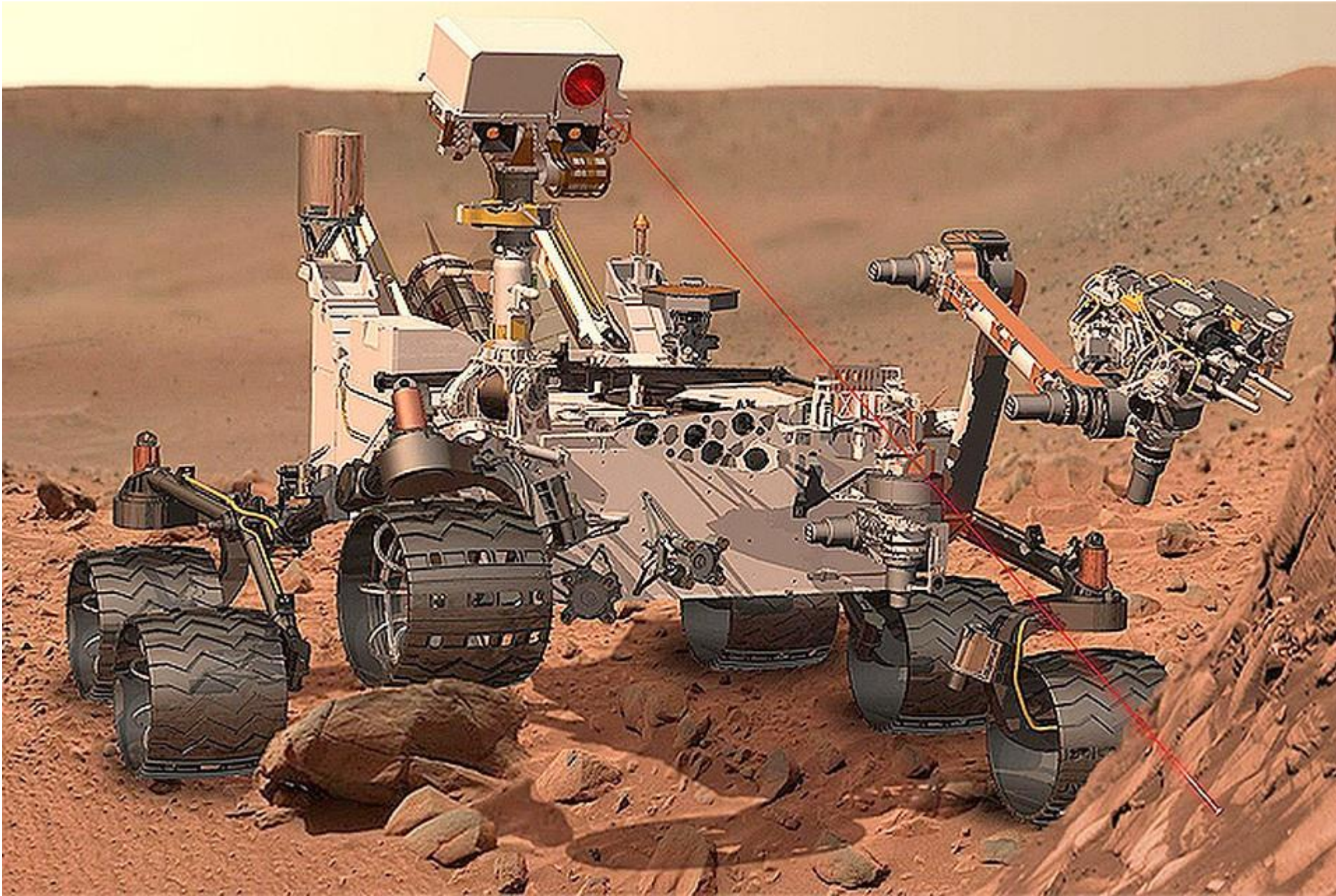


Mars colonization

Sergii Chertopalov

oddělení 28, sekce 4, chertopalov@fzu.cz,

Institute of Physics CAS, Na Slovance 1999/2, 182 21, Prague 8

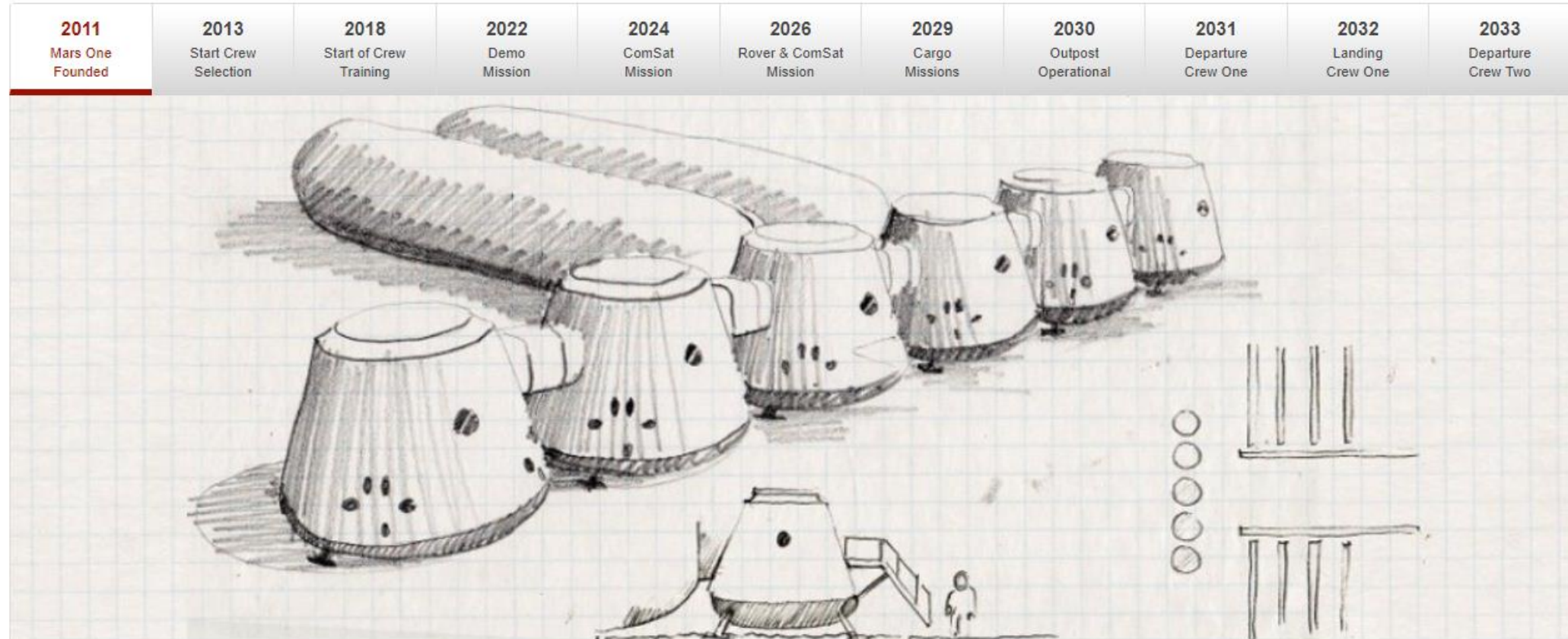


Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission. Curiosity was launched from Cape Canaveral on November 26th, 2011, at 15:02 UTC and landed on Aeolis Palus inside Gale on Mars on August 6th, 2012

Human Settlement on Mars

Mars One aims to establish a permanent human settlement on Mars.

