

MARS SOCIETY AUSTRALIA NASA Ties Help Australian Youth to Look 'Spaceward Bound'

Thursday 5 April 2007

The next generation of space explorers are now reaping the benefits of a new NASA training program which is about to head to Australia, thanks to local efforts.

According to David Cooper, President of the Mars Society Australia, agreement has been reached with organizers of NASA's innovative Spaceward Bound program to extend it to Australia. Spaceward Bound is an educational program organized at NASA Ames Research Center in partnership with The Mars Society, and funded by the Exploration Systems Mission Directorate (ESMD) at NASA Headquarters.

"During a tele-conference between Dr Chris McKay, Dr Liza Coe and Dr Jennifer Heldmann of NASA's Spaceward Bound program, and Mars Society Australia's Directors, Dr Jonathan Clarke, David Willson and David Cooper, we were able to secure this exciting program which will help enthuse Australian students and teachers about exploring space and give them real practical experience of studying some of the most unique places on our own planet. Dr McKay is one of the foremost investigators of the Red Planet with the Space Science Division of NASA Ames Research Center studying also Saturn's moon, Titan, and has been involved in numerical modeling of planetary atmospheres for many years. His broader interests focus on understanding the relationship between the chemical and physical evolution of the solar system and the origin of life. He has been actively involved in planning for future Mars missions including human settlements. Dr. McKay has also been involved with polar research since 1980, travelling to the Antarctic dry valleys and more recently to the Siberian Arctic to conduct research in these Mars-like environments.

"The focus of Spaceward Bound is to have students and teachers participate in the exploration of scientifically interesting but remote and extreme environments on Earth. These environments will be close enough to the 'real thing' to allow them to gain valuable insights into what it might be like for humans to explore the Moon and Mars."

To be known as Spaceward Bound Australia, the extended program will provide teachers and students from both the USA and Australia with the opportunity to take part in expeditions to Mars-like or lunar-like areas of the world, such as the Mars Desert Research Station in Utah, the Mojave, Desert in Arizona, the Atacama Desert in South America and Arkaroola Wilderness Area in Australia's Northern Flinders Ranges. Each of these places has its own distinctive qualities or features, which make it analogous to the Moon or Mars and thus suitable as an analogue research site.

Says David Cooper, "This is a wonderful educational initiative and one which we felt compelled to seek out for the benefit of Australians. Mars Society Australia has a history of supporting expeditions and research in Australian analogue environments, including our 2001 Jarntimarra expedition which also involved NASA personnel.

"We plan to conduct a NASA Spaceward Bound expedition to the Arkaroola region in 2008/2009 tying in with some of our own research projects such as the Starchaser MARSupial Manned Rover (a simulated Mars rover vehicle). This region has been located as the site for construction of the Mars Australian Research Station (Mars-OZ), a facility, which we hope, will eventually be used by teachers and students from across the globe, as well as researchers. Our work therefore has great synergies with the aims and objectives of the Spaceward Bound program. We see this as a stepping stone towards getting young people interested in careers in science and technology, with space as the hook to get them started."

The US program currently comprises two expeditions per year. One expedition involved teachers in fieldwork so that they can bring that authentic experience back to their classrooms and assist in the development of curriculum related to human exploration of remote and extreme environments. For example, in June 2006, U.S. schoolteachers teamed with seven of their counterparts from Chile to work alongside scientists in the Atacama Desert. The second expedition enabled students at the upper undergraduate and graduate level (including teachers) to participate as crew members in two-week long immersive full-scale simulations of living and working on the Moon and Mars at the Mars Desert Research Station (MDRS), established and operated by The Mars Society.

According to Dave Cooper, Australians can look forward to a similar program Down Under. "We are now liaising with NASA about the detail of our collaboration on this project, including the coordination of the NASA Spaceward Bound expedition to Arkaroola."

For more information, look at:

Mars Society Australia – www.marssociety.org
Spaceward Bound – http://quest.nasa.gov/projects/spacewardbound
Starchaser Industries – www.starchaser.co.uk
David Cooper can be contacted for interviews on +61 8 9295 6466