

MARS FORUM

26 November 2001, Mawson Lecture Theatre, School of Geology, Adelaide University.

OPENING REMARKS BY MARS SOCIETY AUSTRALIA PRESIDENT GUY MURPHY'

This forum is being held to mark the departure of an expedition to central Australia which will be leaving tomorrow morning. Called Jarntimarra 1, the expedition is being run by the Mars Society Australia for the purpose of cataloguing what are known as Mars analogue sites.

The Mars Society Australia was established in 1998 after the founding convention of the American Mars Society in August of that Year. It seeks to promote the ongoing exploration and future human settlement of Mars.

Exploration is the first chapter in Australian history, beginning with the settlement of the continent by aboriginal tribes tens of thousands of years ago, followed by the charting of Australia's coastlines by Europeans in the 18th century, the mapping of the interior in the 19th century, then the exploration of Antarctica in the early twentieth century by explorers such as Sir Douglas Mawson, after whom this theatre is named.

In turn, the exploration of Mars is one of the great unfolding human projects of the 21st century, and we hope that Australia will be one of the many participating countries.

In promoting this, the Mars Society has a particular interest in something called analogue research. Two of tonight's speakers will speak in more detail about what analogue research is.

As this is the largest public event associated with the Jarntimarra expedition, I would like to take the opportunity to tell you about the expedition's sponsors, Starchaser Industries.

Starchaser Industries is an Aeronautical Engineering company based in Cheshire, England, which was founded in 1992.

Its goal is to develop an inexpensive means of delivering small scientific payloads into high altitude.

In 1996 Starchaser launched a 7 metre rocket called Starchaser 2, which qualified as the largest private civilian rocket ever to be launched and flown in Europe. 11 of its 12 launches have been successful.

The team officially entered the \$US10 million X-Prize in 1997, and has recently been ranked joint No. 1 seed by Future Publishing's "Frontiers" magazine.

The X-Prize is a challenge to develop a reusable passenger carrying space ship.

The rules are as follows.

- the vehicle must be privately funded and privately constructed meaning that a large government cannot come in and win the competition in a manner which does not lead to economically viable tourist capability
- to reach an altitude of 100km because it is beyond the official 50-miles that the US Air Force recognizes as "worthy of astronaut wings" but not so high that the reentry speed requires exotic heat shielding.
- the vehicle should fly three people so that X-Prize registrants will be designing vehicles which can turn around after the competition and begin to generate revenue traffic following their certification.
- the same vehicle should fly twice within two weeks meaning that the cost per reflight is only the cost of fuel and the limited "touch-labor" that can be applied in this short period of time. Therefore, the cost per seat will be reasonable and affordable to many.

Starchaser's entry known as "Thunderbird" is a low cost, single stage rocket, the first crewed flight of which is scheduled for 2003.

Starchaser have shown great vision and generosity in sponsoring the Jarntimarra Expedition, and I'd like to express our enormous gratitude for their support.

Lets hope the X-Prize become theirs and that *Thunderbirds Are Go!*