# Technical Soaring



April - June 2015

The Scientific, Technical and Operational Journal of the Organisation Scientifique et Technique Internationale du Vol à Voile (International Scientific and Technical Organization for Gliding)

#### **EDITOR-IN-CHIEF**

Dr. Judah Milgram

#### ASSOCIATE EDITORS

Prof. Dr. Zafer Aslan — *Turkey* Chair, Scientific Section and Chair, Meteorological Panel

Prof. Dr. Mark Maughmer — *USA* Chair, Technical Section

Dipl. Ing. Helmut Fendt — *Germany* Chair, Sailplane Development Panel

Dipl. Ing. Ian Oldaker — *Canada* Chair, Training and Safety Panel

Prof. Dr. Goetz Bramesfeld — Canada

# JOURNAL ON-LINE MANAGER

Em. Prof. Dr. Edward (Ward) Hindman

#### OSTIV PRESIDENT

Prof. Rolf Radespiel *Germany* 

## OSTIV VICE PRESIDENT

Prof. Dr. Mark Maughmer *USA* 

# MEMBERS OF THE OSTIV BOARD

Prof. Dr. Zafer Aslan — Turkey
Prof. Dr. Goetz Bramesfeld — Canada
Dipl. Ing. Helmut Fendt — Germany
Dr. Judah Milgram — USA
Dipl. Ing. Ian Oldaker — Canada
Dr. Ing. Lukáš Popelka — Czech Republic

Copy editing/Layout: Judah Milgram Washington, DC USA

© 2015 Organisation Scientifique et Technique Internationale du Vol à Voile All rights reserved ISSN#0744-8996

# 

Wind Tunnel Measurements on Details of Laminar Wings

Volume 39, Number 2

Technical Soaring (TS) documents recent advances in the science, technology and operations of motorless aviation.

TS is published quarterly by the Organisation Scientifique et Technique Internationale du Vol à Voile (International Scientific and Technical Organization for Gliding, OSTIV), c/o TU Braunschweig, Institute of Fluid Mechanics, Hermann-Blenk Str. 37, D-38108 Braunschweig, Germany. E-mail: president@ostiv.org; URL: www.ostiv.org.

Subscription is restricted to OSTIV members but material can be submitted by anyone. Rates per calendar year are €25 for students under 25 years of age, €45 for Individual/Local Club Membership; €80 for Scientific/Technical Organization/Library Membership and €250 for Active Members (National Aero Club Members of FAI).

Submitted research papers will be peer-reviewed. Guidelines for preparation and submission of manuscripts can be found in this issue and on the OSTIV website in the 'editor' section.

TS is online (full-color) at journals.sfu.ca/ts/. Back issues, from Vol. 1, No. 1 to the current issue, are online. OSTIV members have complete access to TS online; non-members may access titles and abstracts. Members should contact the webmaster, Jannes.Neumann@t-online.de, for access. Back issues can be purchased from either the OSTIV Secretariat or, in the USA, by email from bernald@juggernaut.com. A quick-start guide to access TS online is on the OSTIV website.

An index of *Technical Soaring* (Vol. 1 through Vol. 34) is at soaringweb.org/Soaring\_Index/Technical\_Soaring. Issues are indexed by author, subject and issue. Additional information on *TS* and information on OSTIV Publications can be found on the OSTIV website in a searchable Publications Index.

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

### **Open Access Policy**

**Reader Rights.** For the first twelve months following publication, only OSTIV members may download material. After twelve months, free download to all.

**Reuse Rights.** No reuse for the first twelve months, after which material may be reused in other works only with permission of the authors of the article.

**Copyrights** Authors retain copyright to the basic material. OSTIV retains copyright to the published version. Works that are inherently in the public domain will be noted as such on their title pages.

**Author posting rights** Author may not post copies of their articles on websites until twelve months after publication. After twelve months, author may distribute freely by any means and post to third-party repositories. Authors may distribute individual copies of their articles at any time.

**Archiving.** Authors may archive their own papers on the web and in Open-Access archives as follows. The version of the paper as first submitted to Technical Soaring may be archived at any time. The version as published may be archived in Open-Access archives starting 12 months following publication. OSTIV may archive papers as published at any time.

**Machine Readability** After twelve months, article full text, metadata, and citations may be crawled or accessed without special permission or registration.