

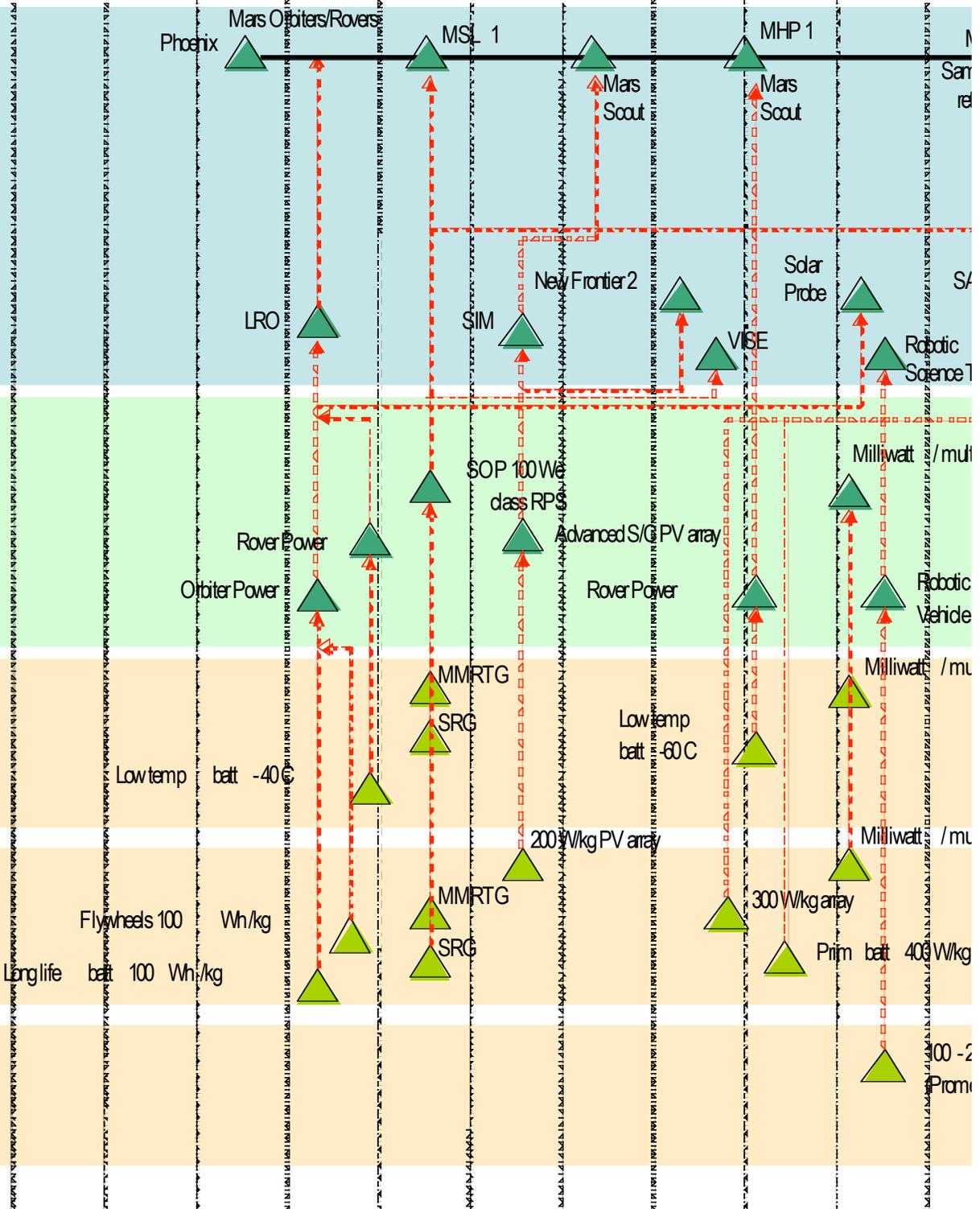
**Key Assumptions  
Robotic Science  
Missions**

