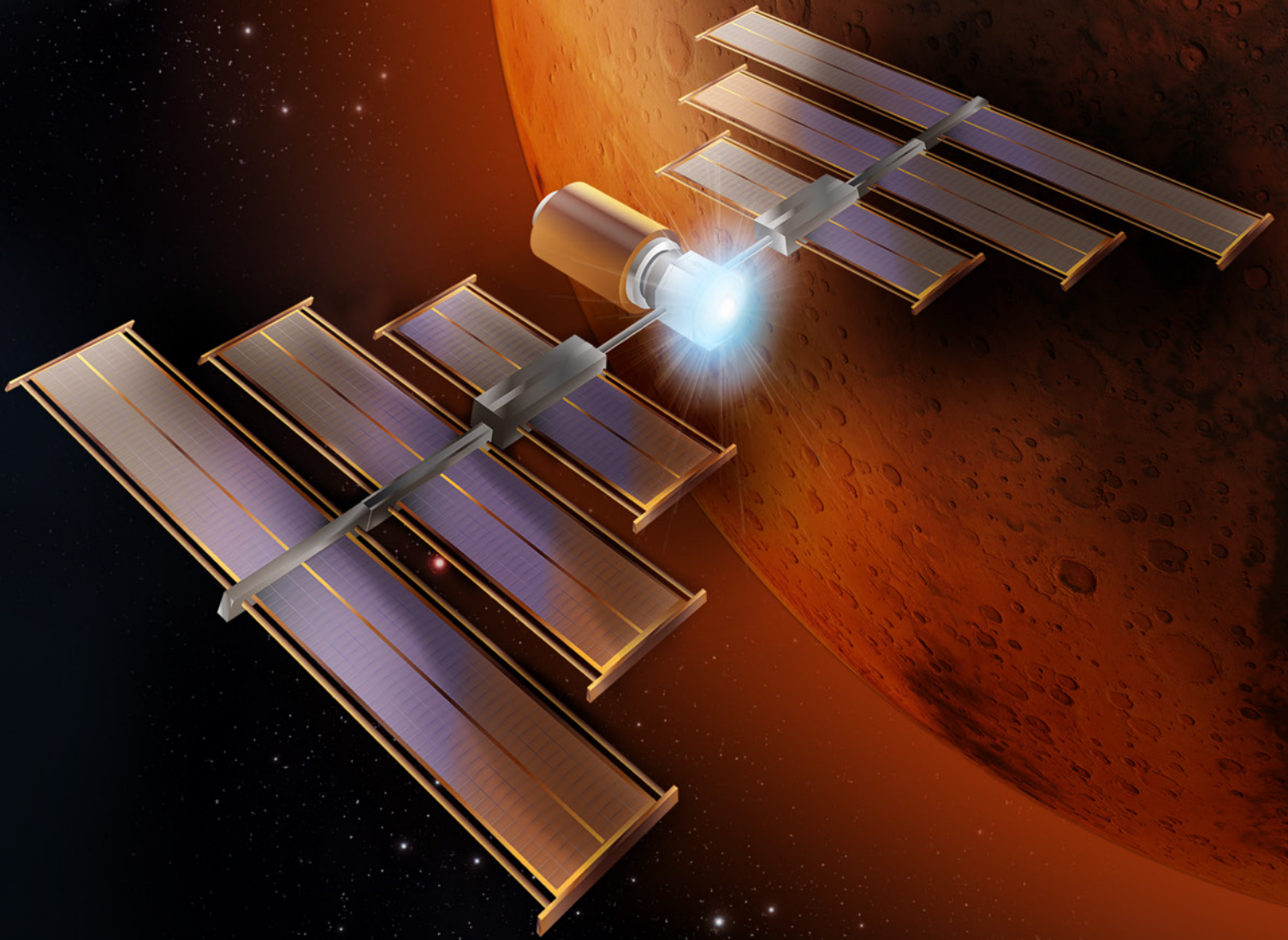


Aerojet Rocketdyne

SEP

SOLAR ELECTRIC PROPULSION
SERVICE MODULE



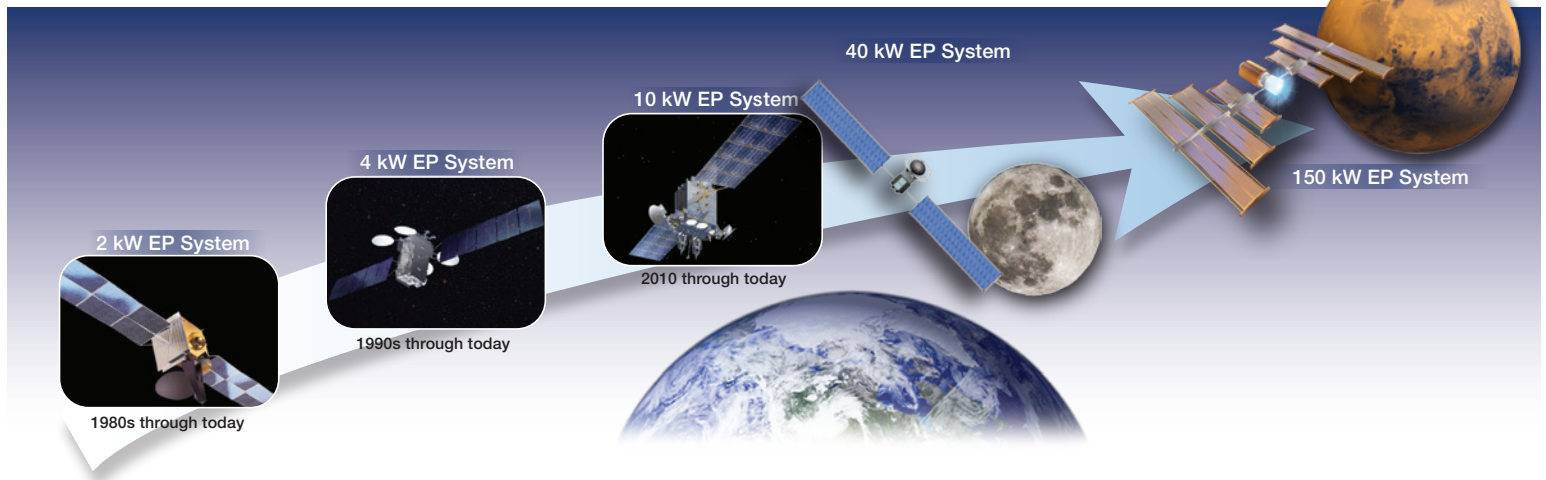
13 kW Hall Thruster

Aerojet Rocketdyne

Aerojet Rocketdyne's standardized Solar Electric Propulsion (SEP) module will enable and support key elements for NASA's return to the Moon and eventual missions to Mars, including the efficient transfer of cargo, habitats and science payloads prior to human arrival. Our module is flexible so it can be used for multiple missions—affordably and reliably.

SEP
SOLAR ELECTRIC PROPULSION
SERVICE MODULE

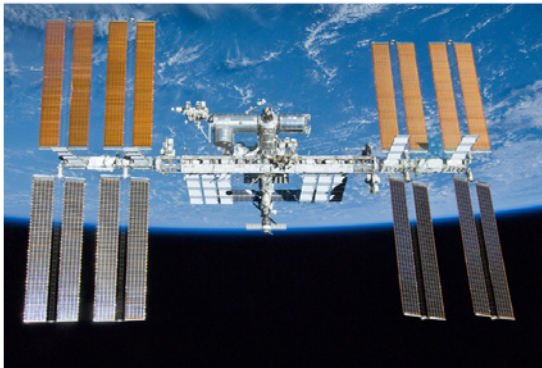
Aerojet Rocketdyne and NASA are working to develop SEP modules built around the next-generation Hall thruster system.



PROVEN SEP INTEGRATION

Aerojet Rocketdyne has the experience to design and develop a standardized SEP module needed for the Journey to Mars. We are a leader in building and integrating complex power and propulsion systems, including:

- International Space Station 100 kW power system (4x greater than any commercial satellite)
- Power systems on Mars robotic missions
- Electric propulsion on >150 satellites in orbit
- XR-5 – highest power hall thruster ever flown
- >250 propulsion systems flown, including those on NASA's New Horizons spacecraft



SEP/SPACECRAFT INTERACTIONS

Aerojet Rocketdyne has the expertise and flight-proven experience to understand and address the complex interactions between the solar arrays, electrical power and various subsystems of SEP spacecraft.

We continue to work with other industry leaders to refine our knowledge of these complex interactions so that future high-power SEP modules can be as ubiquitous as on today's satellites.

