crew to the International Space Station (ISS), waves to his sons from a bus prior to the launch of Soyuz-FG rocket at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri Lovetsky, Pool)

In August, the space station crew found a hole in a Soyuz capsule docked to the orbiting outpost that caused a brief loss of air pressure before being patched. Roscosmos chief Dmitry Rogozin raised wide concern by saying the leak was a drill hole that was made intentionally during manufacturing or in orbit. He didn't say if he suspected any of the station's crew.

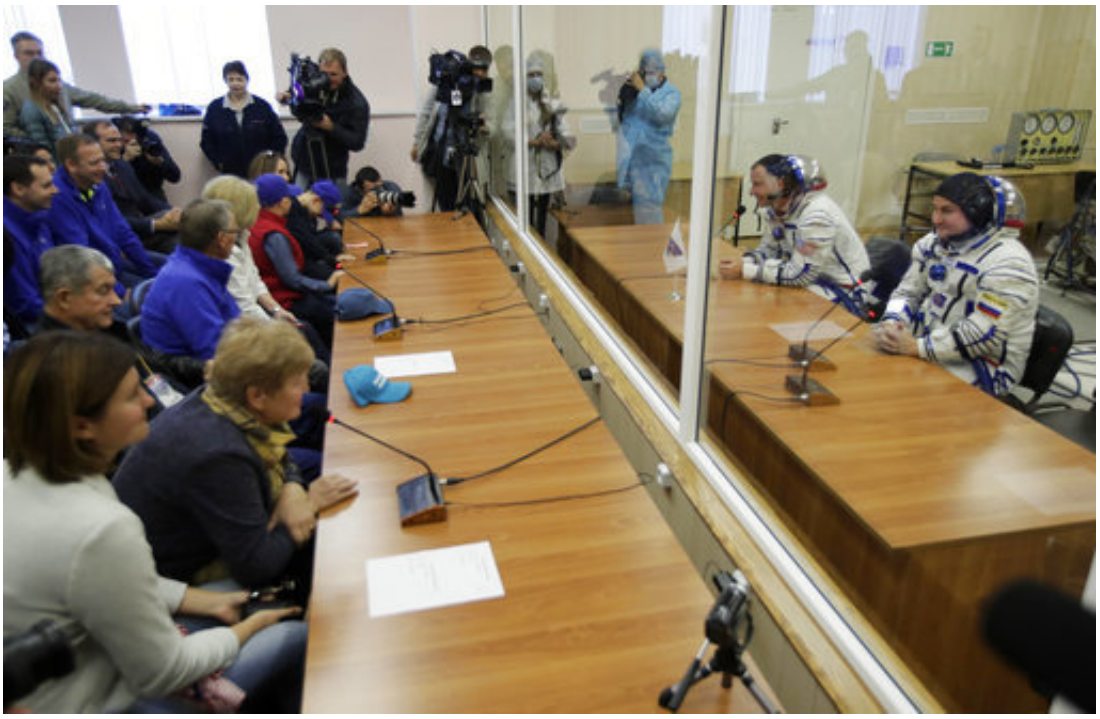
In the 1983 launch failure, cosmonauts Vladimir Titov and Gennady Strekalov jettisoned and landed safely near the launch pad after the Soyuz explosion.

"It's an unpleasant situation," Titov told the Tass news agency Thursday.

"We went through it, and it was very bad."

He added that it will take about a week for the crew to fully recover.

In 1975, the failure of a Soyuz upper stage sent Vasily Lazarev and Oleg Makarov into a fiery fall to Earth from an altitude of 190 kilometers, subjecting them to enormous G-forces that caused them to black out and temporarily lose sight. They landed on a snowy mountain slope and spent two nights in the cold before rescue crews reached them.

