CALL FOR PAPERS

AIAA/MIT/SSA SECOND INTERNATIONAL SYM-POSIUM ON THE TECHNOLOGY AND SCIENCE OF LOW-SPEED AND MOTORLESS FLIGHT

This symposium will take place September 11-13, 1974, at the Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A. The conference is co-sponsored by the American Institute of Aeronautics and Astronatuics, M.I.T., and the Soaring Society of America. The General Chairman of the meeting is:

Oran W. Nicks
Deputy Director
NASA Langley Research Center
Hampton, Virginia 23365, U.S.A.

The emphasis of this conference will be on improving the state-of-the art of designing, developing, and testing flight vehicles optimized for low-speed, low Reynolds number powered or unpowered flight. The formal presentation sessions will be paralled by workshop sessions and panel discussions on whichpprogress made since the previous such meeting (First International Symposium and Workshop on the Technology and Science of Motorless Flight, co-sponsored by MIT and NASA, at MIT, in October 1972) will be reviewed, and new priorities set for future research in this long neglected area of aeronautical science.

New results are sought, both analytical and experimental, as well as reviews of lessons learned from past experience with low-speed airplane, sailplane, model and bird-flight studies.

Papers are solicited for sessions planned around

--Low Reynolds number aerodynamics, with an emphasis on three-dimen-sional effects

TECHNICAL SOARING, VOL. II, NO. 4 -- Vehicle aerodynamic design optimization, including the application of variable geometry and highlift devices.

--Structural design optimization, particularly in the light of the application of advanced composite materials, exacting contour fidelity requirements and the aero-elastic problems peculiar to high-aspect-ratio and water-ballasted structures

--Improved instrumentation and displays to aid in the exploitation of natural atmospheric motions

--Flight testing techniques, instrumentation and results, with an emphasis on accounting for the effects of atmospheric motions on the test data

--Improved knowledge of the mesoand micro-scale atmospheric environment leading to more complete exploitation of natural atmospheric energy for flight purposes.

Other applicable papers not falling precisely within these guidelines will, however, be considered.

Selection of papers will be based on abstracts of 500 to 1000 words, or preliminary drafts of final papers, to be submitted by April 1, 1974. Abstracts should be prepared in accordance with the attached "Instructions for preparation of Meeting Abstracts" and submitted in four copies to the Technical Program Chairman:

Dr. James L. Nash-Webber
Measurement Systems Laboratory
Room W91-200
Massachusetts Institute of
Technology
Cambridge, Massachusetts 02139
U.S.A.

Abstracts should include a list of the names, affiliations, and mailing ad-

TECHNICAL SOARING, VOL. II, NO. 4 dresses of all authors. Authors will be notified of acceptance of their papers by May 13th, 1974. It is intended to make the Proceedings available in a bound volume at the start of the Conference. Inquiries about

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the Conference may be directed to either of the Conference Chairmen.

The Northwest Chapter of the American Institute of Aeronautics and Astronautics, the Seattle Glider Council, and the Soaring Society of America, wish to announce a symposium on the subject "Advances in Glider Technology" to be held in Seattle on March 9, 1974. A full day of activities is planned with morning and afternoon sessions and a static display of sailplanes.

The Program Committee, comprising Dr. Reiner Decher, Harry C. Higgins, and Marion Barritt, request submittal of technical papers discussing developments in low-speed aerodynamics, glider structures, operational factors, meteorology, and the like pertaining specifically to sailplanes and gliders. Each oral presentation will be allowed 20 minutes. The symposium will be limited to papers on aircraft that do not use engines to sustain flight.

Those desiring to present papers are requested to submit an abstract as soon as possible to Marion Barritt, 2212 77th Avenue SE, Mercer Island, Washington 98040.

ERRATA

"Crack Toughened Epoxies for Room Temperature Applications," by K. J. Strack, <u>Technical</u> <u>Soaring</u>, Vol. II, No. 3, p. 1

- 1. Page 1, paragraph 2 of the Abstract, the first sentence should read "Application of toughened systems published to date has been difficult in the case of large lay-ups because of the need to use an elevated temperature cure. New systems are described, etc."
- Page 2, Figure 1 is missing obviously, and was misplaced to page 43.
- 3. Page 4, last sentence of paragraph 2, column 2, reads "Varying the AEP concentration with the rubber at 5 pph now and omitting the 65108..." Should read 75108.

REFERENCES (MARKSON) CONTINUED FROM PAGE 36

Vonnegut, B. and Moore, C.B.; A Study of Techniques for Measuring the Concentration of Space Charge in the Lower Atmosphere; final report to Geophysics Research Directorate, Air Force Cambridge Research Center, Air Research and Development Command (Contract No. AF 19(604) 1920), 163 pp, 1958.

Vonnegut, B. and Moore, C.B.; Apparatus Using Radioactive Probes for Measuring the Vertical Component of Atmospheric Potential Gradient from an Airplane, Bull. Am. Meteo. Soc. 42, 773-777, 1961.

Vonnegut, B., Moore, C.B., Semonin, R.G., Bullock, J. W., Staggs, D. W., and Bradley, W.E.; Effect of Atmospheric Space Charge on Initial Electrification of Cumulus Clouds, J. Geophys. Res. 67, 3909-3922, 1962.