

## The crew of Expedition 9

# Same passion, different paths

By Kendra Phipps

**B**y all rights, the Expedition 9 crewmembers may seem like the odd couple. One is American; the other, Russian. One dreamed of flying in space at the age of 3; the other didn't give space much thought until later in life. One is a space rookie; the other has spent nearly 200 days in orbit.

Despite these differences, the pair has much more important things in common: a strong friendship and a love for their work.

Soon, Astronaut Mike Fincke and Cosmonaut Gennady Padalka will be rooming together in the International Space Station. Expedition 9 is scheduled to launch April 18 from the Baikonur Cosmodrome in Kazakhstan.

Though they were assigned to this mission less than three months before it was scheduled to launch, Fincke and Padalka have trained together for the past two years.

"It was very much a surprise," Fincke said of the last-minute crew change. "But on the other hand, I knew that Gennady and I were ready to go. ... We know each other's strengths and each other's weaknesses. We know how to motivate each other, and we're both really excited."

Padalka agreed that they are a compatible crew.

"I know Mike very well," he said. "He is a very sociable man, and he has a good sense of humor, which is very important in space. We are very, very comfortable with our friendship."

This crew change was not the first for Expedition 9. The original commander, Astronaut Bill McArthur, Jr., was replaced by Astronaut Leroy Chiao mid-January due to a temporary medical issue. Then, NASA and its partners decided it was optimal to keep the existing Expedition teams together. Since Fincke and Padalka had trained together for years, as had Chiao and Cosmonaut Salizhan S. Sharipov, the partners modified the crew assignments, bumping Fincke and Padalka to Expedition 9. Chiao and Sharipov are the Expedition 9 backup crew and the Expedition 10 prime crew.

The situation "shows the wisdom of Space Station planning that we have backup crews," Fincke said, "and that we have a pool of astronauts and cosmonauts who are ready to fly."

### Same passion, different paths

Fincke and Padalka share a love for aviation. Fincke, who will be the mission's Flight Engineer and Space Station Science Officer, attended college on an Air Force ROTC scholarship, became a test pilot and has now flown more than 30 types of aircraft.

Padalka, Expedition 9 Commander, has logged more than 1,500 hours of flight time through his years with the Russian Air Force and is also a General Parachute Training instructor. He said he knew early on that he wanted to be a pilot.

"I was fascinated with aviation, and that is why I entered the Eisk Military Aviation College," he said. While Padalka entered the aviation college and the Russian Air Force for the sake of flying, for Fincke, the U.S. Air Force was more of a means to an end. He had dreamed of becoming an astronaut since he was 3 years old.

"For me (the Air Force) was a stepping-stone to work at NASA, but also, I always wanted to serve my country, so it was very much a win-win situation," Fincke said. He later studied cosmonautics in Russia and attended the Air Force Test Pilot School as an engineer.

"I can't tell you how thrilling it was," he said. "Getting a chance to see how we humans put aerospace vehicles together, and how to make them better ... enhances my ability to be a good Flight Engineer for the ninth Expedition."



Cosmonaut Gennady Padalka



Astronaut Mike Fincke

*...it shows what human beings can do when we work together constructively and not destructively.*

While Fincke pursued spaceflight throughout his life, Padalka arrived at his current career in a different way. It could even be said that spaceflight came to him.

"I met our famous Cosmonaut Aleksei Leonov – he participated in the Soyuz-Apollo project, he was the first man who performed a spacewalk – and he suggested that I become a cosmonaut," Padalka said. At the time, Leonov was the head of a medical commission on a cross-country cosmonaut recruitment trip.

"To a larger extent it was by chance," Padalka said. He became a test-cosmonaut in 1991 and made his first flight, as Commander of the Mir-26 mission, in 1998.

Padalka's and Fincke's paths converged in 2002 when they began training together as a Space Station crew.

### 'A hectic life' for six months

Padalka has one space mission under his belt, but Expedition 9 will be Fincke's first journey into space. To put it mildly, the rookie is looking forward to the mission.

"In life, I don't think we always get a chance for our dreams to come true. But I can tell you, right here and right now, that I'm living my dream," Fincke said. "And not only that, but I've always really had an affinity for the Russian space program. It's such an honor to get a chance to fly aboard the Russian Soyuz spacecraft."

After the crew takes off in its Soyuz capsule – along with European Space Agency (ESA) Astronaut André Kuipers – a whirlwind of activity awaits them.

"It's a hectic life during handover operations," Padalka said. He explained that the crew will be busy conducting experiments and learning the nuances of the Space Station from the Expedition 8 crew before that crew's farewell ceremony. Kuipers will spend about a week aboard the Space Station conducting scientific experiments under a commercial agreement between ESA and Russia and will return to Earth with Expedition 8 crewmembers Mike Foale and Alexander Kaleri.

During the rest of Expedition 9, Fincke and Padalka have their work cut out for them in the form of two spacewalks and about 100 science experiments. There will be many life sciences experiments to further study the effects of long-

term space travel on the human body, along with experiments on materials science and fluid mechanics.

"There are fundamental fluid mechanics problems that we're solving with ingenious contraptions that are easy to operate and give real-time data back to the scientists on the ground," Fincke said.

Padalka, who also has a background in ecology, said he is looking forward to the Russian star spectrometer experiment, which is associated with both astronomy and ecology.

"Only recently did I actually start to think how really exciting that is – to be alone in the cosmos without a spacecraft around me except for this suit that was put together by human hands," Fincke said.

Padalka expressed his certainty about the mission's success.

"I am deeply convinced that our mission will make us take steps forward," he said, "and eventually it will help us to solve many problems on the ground."

When the time comes to leave the Space Station, Fincke expects it to be a bittersweet moment.

"I'll be so excited to go home and see my family. I'll have a new baby girl waiting for me, my little boy who's 3 years old is going to have missed me, and of course I want to see my wife's beautiful smile – so, that'll be the sweet part," he said. "The bitter part is leaving our home of six months."

But even that bitterness should be sweetened by the knowledge that their mission may have inspired children on Earth – the same way Fincke was inspired during the Apollo era – and that the Space Station continues to serve as a "great example of peaceful cooperation," as Padalka said.

"I think this is a great example of how our life can be established on the ground in the ideal," Padalka said.

Fincke agreed: "It's not just for the glory and nationalism, but it's also for all of humanity," he said. "And that's why we're working on the International Space Station: it shows what human beings can do when we work together constructively and not destructively."