



Current NASA Interest in Space Nuclear Power



W. James Adams



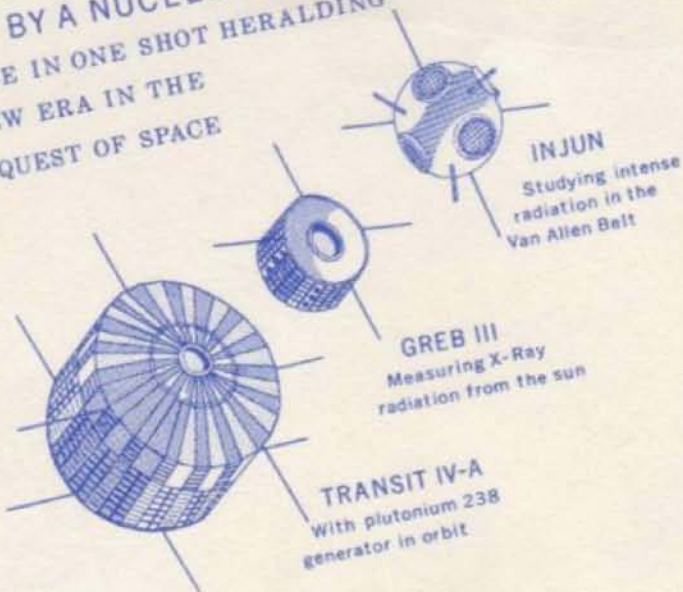
1961

1971

TRANSIT IV-A

•• FIRST SATELLITE POWERED BY A NUCLEAR BATTERY

THREE IN ONE SHOT HERALDING A NEW ERA IN THE CONQUEST OF SPACE



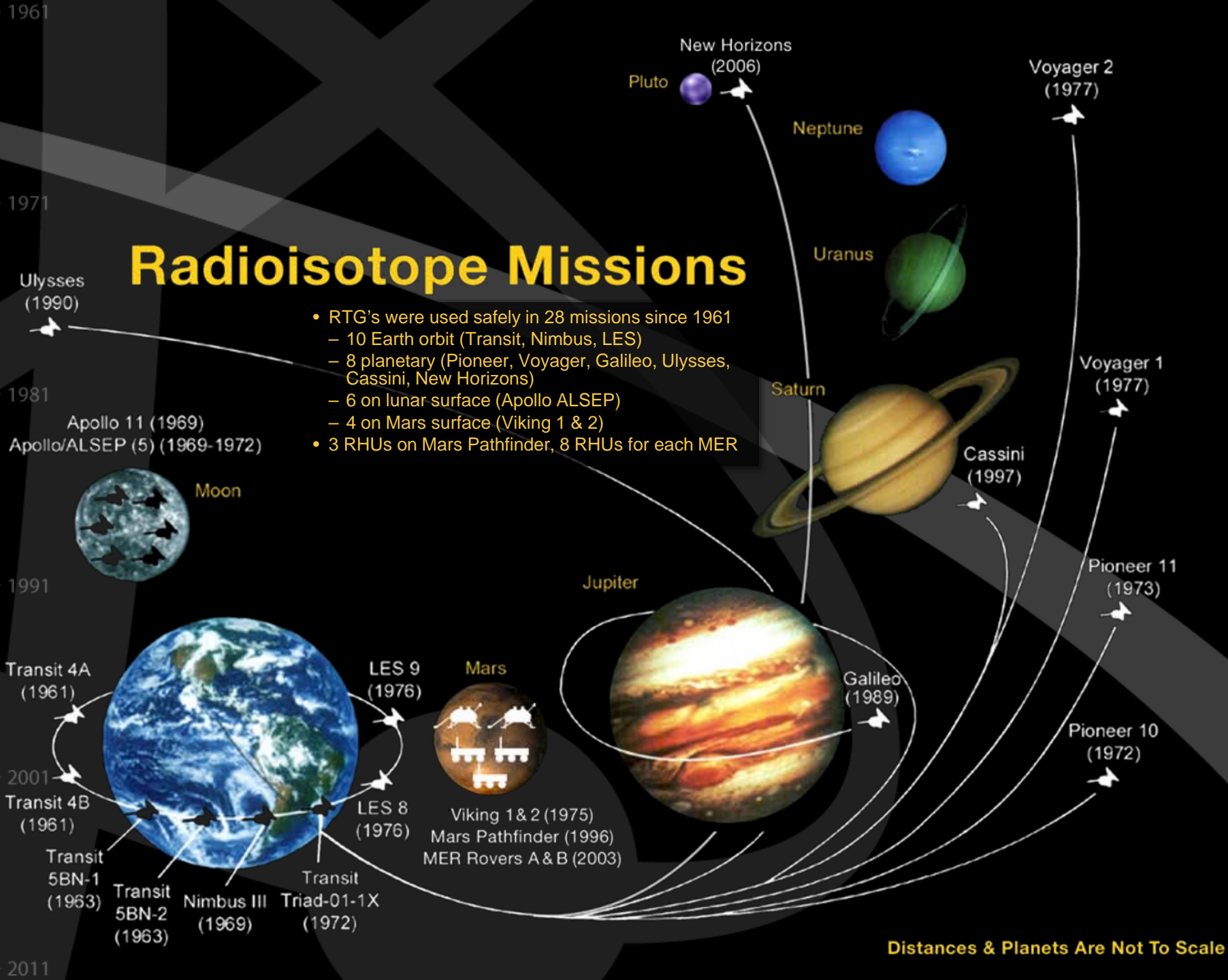
*Box 2296
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200

