

Technical Soaring



The Technical, Scientific and Operational Journal of
Organisation Scientifique et Technique Internationale du Vol à Voile and
The Soaring Society of America, Inc.

EDITORS

Dr. Ing. Ladislav Smrcek - OSTIV
Rob Sjostedt - SSA
Prof. Dr. Mark Maughmer

OSTIV

PRESIDENT

Prof. Ing. L.M.M. Boermans
The Netherlands

VICE PRESIDENT

Dipl. Ing. Christoph Kensche
Germany

MEMBERS OF THE BOARD

Dipl. Ing. John Ashford - *Australia*
Dipl. Ing. Petr Kousal - *Czechia*
Prof. Dr. Mark Maughmer - *USA*
Dr. Ing. Michael Rehmet - *Germany*
Dr. Hermann Trimmel - *Austria*

**CHAIRMAN,
TECHNICAL SECTION**
Prof. Dr. Mark Maughmer

**CHAIRMAN,
SCIENTIFIC SECTION
METEOROLOGICAL PANEL**
Dr. Hermann Trimmel

**CHAIRMAN,
SAILPLANE DEVELOPMENT PANEL**
Dr. Ing. Michael Rehmet

**CHAIRMAN,
TRAINING AND SAFETY PANEL**
Ian Oldaker - *Canada*

SSA

CHAIRMAN OF THE BOARD
Dianne Black - Nixon
EXECUTIVE DIRECTOR
Dennis Wright

Publications Staff
Mark Maughmer, Bernald Smith
Layout/Printing - Fremont Printing
Fremont, CA 94538 - USA
Distribution - Roadrunner Mailing Service
Fremont, CA 94538 - USA

©2006 Organisation Scientifique et Technique
Internationale du Vol à Voile
All rights reserved.
ISSN# 0744-8996

Top Task Meteorological Flight Planning for Soaring

Olivier Liechti, Erland Lorenzen 1



An Unusually High Summertime Wave Flight

Edward E. Hindman, Ray L. McAnelly, William R. Cotton,
Todd Pattist, Richard M. Worthington 7



Inside Thermals

A.G. Williams, J. M. Hacker 24



Volume 28, Number 4

Printed May 2006

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

Technical Soaring is published quarterly by Organisation Scientifique et Technique Internationale du Vol à Voile (OSTIV); Kluyverweg 1; NL-2629 HS Delft; The Netherlands; tel: +31.15.278.6387; fax: +31.15.278.3533; email: l.m.m.boermans@lr.tudelft.nl.

Subscription is restricted to OSTIV members only. Rates/calendar year, based upon surface bulk delivery, are Euro45 for Individual/Library/Local club membership; Euro80 for Scientific/Technical Membership and Euro250 for Active Members (National Aero Club Members of FAI). First class or airmail delivery may be arranged for an extra fee.

Submitted papers will be subjected to a technical, scientific and/or operational review before being accepted for publication. Manuscripts should be sent in electronic format, complete with illustrations and cover letter.

Material from outside the USA should be sent to Prof. Ward Hindman; 1500 W. Plum 10G; Ft. Collins, CO 80521; USA; email: <hindman@atmos.colostate.edu>. Material from the USA and SSA should be sent to Rob Sjostedt, 31 Salinas, Foothill Ranch, CA 92610 - USA;

email: <robsjo@aol.com>

The name *Technical Soaring*, its cover layout and the SSA logo are fully rights-protected and belong to SSA; they are used by permission.