

‘One Planet is Not Enough’: Future of Manned Space Exploration Requires International Collaboration

Upcoming ISS Crew Responds to 21st Century Science & Technology at Global Press Conference:

September 21st, 2011

JOHNSON SPACE CENTER, Houston, TX—NASA astronaut Donald Pettit, Russian cosmonaut Oleg Kononenko, and European Space Agency astronaut Andre Kuipers responded enthusiastically to questions from two representatives of *21st Century Science & Technology* magazine. In a lively round of comments, the spacefarers, all scientists as well, called for putting human DNA on other planets as a matter of survival (Pettit), mining the Moon and colonizing the solar system (Kuipers), and exploring other galaxies (Kononenko).

The three are set to launch to the International Space Station aboard a Soyuz TMA-03M spacecraft around December 26 of this year from the Baikonur Cosodrome in Kazakhstan. Prior to that another crew of three is set to fly to the space station aboard a Soyuz craft on November 14. The present ISS crew will return a few days later.

However, as a result of President Barack Obama's criminal attack on the U.S. space program and the lack of capable technology in other nations, the Russian rockets and Soyuz modules represent the only remaining manned space launch capability for all of humanity. If there is a problem with the November launch, the International Space Station will be unmanned for the first time in a 10-year year stretch of continuous habitation.

While most questions at the press conference focused on technical matters related to the upcoming flights, or how the crew likes working with each other, *21st Century Science & Technology* magazine was able to direct the discussion to the deeper questions of human immortality and survival of the species, which are so intimately tied up with the manned space program.

With a view toward the three-power alliance recently proposed by economist and world statesman Lyndon LaRouche, Ian Overton asked cosmonaut Kononenko:

"The United States and Russia have a long history of collaboration in terms of national strategic missions, from the transcontinental railroad—and, hopefully—far, far into the future. And so, the question that I have is: What do you see as a direction for long-term future collaboration between the United States, Russia, and also China, on space collaboration, manned space exploration?"

Kononenko, a mechanical engineer and avid sportsman, replied that he would express his personal opinion: "I think that space has long been a sports arena, where every participant demonstrates how fast or how huge they are. I think that the future of space exploration is only in joint exploration, and we will be able to do deep space missions only if we cooperate. So I think our future is joint co-operation."

Galactic Question Ignites Discussion

A follow-up question came from Juliette Lamoreux, representing *21st Science & Technology*, who ignited the participants with the query: "And what do you think about the potential threat of cyclical mass extinctions every 62 million years, that we've seen on the Earth, and how mankind may begin to address that bigger galactic question."

The question brought the press conference to life, exciting the deep passion for discovery and accomplishing miracles, which all of us familiar with the manned space program know and love. All three of the astronauts answered.

"I'll tackle the galactic question here," astronaut Pettit first jubilantly interjected. "I'm a firm believer that one planet is not enough. And I like to say that perhaps the ultimate reason for exploring space can be learned from the dinosaurs. If the dinosaurs had explored space, if they had colonized other planets, they would still be alive today. So I think this is ultimately why human beings, if we want to live on the time scale of tens to twenties of millions of years, we're going to have to have our DNA on more than one planet!" Pettit, a doctor of chemical engineering, is a veteran of two space flights, including a six-month stay on the space station in 2002-03 in which he became known for his "Saturday Morning Science" series, demonstrating how fluids behave in extremely low gravity. He also voyaged to Antarctica on an exploration for meteorites.

Smiling broadly, Cosmonaut Kononenko added to Dr. Pettit's comments:

"I think that problems with resources will always face humanity. So humanity will actually have to look for additional means of existence. And I think that it will be an urgent need to explore other galaxies and other planets. that's what I think." Kononenko is a mechanical engineer who led teams in the design and development of spacecraft electrical power systems at the TskB-Progress facility in Samara (Kuybyshev), where the rockets which carried the Soyuz modules to the ISS were constructed. He is also a veteran of two space walks during a 199-day mission aboard the International Space Station in 2008.

Dutch physician and ESA astronaut Kuipers, also smiling, added a crucial historical perspective:

"We have been around for only a short time. And if we think in cosmic terms—I don't know who said this first—but we're standing at the edge of the ocean with only our toes in the water. There's an ocean to discover!"

Then, expressing the uniquely human ability to think beyond the bookends of one's life, which manned space exploration tends to engender, Kuipers noted:

"If you look back to our age from the far future, people will see see that Sputnik, Gagarin, Armstrong, the first base on Mars (the space station will be skipped, because it will be normal—you'll have several), industrialization, mining on the Moon—, all of these things will happen. I'm convinced that humanity will spread out through the solar system, and who knows beyond. . . ."

The press briefing was broadcast live around the planet on [NASA TV](#), and was also recorded on site.