Roadmap

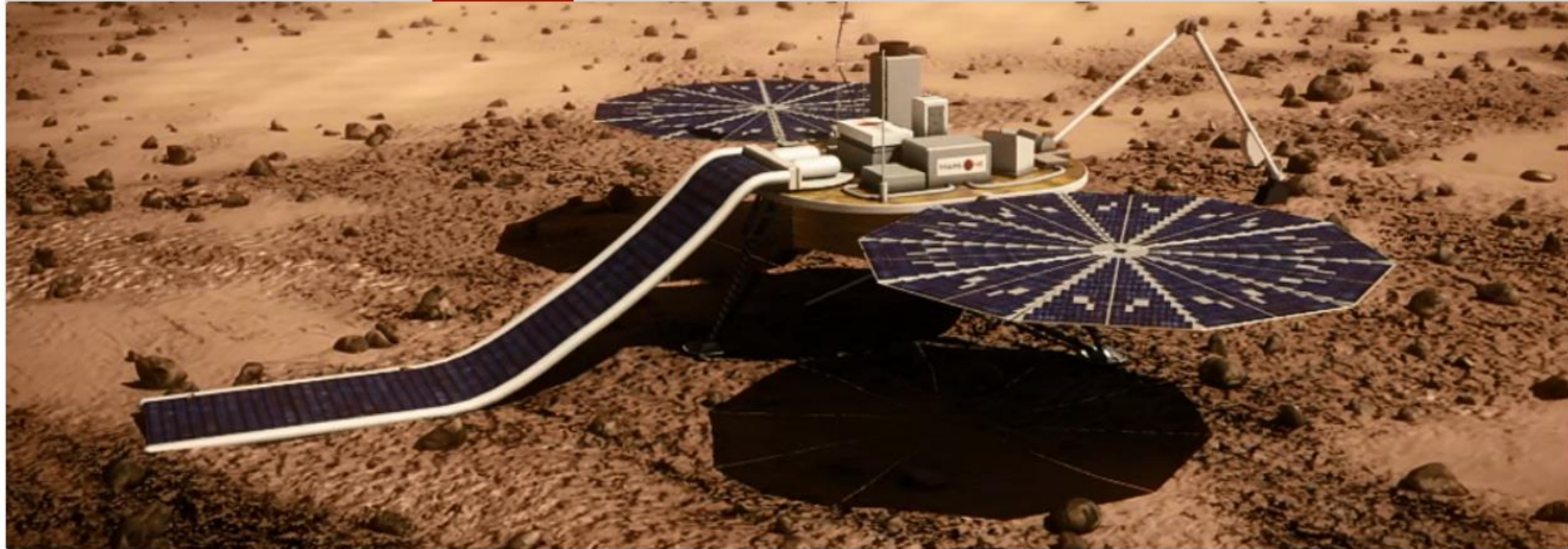


Foundations of mission plan implemented

In 2011, Bas Lansdorp and Arno Wielders laid the foundation to begin the Mars One mission plan. The first step included holding discussion meetings with potential aerospace component suppliers in the United States, Canada, Italy, and the United Kingdom. The mission architecture, budgets, and timelines were then solidified after receiving feedback from the supplier engineers and business developers. This resulted in a baseline design for an achievable mission of permanent human settlement on Mars with existing technology.

