



Published on *Grand Haven Tribune* (<http://www.grandhaventribune.com>)

[Home](#) > WHAT'S UP: Mars500 team returning to Earth

WHAT'S UP: Mars500 team returning to Earth

WHAT'S UP: Mars500 team returning to Earth

Anonymous

08:00 PM

Dec 31

1969

In a science experiment that blurs the distinction between hardcore science and a science fiction B movie, a crew of six — I'll call them "simulanauts" — are nearing the end of a more than 500-day-long simulated mission to Mars.

Since early June, the six simulanauts — two Europeans, three Russians and one Chinese — have been sealed up together in a relatively small isolation habitat, with only e-mail and some voice contact with mission controllers and friends in the outside world, pretending quite seriously to be on a mission to Mars.

The experiment is being conducted jointly by the European Space Agency, the Russian Federal Space Agency (Roscosmos) and the Russian Institute for Biomedical Problems to learn about the physiological and psychological problems that might manifest themselves during a long space mission.

After the launch on June 3, 2010, the simulanauts landed on Mars on Feb. 12, 2011. They began their return trip to Earth two weeks later — after practicing three egresses on the Martian surface, which was also part of the hermetically sealed habitat.

During their journey, the simulanauts were subjected to various emergency situations and conducted experiments on diet, exercise and the regulation of their sleep-wake schedule. In one experiment, the simulanauts wore red eye-covering glasses and spent time during the "day" exposing themselves to blue light to see to what extent bathing themselves in blue light would help their bodies adopt a more regular sleep-wake schedule.

In the human eye, a pigment that is sensitive to blue light is thought to play a key role in keeping our daily circadian rhythm synched with the sun.

In a video of the blue-light experiment (available on the project website at www.esa.int/esaMI/Mars500/^[1]), the simulanauts can be seen wearing their red glasses, working and living in their habitat — which looks a lot like an upstairs room in an old Cape Cod-style home, complete with pocket doors and knotty-pine paneling.

Could you imagine spending 500 days with five acquaintances in an attic with no windows? I run out of

enthusiasm for just about everything after just a few days in my house with my family.

On Nov. 5, the six Mars500 crewmen will emerge from the habitat to see friends, family and the sun for the first time since the spring before last.

I wonder how they will spend their first few days again experiencing Earth.

No doubt, experiments like this are essential if mankind is to explore beyond Earth and the moon. The moon is 250,000 miles away — right in our backyard, so to speak — and it took Apollo astronauts 10 days to get there and back.

A trip to Mars following a low-energy trajectory is about 400 million miles — one way. Making such a trip in today's spacecraft would take longer than a year there and back, during which time astronauts would have to be completely self-sufficient.

Neil Armstrong announced famously upon stepping on the moon: “That’s one small step for a man, one giant leap for mankind.”

I wonder what the first person to step on Mars for real will say. Surely something eloquent. But inside, he or she might be thinking: “I want to go home. There’s no place like home.”

— ***By Doug Furton, a member of the physics faculty at GVSU. Send questions and suggestions to dgf@inbox.com.***

By date (default)

Not promoted to Network

Tags

[Opinion](#) ^[2]

Similar stories

Source URL: <http://www.grandhaventribune.com/content/whats-mars500-team-returning-earth>

Links:

[1] <http://www.esa.int/esaMI/Mars500/>

[2] <http://www.grandhaventribune.com/editorial>