

Abstract for
paper to be presented at the 11th Annual **AIAA**/ Utah State University
Conference on Small Satellites

Deep Space Multimission Microspacecraft

by

Kim Leschly,
Paul Penzo,
& Joel Rademacher

Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive
Mail Stop 301-485
Pasadena, CA 91109-8099

Phone: (818) 354-6740
Fax: (818) 393-6871
Email: kim.o.leschly@jpl.nasa.gov

A multi-mission **microspacecraft** design has been studied at the Jet Propulsion Laboratory. This design implements existing technology, and could be built for launch within 30 months at a cost of **\$20-30M**.

Four different mission concepts have been considered for this **microspacecraft** design; a Magnetic Storm Predictor, Gamma Ray Burst Finder, Comet / Asteroid Flyby, and **Solar Sail Technology Demonstration**. **Each of these missions uses a Geosynchronous Transfer Orbit (GTO) secondary payload launch, with an attached kickstage to send them on to their deep space trajectories.**

Abstract for
paper to be presented at the 11th Annual AIAA/ Utah State University
Conference on Small Satellites

Deep Space Multimission Microspacecraft

by

Kim Leschly,
Paul Penzo,
& Joel Rademacher

Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive
Mail Stop 301-485
Pasadena, CA 91109-8099

Phone: (818) 354-6740
Fax: (818) 393-6871
Email: kim.o.leschly@jpl.nasa.gov

A multi-mission **microspacecraft** design has been studied at the Jet Propulsion Laboratory. This design implements existing technology, and could be built for launch within 30 months at a cost of \$20-30M.

Four different mission concepts have been considered for this **microspacecraft** design; a Magnetic Storm Predictor, Gamma Ray Burst Finder, Comet / Asteroid Flyby, and **Solar Sail Technology Demonstration**. **Each of these missions uses a Geosynchronous Transfer Orbit (GTO) secondary payload launch, with an attached kickstage to send them on to their deep space trajectories.**