2011

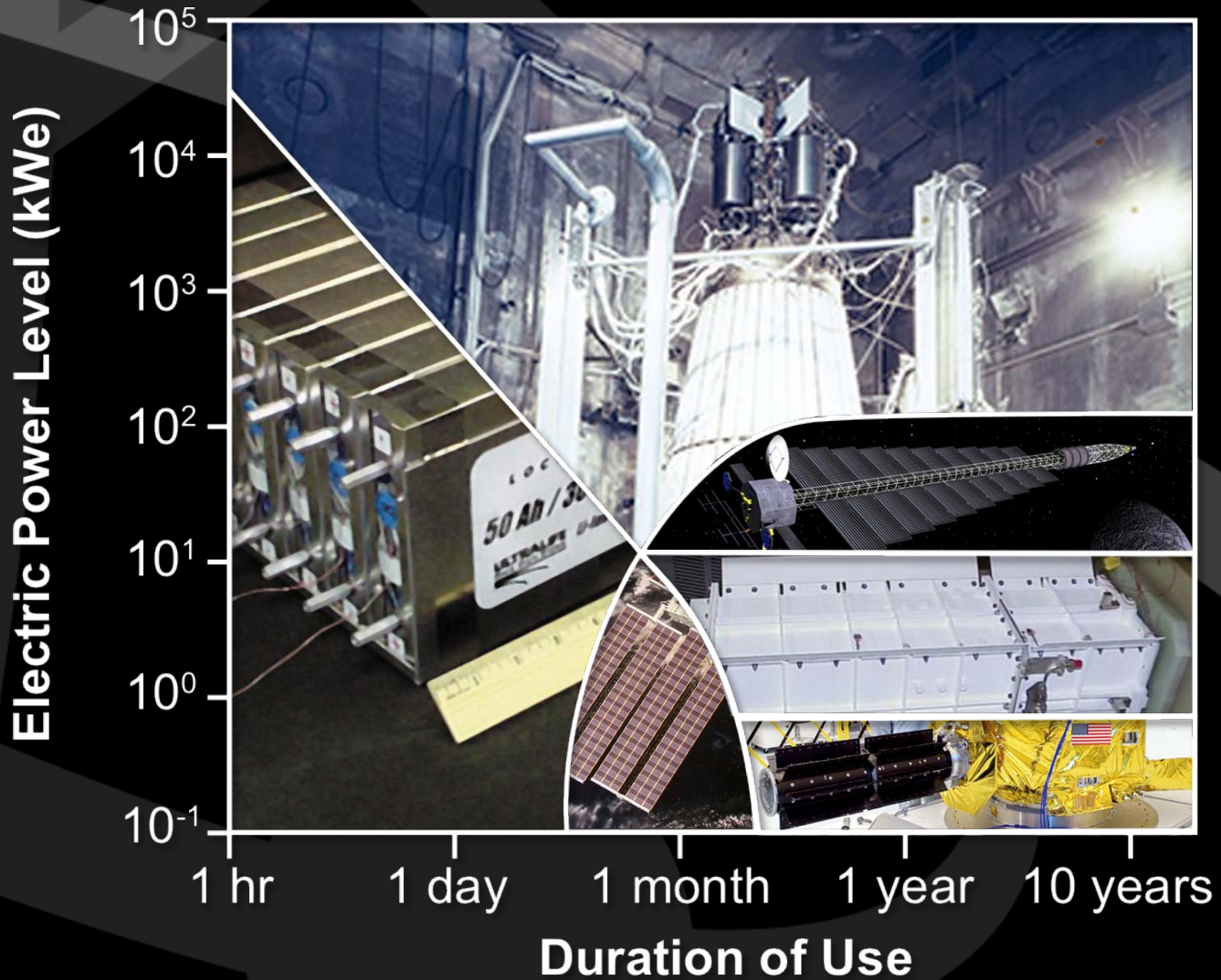
Radioisotope Missions

- RTG's were used safely in 28 missions since 1961
 - 10 Earth orbit (Transit, Nimbus, LES)
 - 8 planetary (Pioneer, Voyager, Galileo, Ulysses, Cassini, New Horizons)
 - 6 on lunar surface (Apollo ALSEP)
 - 4 on Mars surface (Viking 1 & 2)
- 3 RHUs on Mars Pathfinder, 8 RHUs for each MER



