Technical Soaring



The Scientific, Technical and Operational Journal of the Organisation Scientifique et Technique Internationale du Vol á Voile

17	U.	m		1	n
Ľ	D.	ı	•	Л	۲

Prof. Dr. Edward (Ward) Hindman

OSTIV PRESIDENT

Prof. Ir. Loek M. M. Boermans *The Netherlands*

OSTIV VICE PRESIDENT

Dipl. Ing. Christoph Kensche *Germany*

MEMBERS OF THE OSTIV BOARD

Dipl. Ing. John Ashford - *Australia*Prof. Dr. Edward Hindman – *USA*Prof. Dr. Mark Maughmer – *USA*Dipl. Ing. Ian Oldaker - *Canada*Dr. Ing. Michael Rehmet – *Germany*Dr. Hermann Trimmel - *Austria*

CHAIR, SCIENTIFIC SECTION METEOROLOGICAL PANEL and ASSOCIATE EDITOR

Dr. Hermann Trimmel

CHAIR, TECHNICAL SECTION and ASSOCIATE EDITOR

Prof. Dr. Mark Maughmer

CHAIR, SAILPLANE DEVELOPMENT PANEL and ASSOCIATE EDITOR

Dr. Ing. Michael Rehmet

CHAIR, TRAINING AND SAFETY PANEL and ASSOCIATE EDITOR

Dipl. Ing. Ian Oldaker

Publications staff: Edward Hindman, Bernald Smith

Layout/Printing – The Hub Print and Copy Center Ft. Lee NJ 07024 – USA

Distribution – International Mail Express (IMEX) Clifton NJ 07011 – USA

© 2007 Organisation Scientifique et Technique Internationale du Vol á Voile All rights reserved ISSN #0744-8996

Editor's comments
Investigation of the Glider Load Spectra
Miroslaw Rodzewicz
Dynamic Soaring in Shear Wind Regions Associated with Jet Streams
Gottfried Sachs and Orlando da Costa13
Improvement of an Artificial Stall Warning System
for Sailplanes
Loek Boermans and Bart Berendsen19
Cost-Effective Flight Simulator Approach for Ultralight
Aircraft, Motor Gliders and Sailplanes
Florian Hozapfel and Gottfried Sachs26

Volume 31, Number 1 Printed April 2007

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 the Organisation Scientifique et Technique Internationale du Vol á Voile (OSTIV); Kluyverweg 1, NL-2629 HS Delft, The Netherlands, tel:+ 31 15 278 6387, fax: + 31 15 278 3533, e-mail: l.m.m.boermans@lr.tudelft.nl

Subscription is restricted to OSTIV members only. Rates/calendar year, based upon surface bulk delivery, are Euro 45 for Individual/Local club membership; Euro 80 for Scientific/Technical Organisation/Library Membership and Euro 250 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 scientific, technical and/or operational review before being accepted for publication. Guidelines for preparation and submission of manuscripts can be found at www.ostiv.fai.org

The name *Technical Soaring* and its cover layout are fully rights-protected and belong to the Soaring Society of America (SSA); they are used by permission.