

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. Ir. L.M.M. Boermans
The Netherlands

VICE PRESIDENT

Dipl. Ing. Christoph Kensche
Germany

MEMBERS OF THE BOARD

Dipl. Ing. John Ashford - *Australia*
Prof. Dr. Ward Hindman - *USA*
Prof. Dr. Mark Maughmer - *USA*
Ian Oldaker - *Canada*
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

SSA

CHAIRMAN OF THE BOARD

Dianne Black - Nixon

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

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

Data Acquisition System and Experimental Set-up for Wind Tunnel Study of 304CZ Sailplane's Winglets

P. Anderle, L. Smrcek, F. Coton.....68



The Froude Number as a Predictor of Mountain Lee Wave Phenomenon

Ronald A. Mastaler, Nilton O. Renno.....78



Some Thoughts on Airworthiness Requirements

Jozsef Gedeon.....89



Volume 29, Number 3

Printed January 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 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 & Local club membership; Euro80 for Library, 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 OSTIV members should be sent to Prof. Ward Hindman; Earth & Atmospheric Sciences Dept., The City College of New York; Convent Ave. at 138 th Street; New York, NY 10031; USA. email: <hindman@sci.cuny.cuny.edu.>. Material from 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.