

Army War College grad tackles assignment in space

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Col. Tim Kopra, Army War College distance education program graduate, launched from the Kennedy Space Center July 16, headed for the International Space Station. He will serve on a six-person crew at the International Space Station. NASA courtesy photo.

Boldly going ... to space, the final frontier ... a member of the Army War College distance education program class of 2006 is finding a unique way to apply his Army War College education.

Col. Tim Kopra left Earth behind when Shuttle Flight 127 launched from the Kennedy Space Center July 16, headed for the International Space Station. The shuttle mission will include several space walks, and he'll work with the robotic arms on the space station to install new hardware. The shuttle will deliver the final component of the Japanese space agency's Kibo lab.



Endeavour's planned June 17 liftoff was postponed because of a leak associated with the gaseous hydrogen venting system outside the shuttle's external fuel tank. Weather has caused delays in the past several days.

Space shuttle Endeavour and its crew of seven astronauts are in orbit after an on-time launch at 6:03 p.m. EDT from NASA's Kennedy Space Center in Florida. Following a smooth countdown with no technical issues and weather that steadily improved throughout the afternoon, the shuttle lifted off from Launch Pad 39A and began its orbital chase of the International Space Station.

"It was a testimony for this entire launch and flight control team," Launch Director Pete Nickolenko said of the countdown and successful liftoff, which came on the sixth launch attempt after technical issues and weather concerns prevented the first five tries. "It was an outstanding effort, and it made the complex look really easy. It really was a case of persistence."

Once at the ISS, his duties will range from engineering to setting up scientific payloads for ground team operation, to directly engaging in research. He expects to spend about three months at the ISS and said he's excited to be getting full use of the scientific payloads.

"I'm intrigued that there will be six of us who will work together closely and fulfill the purpose for which the space station was designed," said Kopra. "It's absolutely vital to get a lot of the road blocks and unanswered questions resolved."



Under a cloud-washed sky, spectators watch as space shuttle Endeavour rises majestically from Launch Pad 39A at NASA's Kennedy Space Center in Florida on the STS-127 mission to the International Space Station. Liftoff was at 6:03 p.m. EDT on July 15, 2009, and was the sixth launch attempt for the mission. The launch was scrubbed on June 13 and June 17 when a hydrogen gas leak occurred during tanking due to a misaligned ground umbilical carrier plate. The mission was postponed July 11, 12 and 13

due to weather conditions near the Shuttle Landing Facility at Kennedy that violated rules for launching, and lightning issues. NASA photo.

"We'll go back to the moon, and someday to Mars. There are a lot of scientific and technical questions that need to be answered about our future," he said about a mission objective, to learn as much as possible about the effect of microgravity on human physiology.

As an Army officer, Kopra chose an unconventional career path, never certain that it would take him to space. "Every time I went off the beaten path, I had people tell me I was making a mistake," said Kopra. During his West Point days, he was influenced by USMA instructors and by former cadets who spoke to the Corps of Cadets about their NASA experience. That made the dream realistic, he said. Kopra served as a helicopter pilot in DESERT STORM, acquisition officer, test pilot, NASA engineer, and, finally, astronaut.

"It doesn't matter what your goal is, as long as it's big," he said. "Everything is do-able when you do it one step

at a time.”

The Army contributes valuable operational and leadership experience to NASA, which dedicates a few slots to Army officers, Kopra said. He'll go into space with the USAWC flag. "It will be an honor to highlight the institution while I'm on the International Space Station."

His Army War College education became an asset in understanding how the international community works, he added.



After years of training in Germany and Russia, Kopra will serve as a member of an international space crew representing Russia, Canada, the European Space Agency and the United States.

"This mission is the first time we've been able to assemble the capabilities – life support, consumables, and science – for a full crew," he said, noting that Expedition 19 will double the size of the station's resident crew to six.

"One thing we've learned from the 'Mir' is how important it is to take care of the people on board. NASA will take all my CDs and turn them into digits to bring with us. We'll talk via the control panel, and

also have IP telephone for personal use as long as we have KuBand coverage."

There's no comparison between the hardships of space and those of his Army colleagues deployed to Iraq and Afghanistan, he said. "I can't compare it to the folks serving overseas; the time away from home and family is longer and the hazards and stress are much greater."

To learn more visit

http://www.nasa.gov/mission_pages/shuttle/main/index.html