

Life On Mars: One-Way Ticket To Red Planet

It sounds like a sci-fi movie but within 20 years humans could be sent to Mars to try to colonise the planet - without the chance of ever returning home.

The idea is being investigated by Nasa as it looks at whether astronauts could be flown to the red planet, or its moons, with a view to staying there permanently.

The multi-billion pound project, called Hundred Year Starship, is being led by Nasa's Ames Research Centre, based in California.

It is estimated the cost of such a mission to the red planet could be more than £7bn and may be achieved by 2030.

The Pentagon has already contributed around £600,000 towards the plan and Nasa has put in another £60,000.

But Ames director Pete Worden is hoping for more cash and is trying to attract the world's billionaires to the project.

Among those who have been asked is Google co-founder Larry Page. Humans could be sent to colonise Mars by 2030

Mr Worden said: "We hope to inveigle some billionaires to form a Hundred Year Starship fund.

"The human space programme is now really aimed at settling other worlds. Twenty years ago you had to whisper that in dark bars and get fired.

He added: "Within a few years we will see the first true prototype of a spaceship that will take us between worlds."

Mr Worden said Mr Page had shown interest in the project.

"Larry asked me a couple weeks ago how much it would cost to send people one way to Mars and I told him \$10bn (£6.3bn) and his response was: 'Can you get it down to one or two billion?'

"So now we're starting to get a little argument over the price." Phoenix Mars Lander arrives on Mars in 2008

Researchers have claimed such a human mission is technologically feasible and would be cheaper than returning astronauts to earth.

Their new study, in the Journal of Cosmology, found the costs of safely returning a crew would take up the majority of such a mission's budget.

Dirk Schulze-Makuch, an associate professor from Washington State University and Paul Davies, a physicist and cosmologist from Arizona State University, said four volunteer astronauts could undertake the first mission to permanently colonise Mars.

A one-way human mission to Mars would be the first step in establishing a permanent human presence on the planet.

They said: "We envision that Mars exploration would begin and proceed for a long time on the basis of outbound journeys only."

They also said a mission to Mars could exploit hardware technologies developed for the Moon programme.

"One approach could be to send four astronauts initially, two on each of two spacecraft, each with a lander and sufficient supplies, to stake a single outpost on Mars.

"A one-way human mission to Mars would be the first step in establishing a permanent human presence on the planet."

Some experts say the price of sending 20 Mars settlers with a one-way ticket would be equal to bringing four astronauts back.