Distances & Planets Are Not To Scale

Radioisotope Power Enables Missions



1961

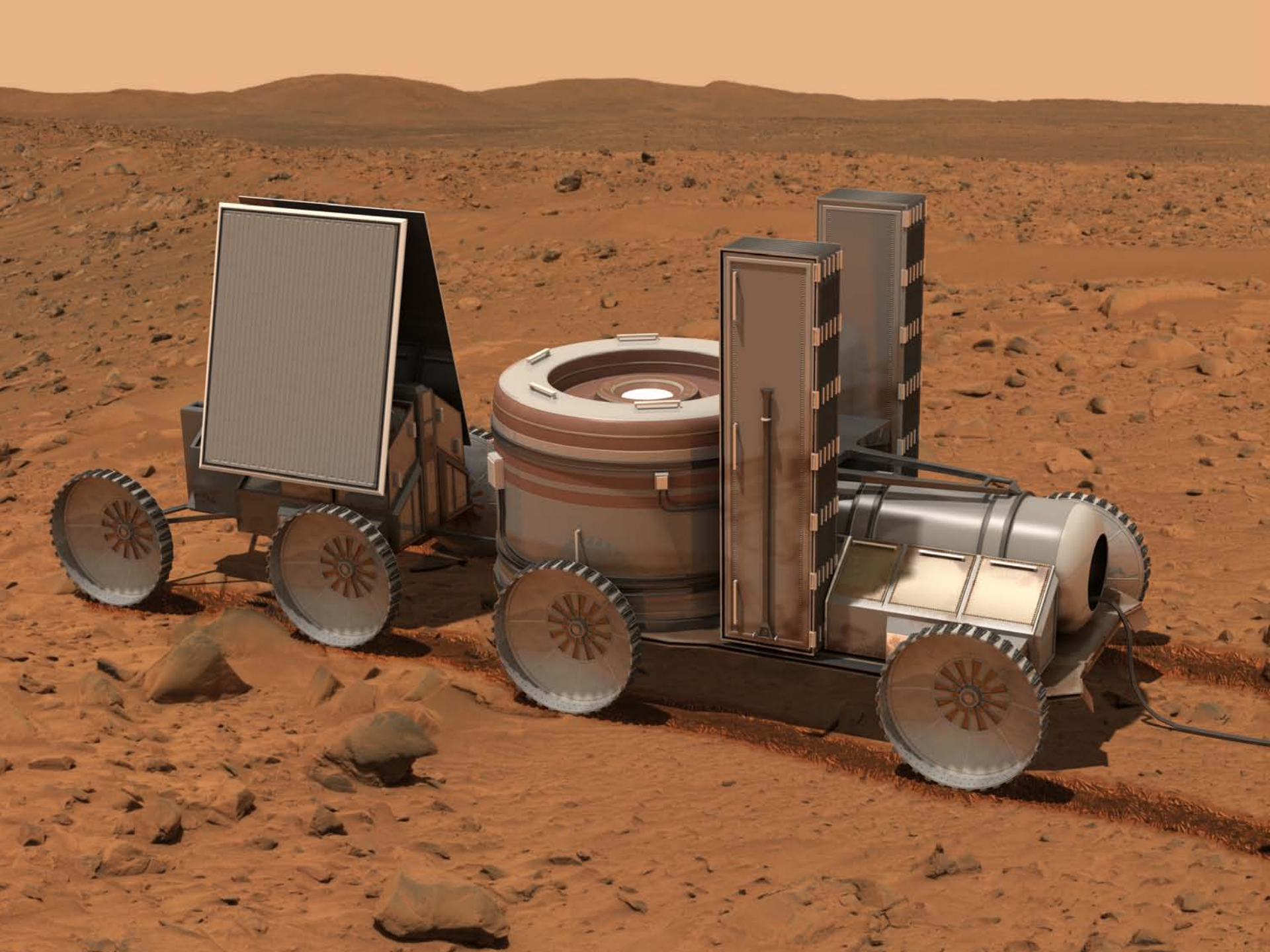
1971