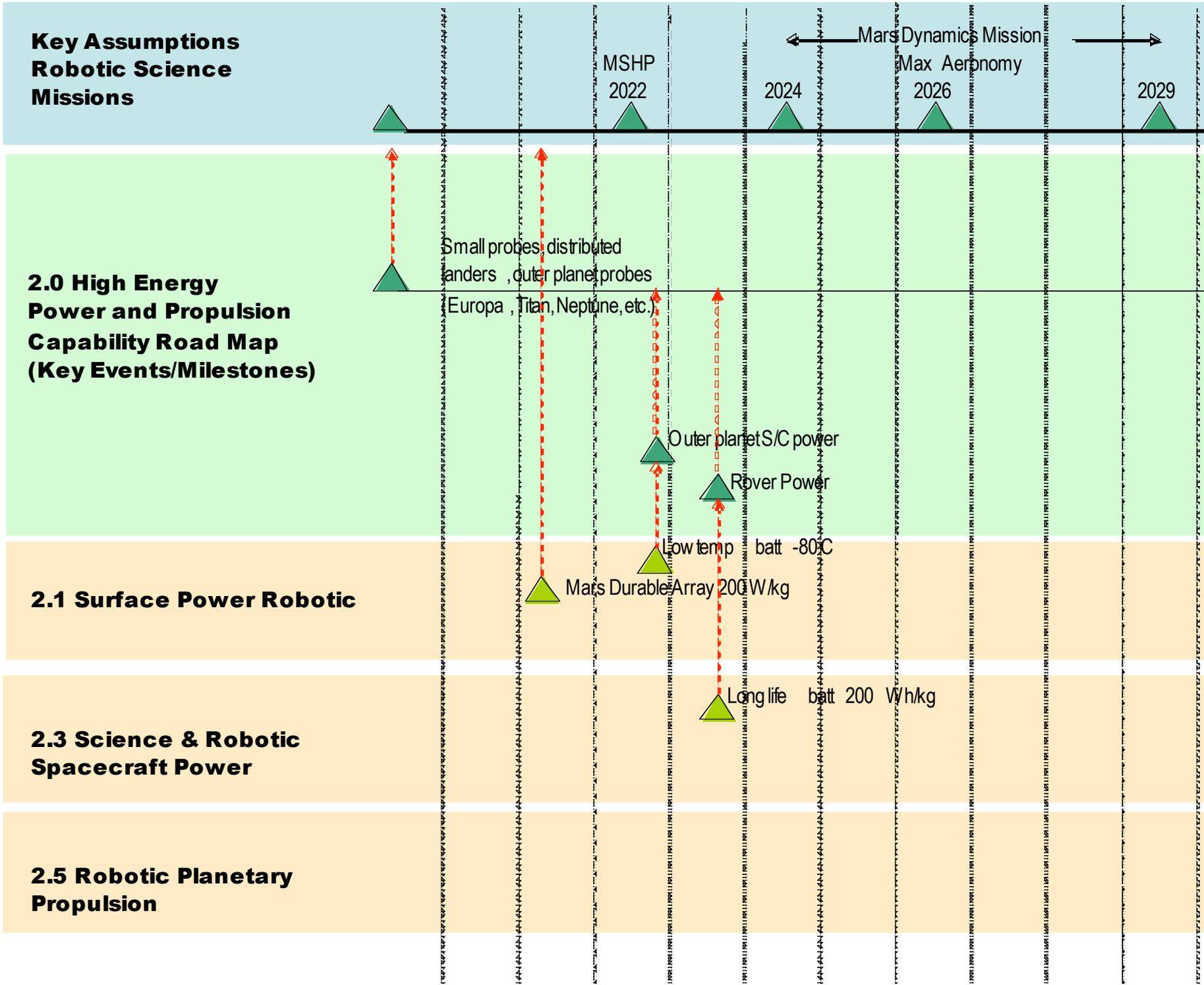
**2.0 High Energy  
Power and Propulsion  
Capability Road Map  
(Key Events/Milestones)**

