

**FOR IMMEDIATE RELEASE**

Feb. 27, 2013

**INSPIRATION MARS FACT SHEET**

**ORGANIZER:** Inspiration Mars Foundation, a 501(c)3 organization committed to providing a platform for unprecedented science, engineering and education opportunities, while using state-of-the-art technologies derived from NASA and the International Space Station.

**MISSION:** Inspiration Mars – a U.S. manned, “fast, free-return” mission to Mars and back to Earth. Coined as “A Mission for America,” this unique, 501-day historic journey around the Red Planet is made possible by a rare planetary alignment that occurs five years from now.

**TARGET**

**LAUNCH DATE:** Jan. 5, 2018

**MISSION DETAILS:** The “fast, free-return” mission passes within 100 miles of Mars before returning safely to Earth. The mission will be built around proven low-Earth orbit (LEO) space transportation systems and technologies derived from industry, NASA and the International Space Station that can be modified for this kind of mission and available in time to meet the window. Details include:

- Modified capsule dispatched from Earth orbit with a single Mars trajectory burn
- Launch vehicle based on existing or evolving vehicles currently in use or development
- Additional maneuvers will only consist of minor course corrections, using the gravitational influence of Mars to “slingshot” the vehicle onto a return course to Earth
- Inflatable habitat module will deploy after launch and detach prior to re-entry
- Closed-loop life support and operational components will be located inside the vehicle, designed for simplicity and “hands-on” maintenance and repair

**SIMPLICITY:** Flyby architecture lowers risk.

- No critical propulsive maneuvers after leaving Earth orbit
- No entry into the Mars atmosphere
- No rendezvous and docking after trans-Mars trajectory burn
- Represents the shortest duration roundtrip mission to Mars
- 2018 launch opportunity coincides with the 11-year solar minimum, providing the lowest solar radiation exposure

**CREW MEMBERS:** Two professional crew members – one man, one woman – flying as private U.S. citizens. Method of crew selection and specific criteria to be announced at a later date.

**FEASIBILITY:** Mars presents a challenging, but attainable goal for advancing human space exploration and knowledge:

- Investments in human space exploration technologies and operations by NASA and the space industry are converging at the right time to make this Mars mission achievable.
- Experts have reviewed the risks, rewards and aggressive schedule, finding that the technology and systems exist today and only need to be properly integrated, tested and prepared for flight.
- A more detailed feasibility study will be presented in early March at the 2013 IEEE Aerospace Conference.

As a result, the foundation is fully investigating the feasibility of undertaking this mission, and intends to do everything possible to take advantage of this unique opportunity for America.

**MISSION BENEFITS:** Inspiration Mars mission boasts numerous benefits to America, including:

- Fostering knowledge, experience and momentum for the next great era of space exploration
- Generating new, cutting-edge research and potential discoveries
- Further driving technology development
- Validating decades of taxpayer investment in NASA technology
- Strengthening the U.S. position as a leader in exploration
- Inspiring youth through science, technology, engineering and math (STEM) education and motivation

**KEY PLAYERS:** Inspiration Mars Foundation established a low-cost, collaborative, nonprofit approach to tackling this unique challenge. The foundation serves as the primary contractor for the mission, overseeing planning, training, systems development, processing and operations.

- Dennis Tito, chairman of Inspiration Mars Foundation
- Taber MacCallum, chief technology officer of Inspiration Mars Foundation and chief executive officer and chief technology officer of Paragon Space Development Corporation
- Dr. Jonathan Clark, chief medical officer of Inspiration Mars Foundation and associate professor of Neurology and Space Medicine at Baylor College of Medicine and space medicine advisor for the National Space Biomedical Research Institute

- Jane Poynter, president and chairwoman of Paragon Space Development Corporation. Paragon is leading the development of the Environmental Control and Life Support System for Inspiration Mars.

**NASA**

**INVOLVEMENT:**

Paragon Space Development Corporation has established a partnership with NASA Ames Research Center under a reimbursable Space Act Agreement to corroborate the technologies, systems and strategies for reentry design and thermal protection. The foundation also will seek NASA's assistance in addressing some of the more challenging elements of this mission, including environmental controls, radiation protection, and human health and productivity plans.

**EDUCATIONAL  
COMPONENT:**

Revitalizing interest among our students in STEM education is a vital part of the foundation's overall mission. Inspiration Mars is collaborating with nationally prominent educators, and inviting STEM organizations and space education experts to help design a compelling educational K-12 program. The development of the education team and program is being led by Nancy Conrad, founder and CEO of the Conrad Foundation.

**FINANCING:**

Funded primarily through private, philanthropic donations. Foundation will also seek government partners that can provide unique expertise, access to infrastructure and other technical assistance as part of a public-private partnership.

**WEBSITE:**

[www.InspirationMars.org](http://www.InspirationMars.org)

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