

From Earth Missions to Deep Space Exploration (05)
Habitation for Exploration Missions (3)

Author: Mr. Diego A. Urbina
European Space Agency (ESA), Belgium, diego.urbina@spaceapplications.com

ENDURING THE ISOLATION OF INTERPLANETARY TRAVEL: A PERSONAL ACCOUNT OF
THE MARS 500 MISSION

Abstract

The Mars500 mission was a 520-long simulation of a round trip to Mars. After going through an intense selection process, 6 individuals from various countries lived and worked for several months in a pressurized facility mimicking as close as possible the conditions of real space flight in Moscow, Russia. The simulation concluded in November 2011 when the crew came out of the facility in seemingly good health and mood.

A first person point of view description of daily life and activities is provided as well as the indication of the environmental factors that can act as stressors during such a mission as well as their change over the different periods of flight, including adaptation to the "real" world. Advice for the design and logistics of future exploration missions is given.