

Volunteers embark on simulated Mars mission

Six men will spend 18 months together sealed in cramped quarters as part of an experiment to test human endurance during a simulated return trip to Mars. The mission is the final and longest part of the *Mars500* project – which began in 2007 – and will take place over 520 days at a special facility in Moscow's *Institute of Medical and Biological Problems*

SIMULATOR OF MARTIAN SURFACE

STORAGE MODULE

3.9m x 24m
Includes food and other consumables – crew receives same diet as astronauts on International Space Station

Experimental greenhouse for growing food

Gymnasium

MEDICAL MODULE

3.2m x 11.9m

Houses two beds and medical equipment for diagnosis and examination if crew members become ill

HABITATION MODULE

3.6m x 20m

Living room

Kitchen-dining room

Crew cabins: Contain bed, desk, chair and shelves for personal belongings

Control room: Communication with nearby monitoring facility by e-mail. Connection will feature 40-minute delay, as on real Mars mission

MARS LANDING MODULE 6.3m x 6.17m

After 250 days, three crew members will enter mock-up of lander for 30-day "Mars orbiting" phase, before rejoining crewmates in rest of facility for 240-day return trip

Total volume of modules
550 cubic metres