

NASA official: Tense moments but calm crew in aborted launch

October 12 2018, by Vladimir Isachenkov



In this photo made available by Roscosmos on Friday, Oct. 12. 2018, agency leader Dmitry Rogozin, center, embraces cosmonaut Alexei Ovchinin, left, and U.S. astronaut Nick Hague at Star City, Russia, a space training center outside Moscow. After an aborted launch on Thursday, Rogozin promised that Hague and Ovchinin will be given another chance soon to work on the International Space Station. (Roscosmos via AP)

NASA's chief heard one reassuring sound over the radio link after the



aborted launch of a Soyuz capsule with an American and a Russian aboard.

It was U.S. astronaut Nick Hague calmly relaying information in Russian to flight controllers.

"My reaction was, 'things aren't going well and he's not speaking English," NASA Administrator Jim Bridenstine told reporters Friday, after Hague and Roscosmos' Alexei Ovchinin returned to the Star City training center outside Moscow from their abruptly shortened mission.

"So, in other words, he was calm, he was cool, he was collected, he was doing what he was trained to do," said Bridenstine, who was at the Baikonur Cosmodrome to watch the launch.

Two minutes after Hague and Ovchinin blasted off Thursday for the International Space Station, their rocket failed, triggering an emergency landing. Their capsule fell from an altitude of about 50 kilometers (31 miles) at a sharper-than-normal angle, building up gravitational forces at 6-7 times those on Earth.

It was the first such accident for Russia's manned program in over three decades, although there also have been launch failures in recent years involving unmanned vehicles. An investigation is underway, and Bridenstine said he doesn't expect the next mission taking a <u>crew</u> to the <u>space station</u> in December to be delayed.





Administrator of the National Aeronautics and Space Administration (NASA) Jim Bridenstine enters the hall before a news conference at the U.S. embassy in Moscow in Moscow, Russia, Friday, Oct. 12, 2018. (AP Photo/Pavel Golovkin)

He recalled the tense moment when he heard Hague reporting the Gforces in Russian to Mission Control, followed by a break in communications and the loss of flight data.

"There was the time when I heard 6.7G, and that was the first time I realized that's not right," he said. "And then of course data was lost, communications was lost for a period of time, and then everybody went to their respective corners attempting to find out what the truth is. And when we learned that the crew was safe and descending it was a moment to behold. A lot of people very, very happy."



Hague's calm voice showed he was well-trained for the emergency, although there was still a nervous atmosphere at Baikonur, Bridenstine said.

"That's the scary moment, you know, when you know that the Gs are not where they should be and then communications stops and I'm sure that they are going through their procedures and doing their thing and the question is what's the ultimate G-load ... and how does that affect the crew," he said. "And during that time we weren't getting a lot of feedback, but again that's appropriate because they were busy and we were OK with that."

About 34 minutes elapsed from the time the rocket failed to when the capsule finally parachuted to a landing on the steppes of Kazakhstan, where rescue crews swiftly picked up the pair.



Administrator of the National Aeronautics and Space Administration (NASA)



Jim Bridenstine speaks during a news conference at the U.S. embassy in Moscow, Russia, Friday, Oct. 12, 2018. (AP Photo/Pavel Golovkin)

Bridenstine praised the Soyuz emergency rescue system, saying it functioned like a "miracle."

"Even when a failure occurs, because of the engineering and the design and the great work done by folks in Russia, the crew can be safe," he said. "That's an amazing capability and we can't understate how important it is. Not every mission that fails ends up so successfully."

Hague also expressed his gratitude.

"Thank you all for your support & heartfelt prayers," he tweeted from Star City. "Operational teams were outstanding in ensuring our safety & returning us to family & friends."

Sergei Krikalyov, the head of Roscosmos' manned programs, said the launch went awry after one of the rocket's four boosters failed to jettison about two minutes into the flight, damaging the main stage and triggering the emergency.





Administrator of the National Aeronautics and Space Administration (NASA) Jim Bridenstine speaks during a news conference at the U.S. embassy in Moscow, Russia, Friday, Oct. 12, 2018. (AP Photo/Pavel Golovkin)

Experts are now trying to determine what specific glitch prevented the booster's separation.

"We will need to look and analyze the specific cause—whether it was a cable, a pyro or a nut," Krikalyov said, adding that Roscosmos hopes to be able to sort out the problem and carry out the next Soyuz launch in December.

Roscosmos promised to share all relevant information with NASA, which pays up to \$82 million per Soyuz seat to the space station.

"I have no anticipation right now that the launch in December for the next crew will be delayed," Bridenstine said. "The investigation is



ongoing, Russia has been very supportive of sharing data with the United States and we're grateful for that. And at this point I'm confident that we'll launch in December."

The current <u>space station crew</u> of an American, a Russian and a German was scheduled to return to Earth in December after a six-month mission. A Soyuz capsule attached to the station that they use to ride back to Earth is designed for 200 days in space, meaning that their stay in orbit could only be extended briefly.



In this photo provided by Russian Defense Ministry Press Service, the Soyuz MS-10 space capsule lays in a field after an emergency landing near Dzhezkazgan, about 450 kilometers (280 miles) northeast of Baikonur, Kazakhstan, Thursday, Oct. 11, 2018. NASA astronaut Nick Hague and Roscosmos' Alexei Ovchinin lifted off as scheduled at 2:40 p.m. (0840 GMT; 4:40 a.m. EDT) Thursday from the Russian-leased Baikonur cosmodrome in



Kazakhstan, but their Soyuz booster rocket failed about two minutes after the launch. (Russian Defense Ministry Press Service photo via AP)

"We don't have an opportunity to extend it for a long time," Krikalyov said.

Krikalyov pledged that the Russian space agency will do its best not to leave the orbiting outpost unoccupied.

"The station could fly in an unmanned mode, but will do all we can to avoid it," he said. "The conservation of the station is possible, but it's undesirable."

Russia currently operates the only spacecraft for ferrying crews to the station following the retirement of the U.S. space shuttle fleet, but it stands to lose that monopoly in the coming years with the arrival of commercial U.S. crew capsules—SpaceX's Dragon and Boeing's Starliner.

"We're getting really close already," Bridenstine said. "We are anxiously anticipating early next year the test of two separate commercial crew vehicles that will fly to the International Space Station—SpaceX ad Boeing."





The Soyuz-FG rocket booster with Soyuz MS-10 space ship carrying a new crew to the International Space Station, ISS, blasts off at the Russian leased Baikonur cosmodrome, Kazakhstan, Thursday, Oct. 11, 2018. Two astronauts from the U.S. and Russia 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)

He said that the launch failure underlined the need for multiple launch systems to complement one another.

"In other words, if there is a hiccup in one country's system, there is another country's system capable of maintaining the operation until the first country is ready to go again," he said. "This demonstrates how important it is to have collaboration and to not be dependent on one system or another system."



But he also underlined the need for continuing U.S.-Russian cooperation in space, voicing hope that it wouldn't be affected by politics.

"We can both do more in space together than we can ever do alone," Bridenstine said. "When it comes to <u>space</u> and exploration and discovery and science, our two nations have always kept those activities separate from the disputes that we have terrestrially."

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