



## **PRESS RELEASE**

**12 February 2003**

### **MARS ON EARTH: MEET THE INTERNATIONAL CREW LIVING AND WORKING ON THE MARS DESERT RESEARCH STATION**

An international crew is about to descend on the Mars Desert Research Station (MDRS) in the American South-west, one of a series of human Mars mission simulation platforms currently operated by The Mars Society (U.S.) in Mars-like environments around the globe.

The 14th Crew on the MDRS in Utah will take part in a venture that has been jointly funded and planned by the Mars Society of Canada and Mars Society Australia. Crewmembers from the United States and France will also participate in this important research program.

Dubbed 'Expedition One' and running from 15 February to 16 March 2003, this mission is intended to be the first in a series of special expeditions staged by the Mars Society of Canada in conjunction with its international partners. The idea behind these expeditions is to systematically focus research efforts on those aspects of a human Mars surface exploration mission that have received scant attention to date.

Says Rocky Persaud, Principal Investigator for ExOne, and a graduate student of Martian geology at the University of Toronto, "We have a busy schedule of research ahead of us.

"Expedition One (ExOne) will be focused on aspects of field science exploration EVAs, short for 'extra-vehicular activities,' which will be used to explore the geology and biology of a Mars-like (analog) site. The term 'analog' refers to a site that displays characteristics similar to those that are, have been or might be found on Mars.

"To this end, studies into exploration strategies, science operations, vehicle mobility requirements, science data logging, work and task analysis, and crew/work interactions will be conducted. The ExOne science program, which has taken six months to plan, also includes research into various interactions between the crew and mission support, as well as crew social-psychology investigations.

"Each week of the Expedition represents one phase of research, with each Phase building on the learning from prior weeks and culminating in an integrated science mission scenario for the final week."

Commander for the first two weeks of the mission (Phases One and Two) will be Rocky Persaud, followed as Commander in Phase Three by Shannon Rupert, a biologist from Miracosta College in San Diego who will also be Chief Biologist for ExOne.

Phase Four will have a commander designated from among the crew on a rotational basis. This 'Duty Commander' will be selected depending on task and function. Differing command styles will be observed from these commander-crew interactions as part of a social psychology study conducted by Dr. Steven Dawson and fellow scientists at the Australian National University.

Technological research will also be a feature of ExOne. Mars Society Australia is providing four "MarsSkin" suits - analogs of a new flexible spacesuit based on mechanical-counter-pressure - for comparison with the MDRS analogs of conventional gas pressurised spacesuits.

The University of Michigan Mars Rover Project will be providing its 'Everest' vehicle as an analog for a 3-person pressurized vehicle for living away from a Mars base for up to a week. This will be put to the test in the final phase of ExOne, when 3 crewmembers will spend a week in the rover without returning to the MDRS, while continuing the ExOne field science program. Also present during ExOne will be the ARES Rover, a 2-person analog pressurized rover built by engineering students at Queen's University in Kingston, Ontario Canada.

Completing the technology program, the Mars Society of Canada will be testing its Astronaut EVA Datalogger, a wearable computer that will stamp GPS coordinates and time to every image taken and audio comment recorded by the field scientist.

"I look forward to a very productive series of Phases during ExOne, with some interesting studies spanning a variety of disciplines and technologies," said Rocky Persaud.

A complete list of the ExOne crew, as well as background information on the venture, can be found in our press kit at: - <http://marssociety.senecac.on.ca/ExpeditionOne/>

Media Days will be run at the Station on **February 23 2003** and **March 8 2003** to showcase Expedition One crewmembers and activities and promote future human Mars exploration.

"We welcome the media to the MDRS on these dates, and hope to highlight some of our research, which we feel will contribute towards a successful future human Mars mission," said Rocky Persaud.

To attend one of the Media Days or interview a crewmember, please direct inquiries to Jennifer Laing, Public Relations Officer at [pr@marssociety.org.au](mailto:pr@marssociety.org.au) (prior to 20 February) or contact her after 20 February at [ExOne-Support@yahogroups.com](mailto:ExOne-Support@yahogroups.com).

**The Mars Society was founded to further the goal of the exploration and settlement of the Red Planet.**

For further information on MSC, see <http://marssociety.senecac.on.ca>

For further information on MSA, see <http://www.marssociety.org.au>

For further information on the University of Michigan Rover Project, see <http://marsrover.engin.umich.edu/>.