Roadmap

2011 Mars One Founded	2013 Start Crew Selection	2018 Start of Crew Training	2022 Demo Mission	2024 ComSat Mission	2026 Rover & ComSat Mission	2029 Cargo Missions	2030 Outpost Operational	2031 Departure Crew One	2032 Landing Crew One	2033 Departure Crew Two
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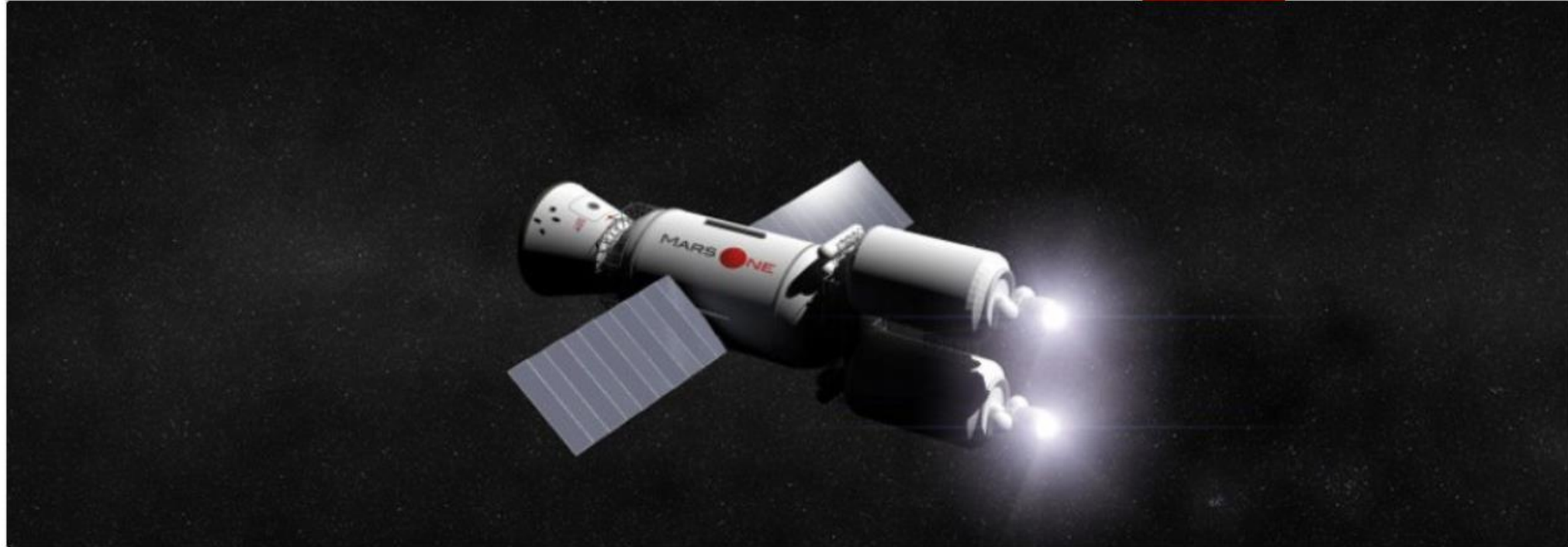
Launch of Mars-bound Demonstration Mission

A demonstration mission to Mars will be launched to provide proof of concept for some of the technologies that are crucial for Mars One's human mission to Mars. Beyond launch and landing on Mars, the mission will prove several important technologies for Mars One's human mission. The lander payload will include:

- A camera to enable a video stream from Mars to Earth.
- A water extraction experiment to confirm that water can be extracted from the Martian soil, one of the most critically important aspects of human life on Mars.
- A thin film solar panel experiment testing multiple brands and types of thin film solar panels for their suitability in providing enough renewable energy to maintain and grow the settlement.

