

Russia gains edge in space race as US shuttle bows out

July 3 2011, by Maria Antonova

As the United States winds down its shuttle programme in a symbolic twist in a long-running space rivalry, Russia will gain complete control of access to the International Space Station.

The <u>Russian space agency</u> plays down any triumphalism, but US astronauts will remain dependent on Russia for access to the ISS at least until 2015 and will have to pay for seats in its Soyuz <u>space</u> capsules.

"We cannot say that we have won the space race, but simply that we have reached the end of a certain stage," the deputy head of the Russian space agency, Vitaly Davydov, said in an interview.

On July 8, four US astronauts will board the Atlantis shuttle for its last flight, wrapping up a three-decade-long programme in which the United States took turns to ferry supplies and crews to the ISS with Russia's Proton and Soyuz rockets.

Henceforth, Washington will have to pay \$51 million per seat in Russia's space capsules until a new crew vehicle can be built by private companies, which US space agency NASA has estimated could be between 2015 and 2020.

Davydov of the <u>space agency</u> Roskosmos rejected any talk of rivalry, however, emphasizing that the ISS was primarily a story of successful international cooperation.



"I cannot think today of another international space project that is so effective in its scale, its significance and its results as the ISS," he said.

While Russia gains a symbolic victory, it will be a costly one, with the obligation to build more space ships to go back and forth to the ISS eating up a budget that could be spent on other projects.

Unlike the reusable NASA shuttles, the <u>Russian Soyuz</u> space capsules are single-use, except for the section in which spacemen return to Earth.

The situation is "not very convenient because it lays a heavy burden on Roskosmos's production capacities," <u>space industry</u> expert Igor Marinin told AFP.

Roskosmos this year declared its budget as \$3 billion, a fraction of NASA's massive \$18.5 billion budget.

And it has faced embarrassing setbacks, including the failure of several satellite launches that led to the sacking of the long-serving space chief Anatoly Perminov in April.

The country's space industry has also drawn smirks with a clunky experiment simulating a trip to Mars, in which volunteers are spending more than a year confined at a Moscow research institute and "landed" in a specially designed sand pit.

To recoup its costs, Roskosmos hopes to build a stronger presence in the commercial space market, such as satellite launches, its newly appointed chief Vladimir Popovkin said at the Saint Petersburg Economic Forum last month.

"The goal is to take up a suitable position in the commercial market: about 10 to 12 percent" of a market worth \$300 billion per year,



Popovkin said.

"This is one of the few things in our country that is competitive on the international level."

While Russia holds 40 percent of the world's space launches and constructs 20 percent of its space craft, currently "its share in the space business is unfairly small, not more than three percent," Popovkin said

Russia also faces new rivals, notably China, which in 2003 became the third country in the world after the Soviet Union and the United States to send a man into space in its own ship.

In ambitious plans, China hopes to put a robot on the Moon in 2013 and to build its own space station due to enter service in 2015.

Davydov acknowledged that China had become a rival, albeit still far behind, but said Russia did not feel threatened.

"There is a place for everyone in space," he said.

"In a certain sense, (China) is our competitor... but that is absolutely normal and we have not been afraid of the market for a long time now."

Ironically, the new commercial realities of the Russian space programme, with reduced budgets and the need to cooperate on large-scale projects, make some Soviet space veterans yearn for the competitive edge of the Cold War.

"It's strange that during the Cold War, when we cosmonauts and constructors dreamt of cooperation, there were a lot of new launches, but then cooperation came and now we are mostly repeating ourselves," lamented retired cosmonaut Georgy Grechko, 80.



The US space shuttle programme's goal of making launches less expensive was not ultimately reached, he said, and its end sees a return to single-use "sausage-like" rockets little different to those used 50 years ago.

"Mankind has lost its stimulus to go into space using more complicated machines," he complained.

(c) 2011 AFP

Citation: Russia gains edge in space race as US shuttle bows out (2011, July 3) retrieved 2 May 2024 from https://phys.org/news/2011-07-russia-gains-edge-space-shuttle.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.