Fire containment system for lithium-ion batteries

- **Purpose:** Prevents a battery fire from spreading. Contains flames, sparks and particulates; and retains heat
- **Description**: Lithium-ion batteries have several orders of magnitude more ignition energy than what is tested for flammability. The fire bag with thermal runaway shields inside a cargo transfer bar will contain a propagating battery fire.
- **Distinctive capabilities**: Storage of COTS batteries on orbit (in any O_2 environment)
- **Potential users**: CLDP, Moon base, HLS, EHP
- **Technical Readiness Level**: Fire bag is a 9. Due to material obsolescence, a redesign is proposed.

Technical Parameters
Size: 10” x 8” x 5”
Mass: 2 lbm. (0.91 kg)
Can prevent battery-to-battery propagation, in some instances
Usage Life: 5-15 years depending on storage and usage conditions
Approximate time to deliver: ATP +2-3 years

Contact Martin Martinez (martin.d.martinez@nasa.gov) in EP5 for more information