Roadmap

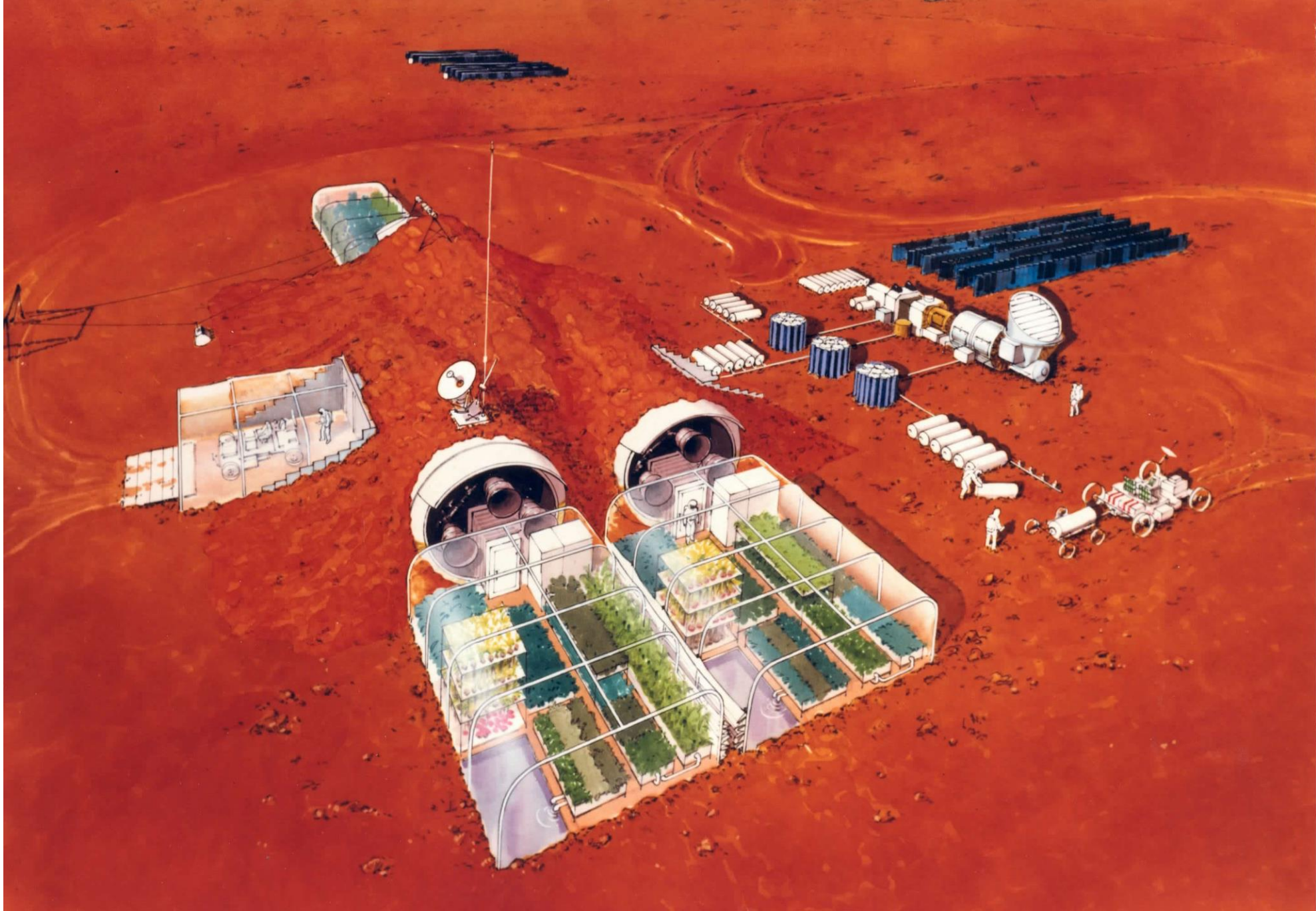
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Ready for liftoff! The first crew will start their journey to Mars

After receiving the green light on the status of all systems on Mars, the Mars Transit Vehicle (MTV) will be prepared for the journey to Mars. First, a transit habitat and a Mars lander with an assembly crew aboard will be launched into Earth orbit. The assembly crew will dock the Mars lander to the transit habitat. About thirty days later, two propellant stages and the boosters that will "kick" the transit vehicle from low Earth orbit to Mars transfer orbit, will be launched and connected.

Once that has been successfully completed, the first fully trained Mars crew will be launched into the same Earth orbit to switch places with the assembly crew, which will descend back to Earth. After a final check of all systems on Mars and on the transit vehicle, engines of the propellant stages will be fired and the MTV will be launched into a Mars-transit trajectory. This is the point of no return for the Mars crew. Read more about the [Mars Transit Vehicle](#).





FALCON 9

FIRST ORBITAL CLASS ROCKET CAPABLE OF REFLIGHT

spaceflight/mars/



92

TOTAL LAUNCHES

53

TOTAL LANDINGS

38

REFLOWN ROCKETS

