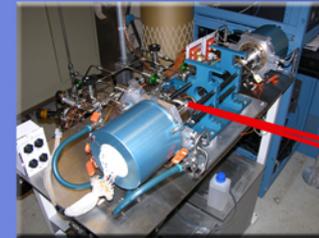




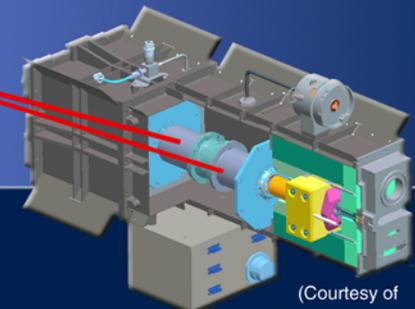
Advanced Stirling Radioisotope Generator (ASRG)

- 100-W class, high-efficiency candidate power source for NASA Space Science missions
- Greater than 28% efficiency reduces radioisotope inventory by a factor of 4 or greater compared to RTGs
- Specific power of >7 We/kg is a significant increase over RTGs
- Lockheed Martin (LM) is developing the ASRG under contract to DOE—Sunpower is developing the Advanced Stirling Converter (ASC) for GRC under NRA award
- NASA GRC provides:
 - Stirling convertors (ASCs) to DOE/LM for ASRG
 - In-house supporting technology development project for transition to flight, focused on reliability
 - Advanced Stirling technology development



Lightweight, dual-opposed ASCs on test at GRC

Advanced Stirling Radioisotope Generator



(Courtesy of Lockheed Martin)

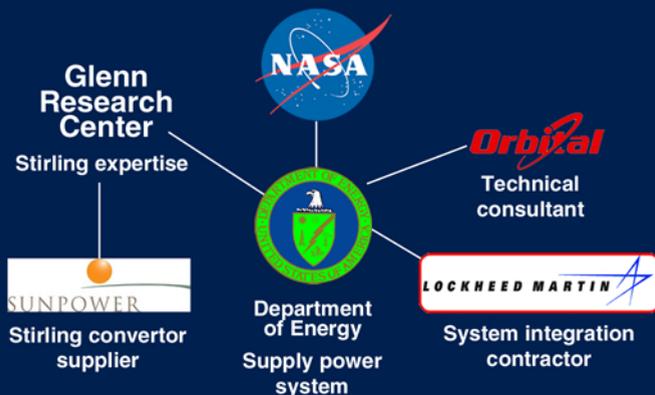


Future

Candidate power source for future missions under study

- Europa Geophysical Explorer
- Enceladus Explorer
- Titan Explorer
- Jovian System Observer

Collaborative Effort



Advanced Stirling Converter, now being integrated into the ASRG, is an outgrowth of the NASA SBIR Program which developed a half-power version of the convertor.