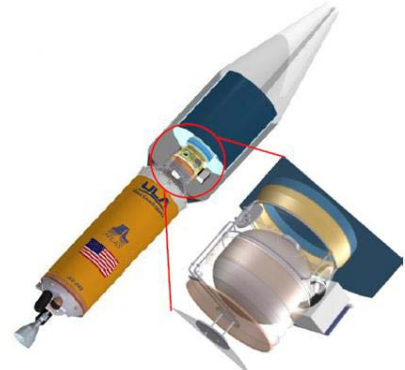


07/2010- Quest Attends NASA Secondary Cryogenic Payload Testbed Workshop

Quest was invited to attend a NASA workshop to discuss possible NASA/Industry/DoD collaborations on a secondary payload cryogenic fluid management testbed. The Space Technology Initiative set forth in the President's new budget outlines a Technology Demonstration project that allows significant NASA funding for flight demonstration of "game changing" technology. The aim of the workshop was to investigate the best technology roadmap for a cryogenic demonstration mission as well as to develop the partnerships needed to push forward.

Cryogenic propellants, orbital cryogenic fuel depots and the ability to store, transfer, handle and refuel spacecraft in orbit are critical to NASA future missions beyond Low Earth Orbit. There are numerous new technologies required to achieve needed cryogenic fluid management capabilities allowing future extended spaceflight missions. There are known concerns about the technology readiness of critical cryogenic fluid management (CFM) technologies in micro-gravity. The NASA Cryogenic Propellant Storage and Transfer technology demonstration program is an orbiting laboratory that can investigate CFM technologies in space, and provides an opportunity to advance in-space CFM technologies. The testbed can provide a cost effective means to mature numerous new technologies, flight test and reduce risk for their use in NASA missions.



Quest's Integrated MultiLayer Insulation (IMLI) is a new next generation thermal insulation offering higher thermal performance, lower mass and a more robust structure than current MLI. IMLI could use a conformal blanket design with IMLI panels and temperature-matched layer panel seaming, and provide lower cost, more repeatability and better insulation for orbiting fuel depots.



Quest has proposed a sequence of steps to mature IMLI technology, measure performance in a realistic environment, and plan development of prototypes leading to a technology demonstration flight.