1981

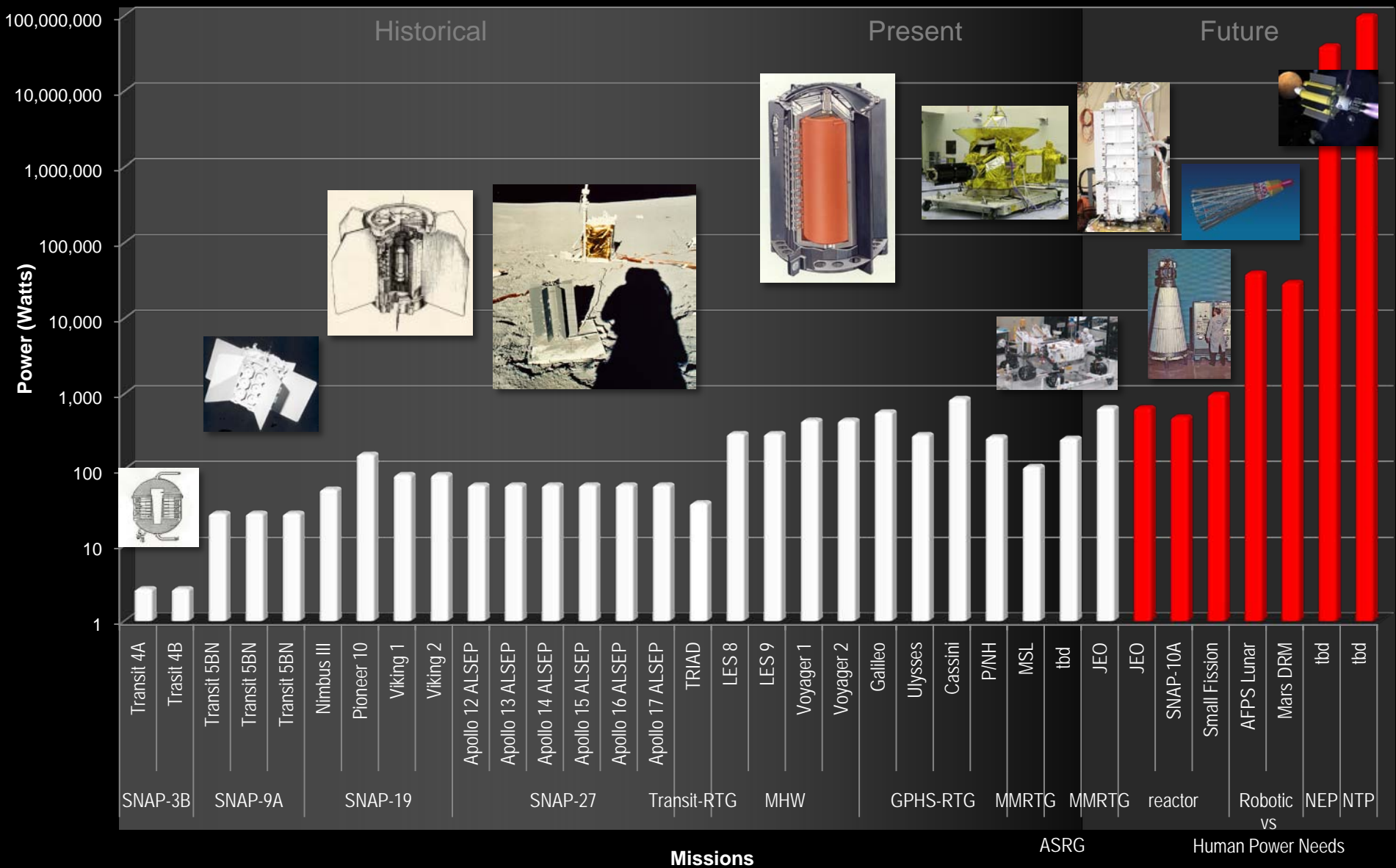
1991

2001

2011



Nuclear Power Enabled Missions



Missions

ASRG

Human Power Needs

