

CALL FOR PAPERS!

41st AEROSPACE MECHANISMS SYMPOSIUM

MAY 16 – 18, 2012
PASADENA, CA

Hosted by
Jet Propulsion Laboratory and Lockheed Martin Space Systems Company

Organized by the Mechanisms Education Association

SYMPOSIUM OBJECTIVES

This symposium is concerned with the problems of design, fabrication, test, and operational use of aerospace mechanisms. Emphasis is on hardware developments. The symposium provides both a social and technical forum for personnel active in the field of mechanisms technology. The symposium attracts papers and attendees internationally.

SUMMARIES AND PAPERS

Papers for presentation and publication are selected from summaries of approximately 1000 words plus figures (total of 4 pages maximum). Summaries are due September 1, 2011. The summary must include:

- A clear description of what is to be presented. Minimize non-essential design information and emphasize results and conclusions. Tell what is unique about the work and why your paper should be chosen.
- Identify the status of the work (concept, development, qualified, flown) and what data is available.
- Indicate whether the subject has been previously published.
- One or two figures, preferably containing test data that supports important findings and photographs to illustrate the maturity of the work.

Paper selection is based on the following criteria:

- Ability to educate with "lessons learned" from development difficulties, ground tests, or flight anomalies. First preference is given to papers that discuss fully-developed, tested and/or flown space or aircraft mechanisms. University student space project work is also highly encouraged.
- Unique and innovative characteristics of design solutions.
- Quality, general usefulness, and lasting value of the information to be presented.

Lessons learned are particularly important. Such papers are often more valuable than reports of purely successful efforts since they help others avoid similar problems in the future.

Authors are notified in October 2011. The final 14-page paper is due December 22, 2011. The paper is published in the symposium proceedings and the author makes a 25-minute presentation at the symposium (the written paper and presentation must be done in the English language). Paper acceptance is a commitment to present the paper at the symposium. Potential authors are advised to clear travel budget, security and export control issues prior to offering the paper. The committee may also choose poster papers, which are 6-page published papers and authors make a 10-minute presentation at the symposium and may also have a table/display at the supplier exhibits. The Dr. George Herzl Award is awarded to the author of the best paper.

TOPICS

- Mechanisms for commercial, military, government, or scientific spacecraft/aircraft, and related test and support facilities. Includes antenna, sensor, solar sail, solar array or instrument deployment; release & pointing mechanisms; steering mirrors & payload mechanisms; gimbals; EVA mechanisms; robotic systems; separation mechanisms; utility transfer; & momentum/reaction wheels.
- Space tribology, bearings, gears, or mechanism lubrication papers containing test data.
- Studies related to mechanism technology including:
 - new actuators, dampers, sensors, release devices
 - studies of reliability, redundancy, and lubrication
 - studies of thermal and space vacuum effects

CONTACT

The summary, along with the full address, phone, and e-mail of author and co-authors, **must be submitted no later than September 1, 2011** to:

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THE SYMPOSIUM ORGANIZING COMMITTEE

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