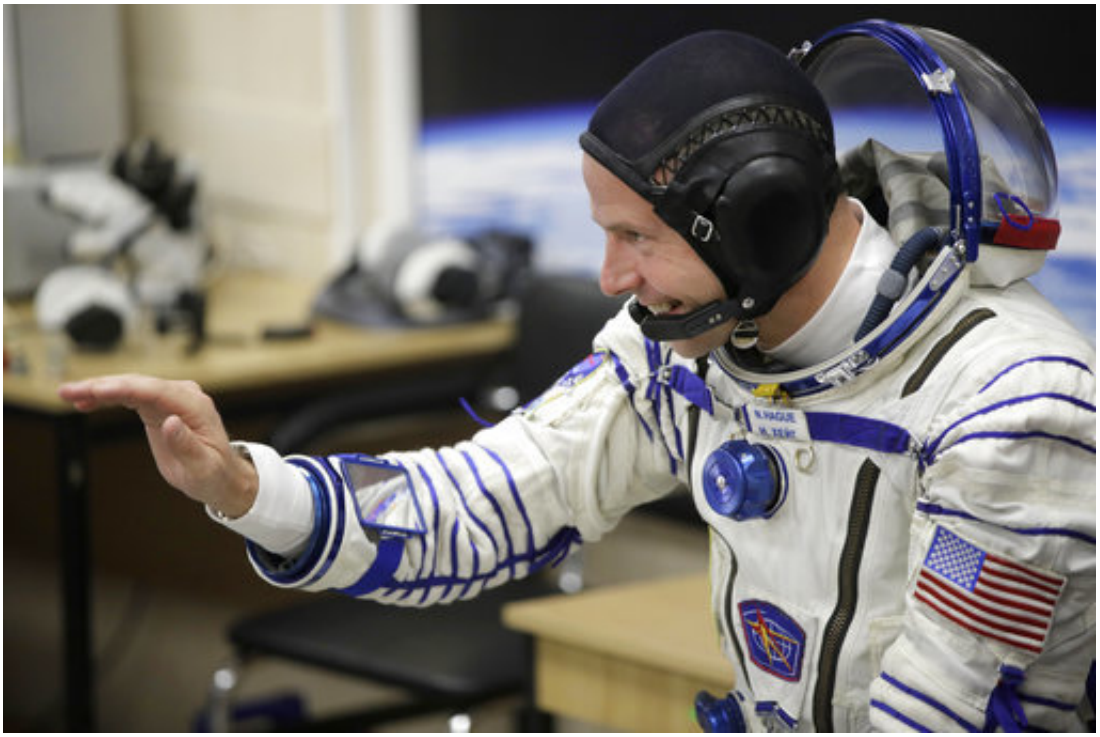


U.S. astronaut Nick Hague and Russian cosmonaut Alexey Ovchinin, right, members of the main crew of the expedition to the International Space Station (ISS), speak with their relatives through a safety glass prior to the launch of Soyuz MS-10 space ship at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri Lovetsky)

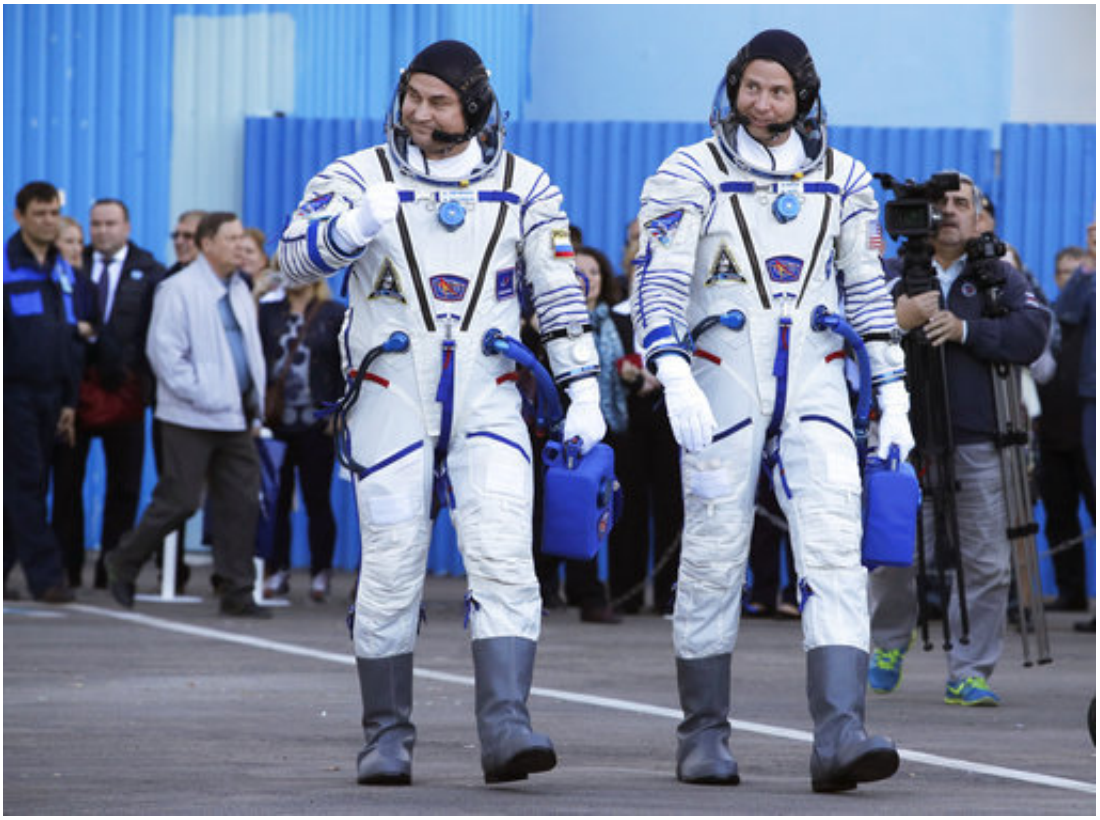
Russia has continued to rely on Soviet-designed rockets for commercial satellites, as well as crews and cargo to the space station.

