

Technical Soaring



The Technical and Scientific Journal of The Soaring Society of America and
Organization Scientifique et Technique Internationale du Vol a Voile

MANAGING EDITOR

Rob Sjostedt

OSTIV EDITOR

Cedric O. Vernon

SSA TECHNICAL PANEL

CHAIRMAN, SSA TECHNICAL BOARD

Oran W. Nicks

DESIGN AND CONFIGURATION

John McMasters

AERODYNAMICS

Winfried M. Feifel

METEOROLOGY

Walt Rogers

STRUCTURES AND MATERIALS

Ed Crawley

INSTRUMENTATION AND EQUIPMENT

Peter Newgard

FLIGHT TESTING

Joseph Gera

TOWPLANES AND LAUNCH SYSTEMS

Jim Indrebo

OSTIV REPRESENTATIVE

Bernald S. Smith

OSTIV

PRESIDENT,

Dr. Manfred E. Reinhardt

CHAIRMAN, TECHNICAL SECTION

Dipl. Ing. Winfried M. Feifel

CHAIRMAN, SCIENTIFIC SECTION

METEOROLOGICAL PANEL

Prof. C.E. Wallington

CHAIRMAN, SAILPLANE DEVELOPMENT PANEL

Prof. Dr. Ing. Piero Morelli

CHAIRMAN, TRAINING AND SAFETY PANEL

Bill Scull

©1988 The Soaring Society of America
All Rights Reserved

OSTIV SECTION

**Canards: The Myths and
the Realities** A. Blackburn 71

**Upsets in Pitch: A Guide to Design
Diving Speed** F. Irving 78

**A Simple Approximation of the
Best-Speed-To-Fly Theory** R. Danewid 83

**Barograph With Magnetic Compass
Heading Recording** J. McKenney and H. Schurmeier 88

SSA SECTION

**Soaring Climatology of
Thermal Convection** C. Lindemann 95

The objective of *Technical Soaring* is to document recent advances in the science and technology of motorless aviation.

Technical Soaring is published quarterly by the Soaring Society of America, Inc., P.O. Box E, Hobbs, NM 88241 (505) 392-1177. Subscription price for SSA members is \$18.00 (four issues per year) in the U.S., Canada and Mexico; for other foreign countries—\$21.00 per year. Subscription for non-members of the SSA is \$30.00 per year.

First class or airmail can be arranged for an extra fee. Subscribers should send change of address notices to the above Hobbs box number, being sure to mention *Technical Soaring*.

Submitted papers will be subjected to a technical review before being accepted for publication. Manuscripts should be sent complete with illustrations and cover letter to: Rob Sjostedt, 673 W. 23rd St., San Pedro, CA 90731.

Papers submitted for consideration by OSTIV should be sent to:
Cedric O. Vernon, 15 The Piccards, Chestnut Ave., Guildford/Surrey GU2 5DW.