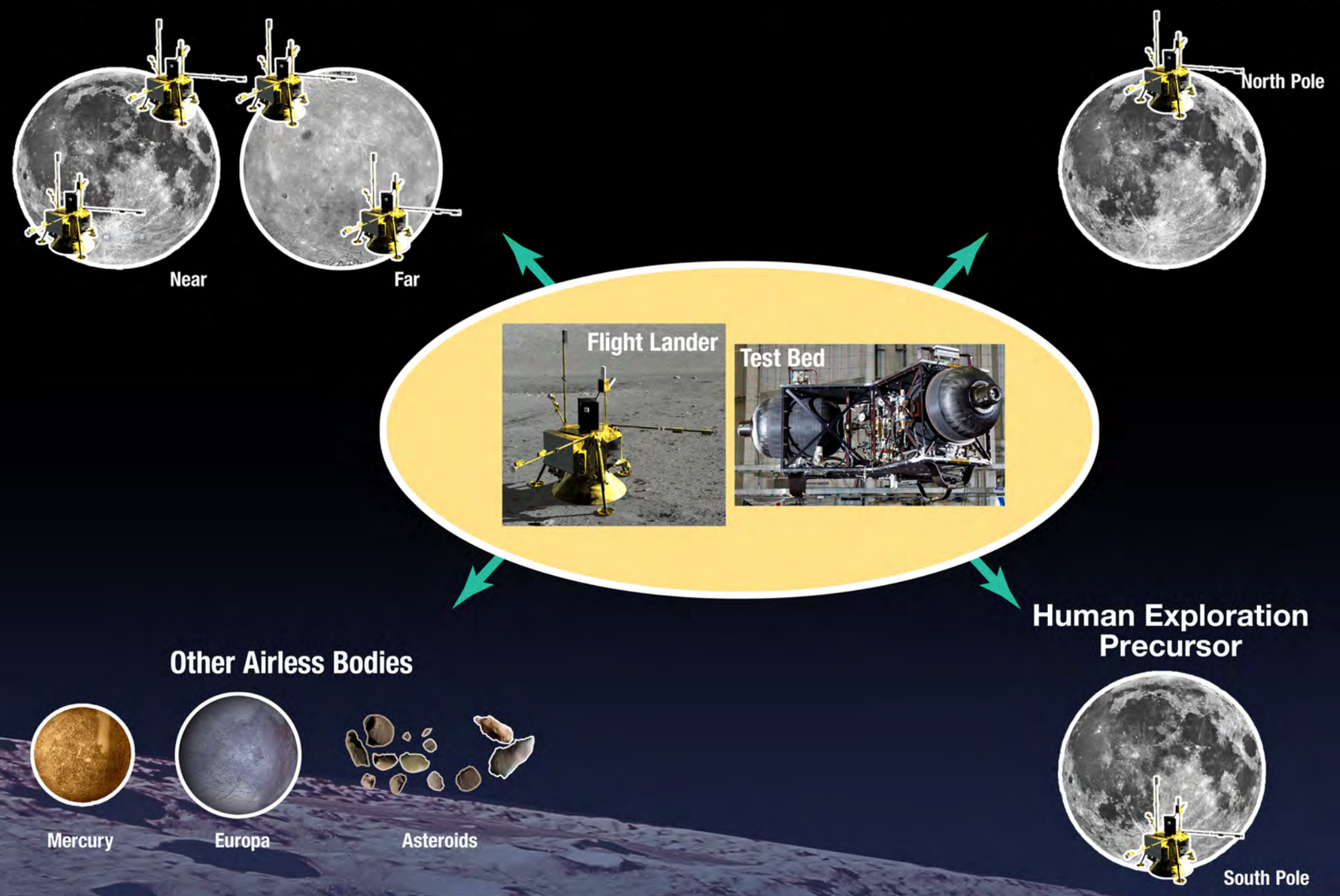
National Aeronautics and Space Administration

Robotic Lunar Lander Development Project

Mission Scenarios



International Lunar Network

- Determine the composition and structure of the moon's interior—its crust, mantle, and core
- Measure heat flow from the lunar interior
- Monitor lunar seismic activity

Lunar Polar Volatiles

- In situ characterization of volatile species including water, carbon dioxide, methane, and ammonia
- Understand current processes taking place in the lunar atmosphere and cold traps

Human Exploration Precursor

- Characterize landing sites for human exploration
- Understand the lunar surface environment: lighting, radiation, thermal, and dust
- Provide essential information for future in situ resource utilization

Other Airless Bodies

- Surface science
- Geophysical networks
- Sample return

For more information go to
<www.nasa.gov/roboticlander>.