While Russian rockets earned a reputation for reliability in the past, the recent launch failures have cast doubt on Russia's ability to maintain its high standards.

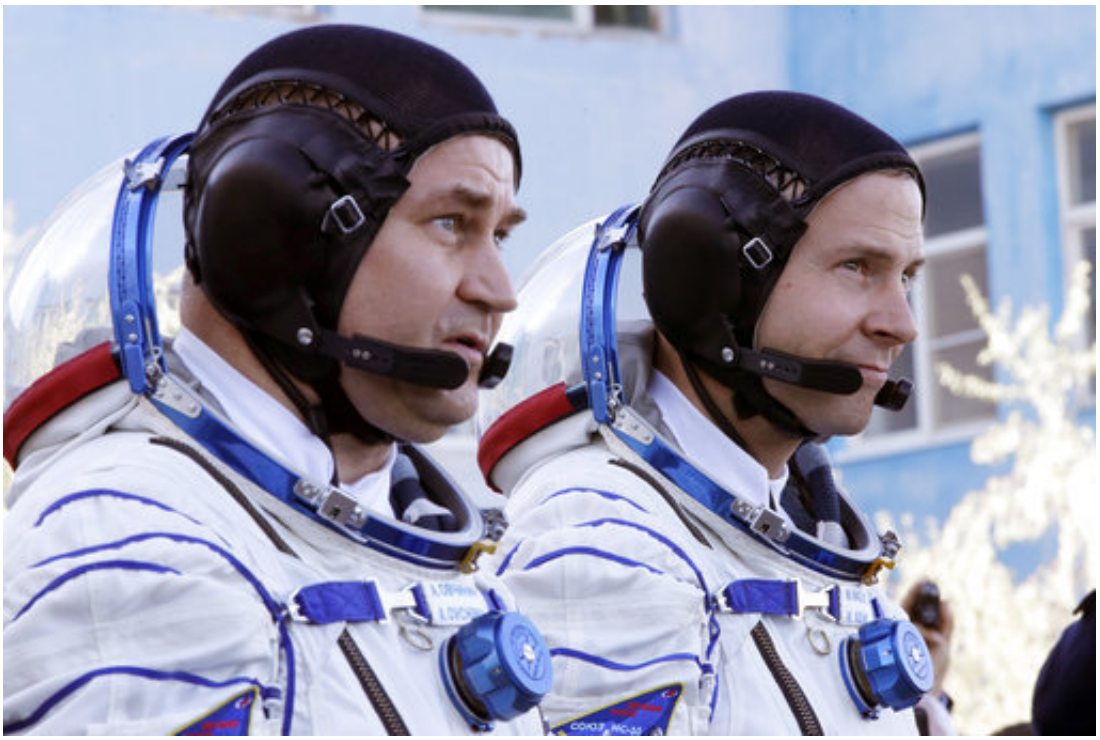
Glitches found in Russia's Proton and Soyuz rockets in 2016 were traced to manufacturing flaws. Roscosmos sent more than 70 rocket engines back to production lines to replace faulty components, a move that resulted in a yearlong break in Proton launches and badly dented Russia's niche in the global market for commercial launches.



