

Mars500's flight of fancy breaks endurance record

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Russian space officials watch researchers simulating a landing on Mars at the Mission Control Center in Korolyov, outside Moscow. Picture: AP.

Source: AP

ENCLOSED in a metal spacecraft, the Mars500 crew have endured 438 days of isolation, living on a spartan diet of cereal bars and pasta with precious little contact with friends and family back home.

Yesterday the stoic endurance of the six cosmonauts was rewarded as they broke the record for the longest space mission.

But when the 520-day Mars mission is completed, it will enter the record books for a second time as the shortest distance travelled in the history of space exploration. Throughout the 14 months since "take-off", the steel vessel has remained grounded at the Institute of Biomedical Problems in Moscow, simulating the duration and conditions of a real-life mission to the red planet.

The mission's Martian "landing" in February was staged in an adjoining room resembling a large sandpit.

Nonetheless, the Mars500 crew were warmly congratulated yesterday by the Russian cosmonaut Valeri Polyakov, the actual holder of the space endurance record, who spent 437 days orbiting Earth aboard the Mir space station in 1995. "Better now not to count how much time has passed, but how much remains. It has a positive effect," he recommended in a message to the crew.

For 438 days, the crew have worked inside a closed, windowless space of 550 cubic metres, observed by doctors and psychologists. Each cosmonaut has a narrow bed, a desk and a wardrobe. There is no shower but the crew clean themselves in a heat chamber like a sauna, and use tissues to wipe off grime.

The crew have been playing computer games simulating emergencies on Mars, as well as Guitar Hero. The cosmonauts retrieve their meals through a hatch and have to eat them in their entirety, as scientists are studying the reaction of their bodies to a long-term space diet.

Mr Polyakov, who spent time in a previous simulated trip, described the experience as "identical as spaceflight, except no weightlessness".

The mission may fuel conspiracy theories that the Apollo Moon landings were faked. But the Russian, Chinese and European collaborators have been clear from the start that the Mars500 mission is an exploration of the psychological and physical impact of enduring long-distance space flight.

Only three of the crew - a Russian, Aleksandr Smoleevskiy, an Italian, Diego Urbina, and a Chinese trainee cosmonaut, Wang Yue - actually left the craft for the simulated Mars "landing" earlier this year.

Romain Charles, a French engineer, and two Russians, Sukhrob Kamolov, a surgeon, and Aleksii Sitenko, a shipbuilding engineer, remained inside the mothership throughout.

If they last the full 520 days, each member of the expedition will receive a fee of about \$100,000 apart from Mr Wang, who is rumoured to be getting less.

The crew are coping well and are in good spirits, according to the European Space Agency, which has been providing them with surprise gifts, such as books and T-shirts, to sustain morale during the long "trip" back.