Technology Session

Pat Beauchamp
JPL-Caltech
February 19
OPAG Posters

• Parametric Analyses of an Advanced RTG – David Woerner

• 30W Boost in MMRTG Power Delivered at Beginning of Life & 50W at End of Design Life – David Woerner

• High-Efficiency Stirling Generators for Science & Human Exploration – June Zakrajsek, GRC


• Nano-Spacecraft for Outer Solar System Exploration: 2. Technology state of the art and way forward – Julie Castillo

• Titan Aerial Daughtercraft – Larry Matthies

• High spatial resolution IR imaging system for Outer planetary missions – Alex Soibel

• Outer Planet Flagship Missions with ARM-derived Electric Propulsion Stage – Damon Landau and Nathan Strange
SLS

SLS – Steve Creech (MSFC)

• I asked him about the rule for nuclear missions because I had heard that you have to do 7 safe flights before allowing nuclear power on board.
  – He said that it was an ELV rule that Launch services program has. SLS, since it has a lot of heritage hardware with multiple flights from shuttle, and will be human rated, they believe will be less.
  – There is a process that they have to go through. They were about to get started on that for Europa when they went solar power.
  – He said that for nuclear powered s/c the process for nuclear certification takes time and will cost effort so we will need a requirement before completing. He suggested we plan mid-2020s for OPAG purposes.

• He will attend the next OPAG meeting.