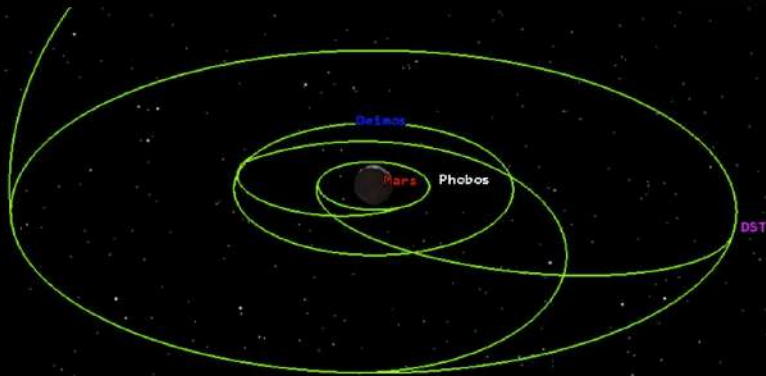


# DIRT

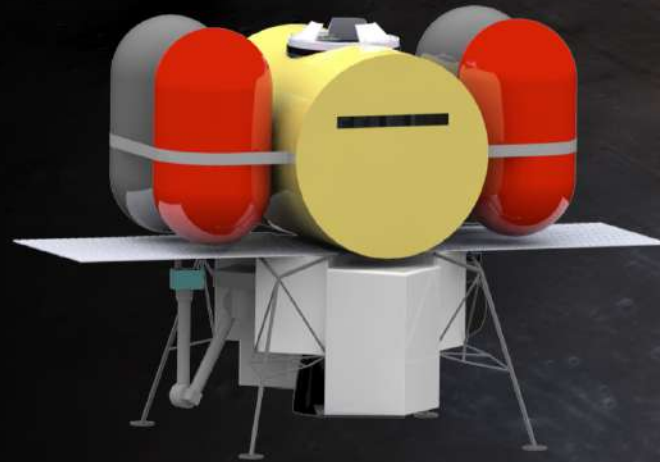
## Drag-Inducing Regolith Transport



### Mission Timeline

- > 23 SEP 2037 - Launch
- > 24 SEP 2037 - Earth Escape
- > 28 JUN 2038 - Mars Capture
- > 01 JAN 2040 - DST Rendezvous
- > 03 JAN 2040 - Departure from DST
- > 04 JAN 2040 - Deimos Arrival
- > 07 JAN 2040 - Transfer to Phobos
- > 08 JAN 2040 - Departure from Phobos
- > 09 JAN 2040 - DST Rendezvous

## Exploration Excursion Vehicle



Mass - 9,498 kg  
Cost - \$59,012,159  
Power Requirement - 1.889 kW

- > AJ10-190 Main Propulsion System
- > R-4D Reaction Control System
- > PEMFC Power Source
- > Passive Thermal Control: MLI Coating
- > Active Thermal Control: 2 Radiators, 2 Heat Exchangers, Pump, Cold Plate
- > Environmental Control and Life Support System (ECLSS)
- > DSOC Telecommunication System
- > IADCS-100 GNC System
- > Flash, Doppler & Laser LIDAR System
- > Soft Capture Docking System
- > Launched on Starship



## Sample Collection

- > 50 kg Regolith Collection from each Moon
- > Purpose: Research as Air-braking Medium
- > One Collector per Moon
  - > Contamination Prevention
- > Clamshell Scoop Mechanism
- > Driven by Linear Actuator
- > Rigid Digging Teeth on Scoop
- > Two Isolated Storage Chambers in EEV