

PRESS RELEASE - MARS SOCIETY AUSTRALIA

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AUSTRALIAN MARS RESEARCH FACILITY 'ONE STEP CLOSER'

Australia is one step closer to having its own outback space research facility, to be used for testing equipment and technology which could help to send humans to Mars.

A group of Australian and international scientists and engineers have now returned to Adelaide after two weeks in the Red Centre, and have identified three sites for the conduct of this research, with the most favourable location identified as the Arkaroola region in the Northern Flinders Ranges. The other areas with strong potential for future Mars analogue research are Arkaringa near Coober Pedy and the Woomera region.

The first Project Jarntimarra expedition, organised by Mars Society Australia, was an outstanding success, said President Guy Murphy.

"Project Jarntimarra is the lynchpin of our technical programme, known as Operation Red Centre, and will have a number of important spinoffs. We have now identified a variety of sites with Mars-like characteristics, where valuable research can be carried out, such as testing rover vehicles for surface exploration and interaction between crews and mission controllers. The expedition also helped to raise the public profile of Mars Society Australia through media coverage of events, and alerted the scientific and engineering community to our work, which is aimed at facilitating future human exploration and colonisation of Mars.

"This ranking is our considered view of the three best Mars analogues of the places we visited during this expedition. Mars Society Australia intends to consult with traditional and existing owners/leaseholders before making definite proposals to undertake activities at any of these locations at a later date."

Members of the Jarntimarra team included astrobiologist Professor Malcolm Walter of Macquarie University and the Australian Centre for Astrobiology, geologists Dr Jonathan Clarke of the Australian National University, Professor Vic Gostin of the University of Adelaide and Matilda Thomas from the Australian Centre for Astrobiology, roboticist Dr Graham Mann of Murdoch University, James Waldie, from RMIT University, a PhD student who is working on new spacesuit technology, Sydney University aerospace engineering undergraduate Michael West, and Flinders University medical graduate James Leyden.

Said Mars Society Australia Technical Director Jason Hoogland, "We now have a core of local talent that having met face to face, understands the challenges and will now act as champions of our vision. While at Arkaroola, this team engaged in a series of intensive workshops to map out a more detailed plan for our technical activities over the coming years. This was also a wonderful demonstration of collegiate-style debate and discussion that will give rise to a more robust and ultimately more successful technical programme.

"The team spent a couple of days developing a science and engineering plan for Operation Red Centre, which we hope will get underway in 2002 or 2003. Basically we have now selected an optimal site for our research, which we believe to be the Arkaroola region in the Northern Flinders Ranges in South Australia. This site had a number of advantages. It has good access by road year-round, is close to infrastructure such as an airstrip and the Arkaroola resort, and has visual characteristics which are analogous to Mars, such as the red soil and dust. According to Hoogland, the site is also currently home to some leading-edge Mars research, allowing Operation Red Centre to leverage off existing projects.

"For example, Professor Malcolm Walter is looking for signs of microbial life in hot springs in the Arkaroola region. He believes that if there is or has ever been life on Mars, this is the type of environment where it would be located. We hope to build on this type of work in the future."

The next step for Mars Society Australia, said MSA President Guy Murphy, is to return to the Arkaroola site for more detailed analysis and to raise funds for the establishment of a research facility or habitat called Mars Oz. The type and size of facility has yet to be decided upon, with Mars Society Australia investigating a number of options. It is estimated that AU \$250,000 will be required to set up the facility for its first field season, but the benefits to the local economy and Australian R&D would be far in excess of this sum, said Murphy.

"We envisage that the habitat or 'hab' would be used by Australian and international scientists and engineers during a field season, much like the research facility the Mars Society has established on Devon Island in the Canadian Arctic. These people would book time on Mars Oz for conducting their research, which would be carried out alongside the Mars Society Australia's own programme - Operation Red Centre.

"We have a lot to offer the Mars scientific community and it would be an amazing boost to Australian space science and technology to have local and international personnel working side by side. We were fortunate on this first Jarntimarra expedition to have Dr Carol Stoker and Dr Larry Lemke from NASA Ames Research Center in California with us, and the younger members in particular learnt a great deal from spending time with them. It's a great model for the future, and augers well for development of a strong scientific and technical base in this country.

"If a human does eventually walk on the surface of Mars, Australia will have had a part to play in this. I hope that the work Mars Society Australia is doing will be an inspiration to young Australians, and encourage them to pursue careers in science and engineering."

Project Jarntimarra was sponsored by U.K. aerospace company Starchaser Industries. Their logo 'The Sky is Not the Limit' was an eye-catching sight on the sides of the convoy of vehicles owned by local firm Westprint, which travelled over 4,000 kilometres through some of Australia's harshest and most spectacular landscape. Mars Society Australia is now seeking a sponsor for the rest of its technical programme.

Said Hoogland, "Overall, the first Jarntimarra expedition achieved and exceeded all our objectives. Our next step is to consolidate the huge steps taken, recruit talent into our projects and, most important of all, raise the financial and in-kind support needed to see Operation Red Centre to fruition with all its hardware elements. We have the capability to undertake genuinely world class research that will advance our understanding of Mars and better prepare us for human missions to the Red Planet.

"All we need now is the support to make it happen."

Media inquiries and requests for interviews regarding Project Jarntimarra should be directed to: Jennifer Laing, Public Relations Director, Mars Society Australia - ph 0417 135 113 or email: pr@marssociety.org.au

For further information on Mars Society Australia, visit <http://www.marssociety.org.au>.