

Russia brings astronauts safely back to Earth

November 22 2011, by Stuart Williams



Expedition 29 Commander Mike Fossum (L) and Flight Engineers Sergei Volkov (C) and Satoshi Furukawa (R) sit in chairs near the Soyuz TMA-02M capsule minutes after they land in a remote area outside the town of Arkalyk, Kazakhstan on November 22.

Three astronauts landed safely in the Kazakh steppe aboard a Russian Soyuz capsule on Tuesday after a stay of over five months aboard the International Space Station, Russian mission control said.

American Mike Fossum, Japan's Satoshi Furukawa and Russia's Sergei Volkov touched down outside the remote settlement of Arkalyk in Kazakhstan just before sunrise after undocking from the ISS earlier in



the day.

"It has landed," said a message flashed on the screen at Moscow mission control shown in a live relay. State television pictures showed the astronauts extracted from the capsule apparently in good health.

The Soyuz capsule landed on its side rather than its bottom after its descent to Earth with a parachute, mission control said, but such landing was not unusual. The landing was on time and on <u>target</u> at 0226 GMT.

The hitch-free landing of the Soyuz is a boost for the Russian space programme, which has been battling to restore confidence in its reliability after a spate of disasters in unmanned spaceflight.

State television pictures showed ground workers moving quickly to carry the three men from the capsule to protect them from the initial shock of temperatures of minus 15 degrees Celsius after their half year stay on the ISS.





Russia space agency ground personnel move the Soyuz TMA-02 capsule after it landed near the town of Arkalyk in northern Kazakhstan on November 22. The Soyuz capsule landed on its side rather than its bottom after its descent to Earth with a parachute, mission control said.

Volkov was the first to emerge, followed by Fossum and Furukawa. All were carried out by ground workers as the experience of prolonged <u>weightlessness</u> means that they cannot initially walk unassisted.

The three men were sat down in chairs, swathed in blue rugs and blankets to protect themselves from the sub zero morning temperatures as dawn broke over the snow-dusted steppe. Fossum was shown chatting on a mobile phone.

They were then lifted -- still in their chairs -- to a nearby medical tent put up next to the touchdown site to have their space suits removed and

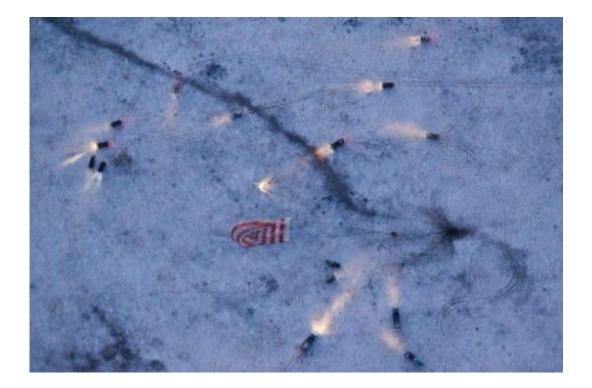


go through standard medical tests.

The three were then to be helicoptered to the northern Kazakh city of Kostanay for a farewell ceremony before splitting up, with Fossum and Furukawa returning to the United States and Volkov flying to Moscow.

It was during their stay on the ISS that a Russian unmanned Progress supply ship carrying supplies for the station crashed into Siberia in August shortly after launch, forcing a complete rejig of the timetable for manned spaceflight.

This capped a disastrous year for the Russian space agency which also saw the loss of three navigation satellites, an advanced military satellite and a telecommunications satellite due to faulty launches.



This photo taken from a helicopter shows the landing site of the Soyuz TMA-02 capsule near the town of Arkalyk in northern Kazakhstan. The hitch-free landing is a boost for the Russian space programme, which has been battling to restore



confidence in its reliability after a spate of disasters in unmanned spaceflight.

Hours after the landing, the Russian space agency publicly acknowledged for the first time that its Phobos-Grunt probe for Mars's largest moon, launched on November 9, was also likely lost.

The probe has failed to head out of Earth's orbit on its course to the red planet and its moon Phobos.

"There is little chance that we will be able to realise this mission," the deputy head of Roscosmos Vitaly Davydov said at <u>mission control</u>, quoted by Russian news agencies.

The three returned astronauts had spent 167 days in space -- slightly more than the 161 day mission originally envisaged as the return was delayed by almost a week due to the Progress mishap.

Their return to Earth leaves three astronauts remaining on the ISS, American Dan Burbank and Russians Anton Shkaplerov and Anatoly Ivanishin who blasted off from Russia's Baikonur cosmodrome in Kazakhstan on November 14.

They will be joined by another multinational crew of three astronauts that is due to take off from Baikonur on December 21.

Following the retirement of the US shuttle in July, Russia is currently the only nation capable of transporting humans to the ISS.

Unlike the horizontal landing shuttle, the Soyuz returns to Earth vertically with a parachute in a procedure whose basic principle has changed little in the last decades but is admired worldwide for its



simplicity and reliability.

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