

## Values and New Models for Space Exploration (10)

## Values and New Models for Space Exploration (1)

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ORGANISING AN EMERGENT MARS PROGRAMME BY EMBRACING THE SPACE ENTHUSIAST  
PUBLIC: AN UPDATE ON THE MARTIAN TRUST AHEAD OF ITS PUBLIC DEBUT

**Abstract**

Answering the twin-Martian-life questions – did life emerge on Mars and can human life expand to Mars – requires a long-term human presence at Mars. That won't come about from a single project or mission. Rather, an emergent programme is required, one beginning with currently knowable projects and progressing to projects that become knowable. Traditional models for organising space exploration do not offer the funding stability nor solution flexibility that are required for this scale of emergent programme.

The Martian Trust is designed to fund and guide a programme leading to the establishment of a self-sustaining research base at Mars. Combining endowment management with demand-driven revenue generation, The Martian Trust addresses the shortfalls of traditional models for organising space exploration. The scale of the problem – several hundred billion dollars over a generation or more – may appear daunting, but it is daunting to any model and a new model is needed.

The Martian Trust descends from various sub-disciplines of economics. It is responsive to the human-organisational aspects of engineering rather than being engineering. For engineering to supply a generations-long emergent programme, millions of individuals must want to answer the twin-Martian-life questions. The demand for Mars must be fundamental rather than an intermediate means to political, technological, or any other end for which support will waver over the generational time scale.

Astronautics began with Tsiolkovsky, Oberth, and Goddard, but the demand for space exploration was present in the stories of Verne, Wells, and storytellers before and since. The interaction between storytellers and practitioners that connects Why-to-How is the source of popular demand for space exploration. The Martian Trust places popular demand in the vanguard of funding and guiding an emergent programme that will bring humanity to Mars.

The first presentation of The Martian Trust was at a Mars exploration conference organised by the British Interplanetary Society in 2008 (published in the May 2009 issue of JBIS). An evolved version was presented at the 2014 AIAA Space Conference. The Martian Trust has since been incorporated in New Zealand and will debut with a global public appeal in 2017. This paper and its presentation at GLEX 2017 are meant as an update and pre-public preview for the space exploration community.