U.S. astronaut Nick Hague, a member of the main crew of the expedition to the International Space Station (ISS), gestures prior to the launch of Soyuz MS-10 space ship at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri Lovetsky)



U.S. astronaut Nick Hague, right and Russian cosmonaut Alexey Ovchinin, member of the main crew of the expedition to the International Space Station (ISS), walk prior to the launch of Soyuz MS-10 space ship at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri Lovetsky, Pool)



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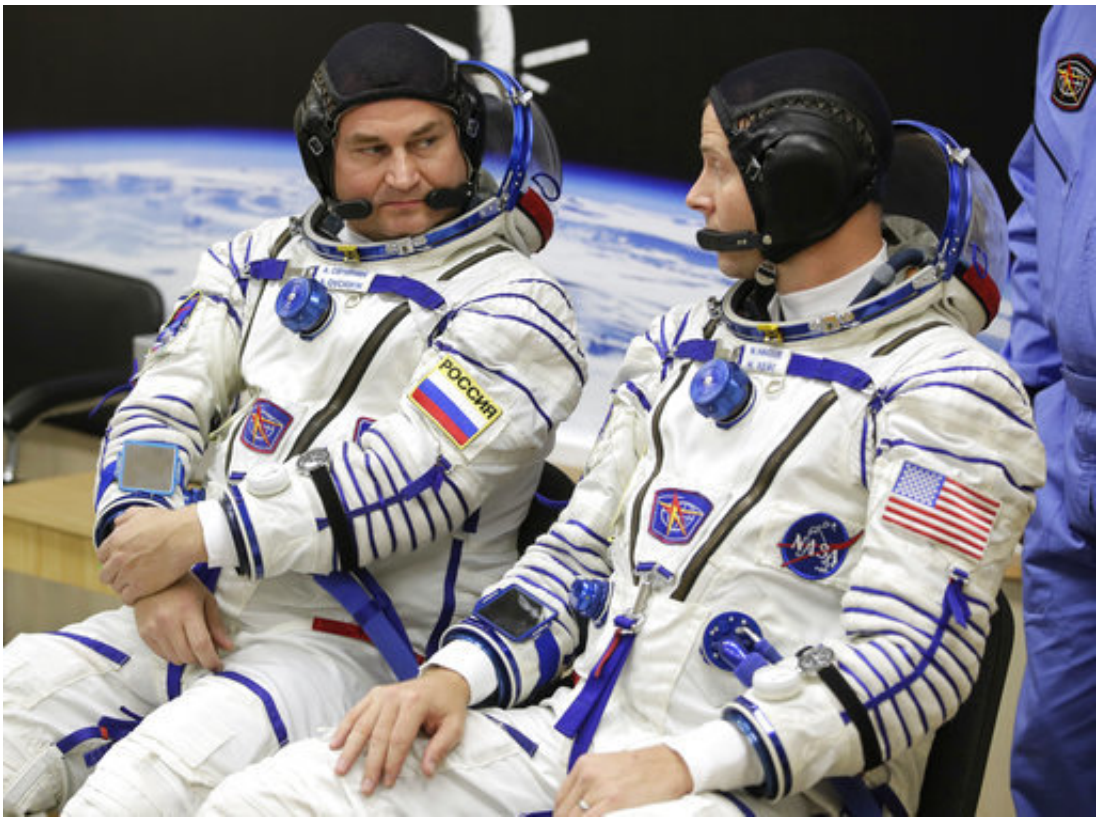

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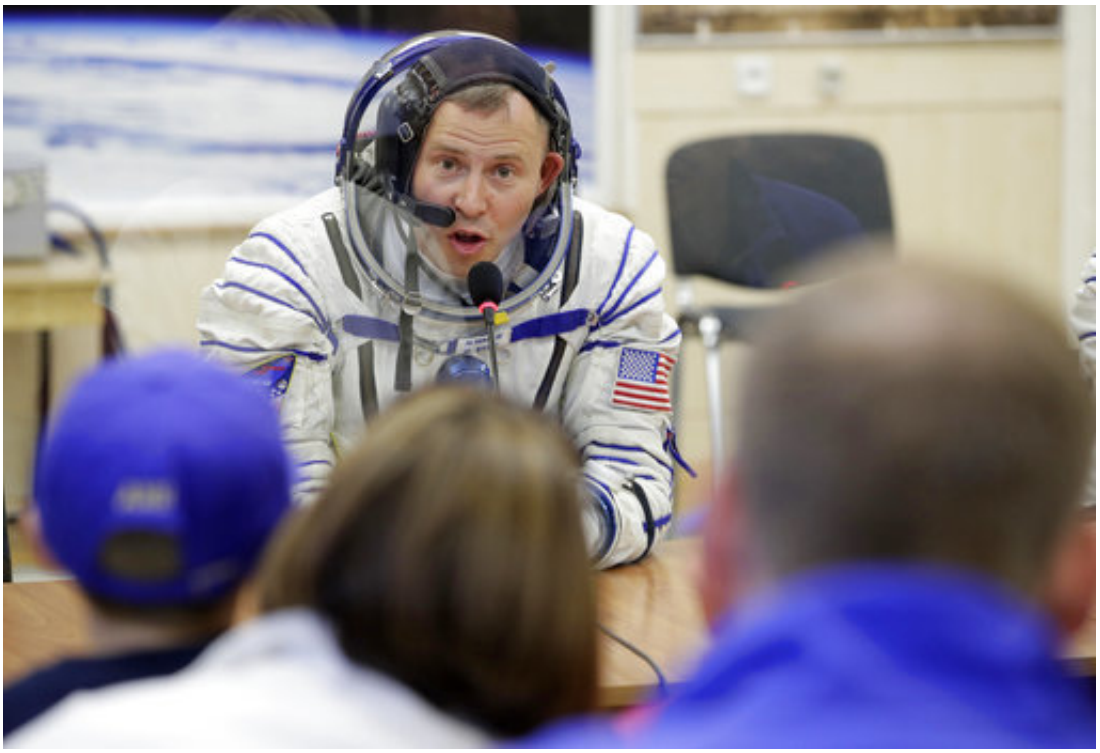

