

# Technical Soaring



The Technical and Scientific Journal of The Soaring Society of America and  
Oganization Scientifique et Technique du Vol a Voille

## MANAGING EDITOR

Rob Sjostedt

## OSTIV EDITOR

Ladislav Smercek, Jr.

## SSA TECHNICAL PANEL

### CHAIRMAN,

### SSA TECHNICAL BOARD

Stephen Northcraft

### DESIGN AND CONFIGURATION

Mark Maughmer

### AERODYNAMICS

Dan Somers

### METEOROLOGY

Harry Senn

### STRUCTURES AND MATERIALS

Ed Crawley

### INSTRUMENTATION

### AND EQUIPMENT

John Hansman

### FLIGHT TESTING

Einer Enevoldson

### TOWPLANES AND

### LAUNCH SYSTEMS

E.J. Indrebo

### OSTIV REPRESENTATIVE

Bernald S. Smith

### AIRWORTHINESS TECHNICAL

### STANDARDS

Al Blackburn

## OSTIV

### PRESIDENT,

Dr. Manfred E. Reinhardt

### CHAIRMAN,

### TECHNICAL SECTION

Dipl. Ing. Winfried M. Feifel

### CHAIRMAN,

### SCIENTIFIC SECTION

### METEOROLOGICAL PANEL

Dr. H Trimmel

### CHAIRMAN,

### SAILPLANE DEVELOPMENT

### PANEL

Prof. Dr. Ing. Piero Morelli

### CHAIRMAN,

### TRAINING AND SAFETY PANEL

Bill Scull

## OSTIV SECTION

**OSTIV Remarks** .....by Manfred Reinhardt 34

**Human Flight With Light**  
.....by Michael Rehmet and Bernd-Helmut Kröplin 36

**Center-Of-Gravity and Lift Coefficient  
Limits of a Gliding  
Parachute: Case Study** .....by Gil Iosilevskii 44

## SSA SECTION

**An Automatic, Adjustable Nose Wheel Brake  
For Sailplanes** .....by Victor M. Saudek 52

**Low Cost Manufacture of  
Laminar Wings** .....by Day Chahroudi 55

**GPS - The Emperor's  
New Position?** .....by Dr. Julian West 62

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 \$24.00 (four issues per year) in the U.S., Canada and Mexico; for other foreign countries - \$27.00 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, 1544 Blue Heron Way, Oregon, W153575.

Papers submitted for consideration by OSTIV should be sent to: Mr. Ladislav Smercek, Jr., Dept. of Aerospace Engineering, University of Glasgow, University Avenue, Glasgow-G12 8QQ Great Britain.