

RED PLANET MEETS RED CENTRE: SCIENTISTS CONDUCT MARS RESEARCH DOWN-UNDER

Adelaide, Australia, July 26, 2004 - An Adelaide space conference this weekend is the prelude to a month-long expedition in the Australian Outback, organised by Mars Society Australia and its international counterparts.

Many of the speakers at the Fourth Australian Mars Exploration Conference 2004 (AMEC), to be held at the School of Natural and Built Environments, University of South Australia on 31 July-1 August, are shortly to be participants in Expedition Two, and will provide delegates with an overview of their Mars-related research, covering diverse disciplines such as geology, astrobiology, psychology/human factors, biomedicine, engineering and robotics.

Keynote speaker at AMEC 2004 will be Mr Neal Newman, (NASA representative to Australia and South-East Asia), presenting 'A New Vision for U.S. Space Exploration'.

Other speakers include:

- Dr. Jennifer Heldmann, NASA Ames Research Center, on 'Formation of Martian gullies by the flow of simultaneously freezing and boiling liquid water'.
- Dr. Vic Gostin, Visiting Fellow, University of Adelaide, on 'How and Why Martian Geology is So Different to that of Earth'.
- Dr. Mark Bishop, University of South Australia, on 'Environmental Change and the Aeolian Evolution of Landscape: The Dominant Process on Mars'.
- Dr Sheryl Bishop, University of Texas Medical Branch, on 'A Comparison of Male and Female Teams in Surviving the Australian Outback'.
- David Willson, Mars Society Australia & Dr. Jonathan Clarke, Australian Centre for Astrobiology, on 'Design and Development of the MARS-OZ Base.'

"There will be a lot of excitement at this year's conference," says Expedition Two leader Dr. Jonathan Clarke, a director of Mars Society Australia. "AMEC will form the leadup to the departure of crew members on Expedition Two, to take place between August 2-29, 2004, and those attending the conference can meet many of these expeditioners and find out first-hand what they plan to do in the Outback and why this is such a unique place to carry out Mars-related research.

"Expedition Two will involve a wide range of research projects within an approximately two hundred kilometre radius of Arkaroola in the northern Flinders Ranges of the Australian Outback. It is the second in a series of fifteen expeditions to Mars-like or 'analogue' locations here on Earth. The goal of the expeditions is to develop strategies and technologies that will support a successful future human Mars mission.

"There will be four main themes to the expedition: collecting baseline environmental data on the field area, carrying out Mars-mission related engineering analogue research, human factors studies, and publicity with respect to the human exploration of Mars.

"Expedition Two will culminate in the selection of the precise site in the Arkaroola area for the construction of MARS-OZ, one of the four Mars Analogue Research Stations planned worldwide. It will also lay the groundwork for future expeditions and research by Mars Society Australia in the Arkaroola region."

Previous expeditions run by Mars Society Australia in the Red Centre (Jarntimarra-1) and Utah (Expedition One) in conjunction with the Mars Society of Canada and the Mars Society in the United States led to extensive media coverage and a heightened profile for the organisations involved, individual expeditioners, and sponsors. It is therefore hoped that Expedition Two will provide an excellent platform for public education and outreach, as well as meeting the rigorous science and engineering goals of the Society.

The purpose of the Mars Society, a world-wide non-profit organisation, is to further the goal of the exploration and settlement of the Red Planet, through lobbying, outreach and conducting Mars exploration on a private basis.

Says Jonathan Clarke, "Organising the expedition has taken the best part of the last eighteen months and has been a true collaborative effort between local Mars Society members and our international colleagues. We couldn't have done it without the

generous support of our sponsors, which include the Canadian Space Agency, LandRover Australia, Australian Geographic magazine, Skins apparel, Boblbee backpacks, the Australian National University, the Arkaroola Wilderness Sanctuary and Hire Intelligence."

"Project funds, including cash grants and in-kind donations, now total approximately \$50,000. This effort stands us in good stead to raise the substantial funding we need to construct and operate the Australian Mars Research Station (MARS-OZ) in the Arkaroola region, which we estimate at approximately \$1 million."

Guy Murphy, President of Mars Society Australia, urges all space enthusiasts based in Adelaide to come along to the conference and be enthralled by some of the experts in the field.

"We have deliberately kept the cost of the conference low to make AMEC affordable and accessible by as many members of the public as possible. Registration can be done online at <http://www.marssociety.org.au> or register on the day at the University of South Australia in North Terrace, Adelaide. Mars has hit the headlines this year, with the various rover missions reaching the surface, and this is a great opportunity to hear the latest on work being carried out to send people to Mars this century." Rocky Persaud, Vice President of Mars Society Canada and Program Manager for the Mars Expedition Research Council, describes the purpose of the expeditions. "To prepare for a Martian expedition led by a human crew and assisted by robots, a substantial amount of mission definition can emerge from Mars analog studies on Earth. A series of human Mars expeditions will rely on exploration strategies, human factors solutions, and technologies developed and tested at Mars analog bases where real field science is practised.

"An international, interdisciplinary research program into field operations, exploration technology, information management, habitability issues, mission support options, and crew social-psychology is needed to integrate all the components necessary for a successful expedition. We need to do these analogue expeditions here on Earth, if the space agencies of the world are going to learn how to plan a future human Mars expedition that achieves its goals as effectively as possible."

Crews will travel around parts of the South Australian Outback in 4WD vehicles donated by LandRover and camp in remote areas, liaising with the base crew at the Arkaroola Wilderness Sanctuary by satellite phone. Each week or phase will involve a different locality, with the weekends serving as a rest and relaxation period and for crew changeover. Approximately 30 people will take part in the expedition over a period of a month, with 15 people departing Adelaide for the first phase.

Expeditioners will leave central Adelaide early on Monday morning (2 August) on the journey to Arkaroola and radio, press and TV interviews will be possible before departure and during the Expedition.

Information on Expedition Two can be found at <http://chapters.marssociety.org/canada/expedition-mars.org/ExpeditionTwo/>

A copy of the official Expedition Two presskit is available for downloading as a pdf file at <http://chapters.marssociety.org/canada/expedition-mars.org/ExpeditionTwo/files/docs/ExTwoPressKit.pdf>

For interviews with members of the crew or speakers at AMEC, please contact Jennifer Laing on 0417 135 113 or email pr@marssociety.org.au