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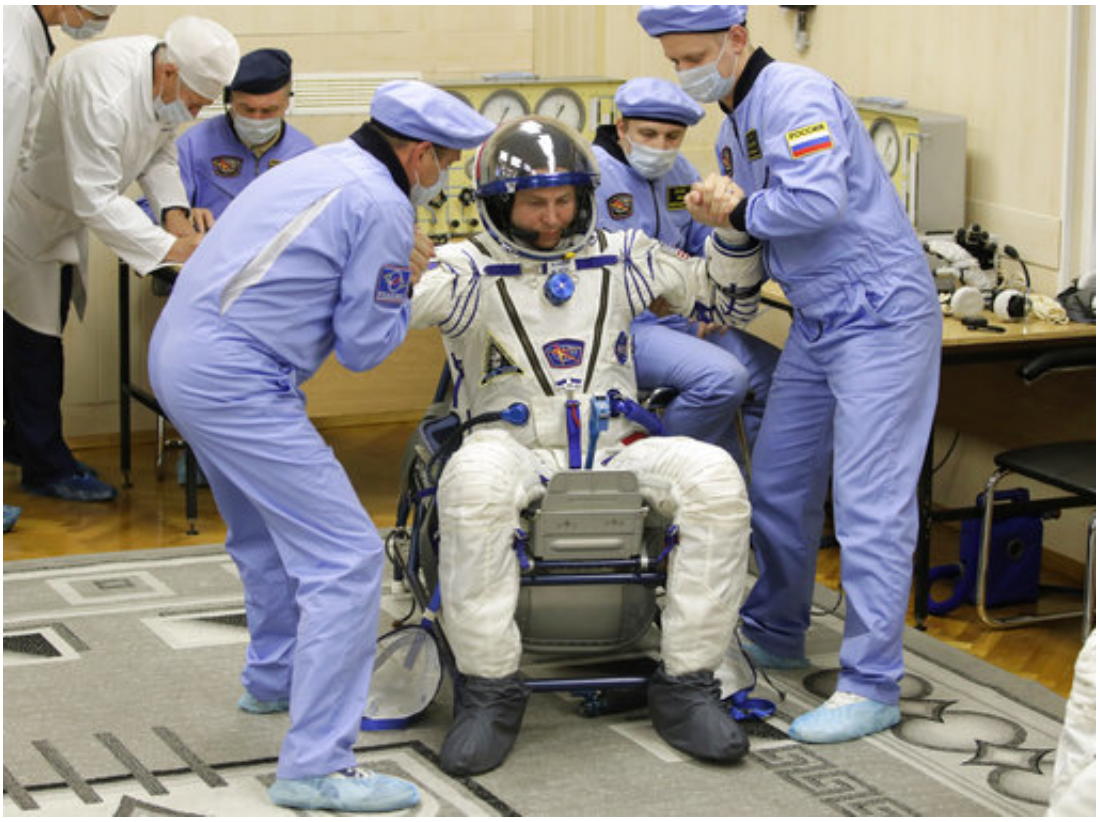

Russian Space Agency experts help U.S. astronaut Nick Hague, a member of the main crew of the expedition to the International Space Station (ISS), to stand up after inspecting his space suit prior to the launch of Soyuz MS-10 space ship at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. (AP Photo/Dmitri Lovetsky)