

## Your Place on Mars

**An Editorial by Naté Sushereba**



The International Aeronautical Congress (IAC) 2016, held in Guadalajara, Mexico in September, covered a stunning array of topics – everything from propulsion systems to wireless power transmission technologies, space culture to medical care for humans in space, and more. Dozens of technical tracks ran simultaneously with press announcements, expositions, and cultural events – truly something for everyone. However, one topic captivated this scientific congregation in its entirety ... MARS.

From the myriad of proposals presented at the IAC on how humankind might one day colonize the red planet, SpaceX's Elon Musk put on the most dazzling show. Thousands of people gathered Tuesday afternoon, September 27, to hear the 40-100-year plan to send a million people to a permanent Mars colony, which would begin in the next decade by sending Musk's Interplanetary Transport System. This would stand 400 feet tall, with a massive 55-foot-wide spaceship at the top. This totally reusable super-spaceship would transport 100 to 200 passengers and their luggage to Mars. We watched as expertly executed graphics depicted how everything would look, work, and unfold. We sat transfixed as our Mars messiah gave us a glimpse into the future.

However, Musk's plan was not the only game in town. Lockheed Martin made a less flashy, but no less believable, presentation to about a third of the audience Wednesday night, September 28. It highlighted their Mars base camp mission, in which they propose using cislunar space to assemble and test a Mars spacecraft that could perform a Mars orbital mission, including sorties to the moons Phobos and Deimos, as soon as 2028. NASA has its own ideas of how best to go about making the human race into a multi-planetary species with its Journey to Mars campaign, which will no doubt incorporate ideas from SpaceX, Lockheed Martin, and others.

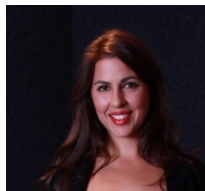
Now, let us take a moment to consider the realities and limitations before us. Putting aside that the technologies needed to implement these plans have yet to be developed, the fact remains that, on the outside, only a million or so people will reach Mars in our lifetime. So where does that leave everyone else who has been dreaming of and working towards getting humanity off the third rock?

When the credits at the end of a major motion picture roll, it is not the actors' names that fill the majority of the screen. Indeed, the faces that are featured in the film make up a very small percentage of the workforce needed to take the story from imagination to

reality. And so it will be with the inevitable space epoch. Astronauts and colonists may be our species' representatives in the cosmos, but it will be teachers, lawyers, artists, policymakers, psychologists, PR reps, economists, writers, engineers, and all other manner of space enthusiasts working together as a global community to make these grand dreams of the human race expanding beyond our earth into the reality of permanent space settlement. Anyone and everyone with a desire to contribute can have a place in this tribe of dreamers and doers.

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**About the Author:** Naté Sushereba is the Vice President of Public Relations and Media at Kepler Space Institute.



**Editors' Notes:** We are grateful to Naté Sushereba for this report on IAC Guadalajara.  
***Bob Krone and Gordon Arthur.***