**2.1 Surface Power Robotic**

**2.3 Science & Robotic  
Spacecraft Power**

**2.5 Robotic Planetary  
Propulsion**





# Key Assumptions Exploration Missions

## 2.0 High Energy Power and Propulsion Capability Road Map (Key Events/Milestones)

### 2.2 Surface Power Human

### 2.6 Human Exploration Propulsion

CEV 2008 Demo

CEV Power System

First Crewed CEV Flight

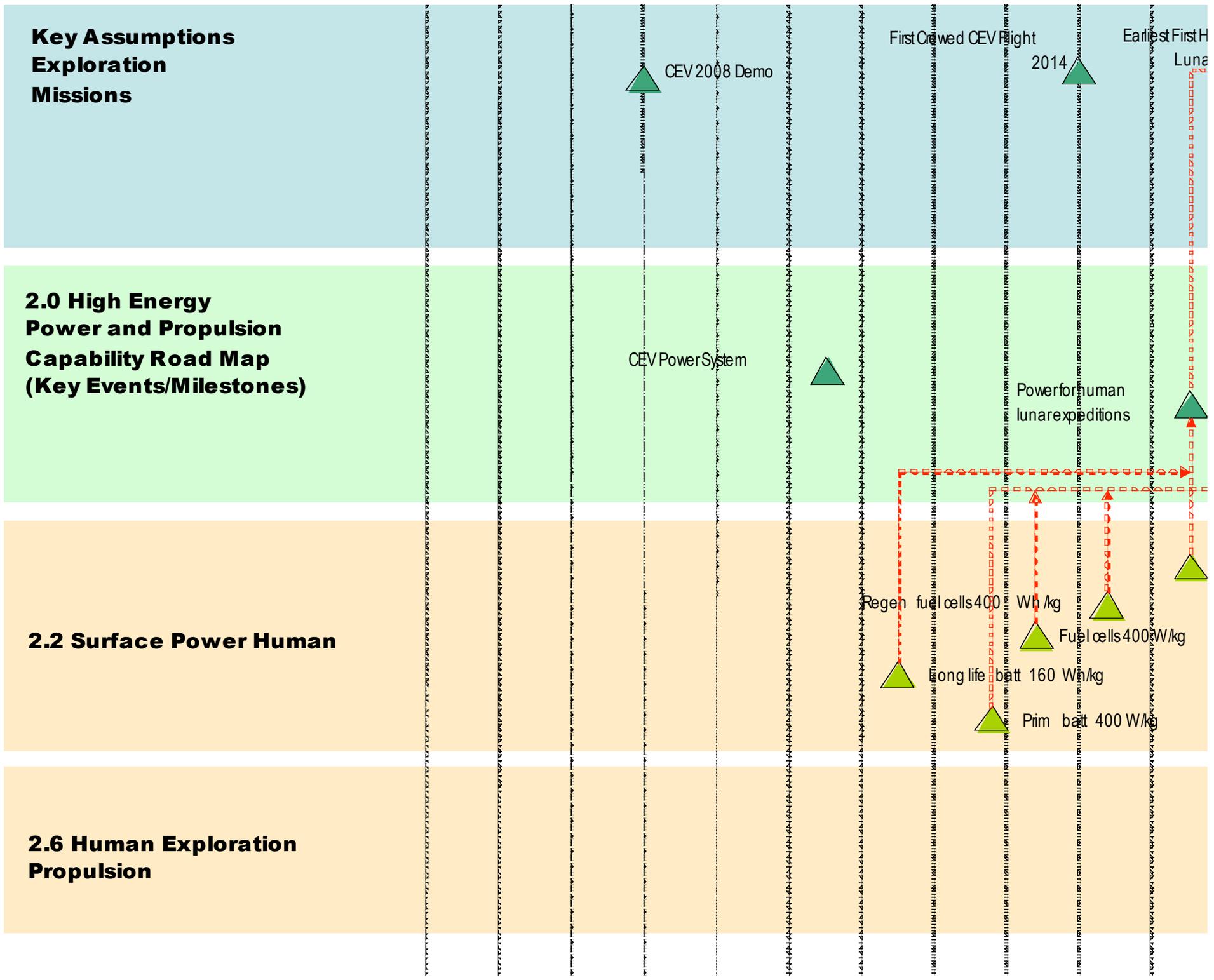
2014

Earliest First Human

Luna

Regen fuel cells 400 Wh/kg  
long life batt 160 Wh/kg  
Fuel cells 400 Wh/kg  
Prim batt 400 Wh/kg

Power for human  
lunar expeditions



**Key Assumptions**  
**Exploration**  
**Missions**

**2.0 High Energy Power and Propulsion Capability Road Map (Key Events/Milestones)**

**2.2 Surface Power Human**

**2.6 Human Exploration Propulsion**

