XXX OSTIV Congress Szeged, Hungary
28 July - 4 August 2010

www.ostiv.fai.org

Information

The XXX Congress of the "International Scientific and Technical Organization for Soaring Flight" – Organisation Scientific et Technique Internationale du Vol à Voile (OSTIV) - will be held at the site of the 31th World Gliding Championships in the Open-, 18m- and 15m Class, Szeged, Hungary, from Wednesday 28 July through Wednesday 4 August 2010. The Congress addresses all scientific and technical aspects of soaring flight including motorgliding, hanggliding, paragliding, ultralight sailplanes and aeromodeling.

Opportunity for presentation and discussion of papers is given in the following categories:
Scientific Sessions: Meteorology, Climatology and Atmospheric Physics as related to soaring flight.
Technical Sessions: Aerodynamics, Structures, Materials, Design, Maintenance and Sailplane development.
Training and Safety Sessions: Training and Safety, Coaching, Health and Physiology.
Joint Sessions: Scientific and technical topics, reviews or news, presented in an informative and entertaining way for the broader interest of the World Gliding Championships and OSTIV.
Topics on instrumentation, electronics, statistics and other system technologies will be included in the sessions for which the application of the technology is most relevant.

Typical and Suggested Topics are:
Scientific Sessions:
Meteorology:
- Meteorological data acquisition and service for gliding operations;
- Weather forecasting for soaring flight;

Climatology:
- Climates that support soaring flight;
- Climate-change and soaring

Atmospheric Physics:
- Mesoscale and small convective, baroclinic or orographically induced phenomena;
- New observations; measurements or analysis of convergence lines, cellular patterns, shear structures, standing and moving waves, short period cycles, turbulence, boundary layer in complex terrain;
- Analytical techniques of delineating thermal and mesoscale structures from routine or experimental ground or flight data, or from remote sensors;
- Modeling of thermals, mesoscale or microscale structures;

Technical Sessions:
The technical sessions will cover all aspects of design, development and operation of sailplanes, motorgliders, ultralights and solar- or human-powered aircraft. Topics may include, but are not limited to:
- Airworthiness, structural concepts, new materials, fatigue, crashworthiness, manufacturing processes;
- Aerodynamics;
- Stability and control;
- Airframe vibration and flutter;
- Propulsion systems;
- Design integration and optimization;
- New developments in flight testing;
- Airworthiness requirements;
- Cockpit instruments, including navigation instruments (GPS etc.).

Training and Safety Sessions:
Training and Safety sessions will be held on subjects covering disciplines such as:
- Flight training, theory and analysis of techniques and results, psychology, objectives, training facilities and material;
- Safety, health, human physiology and psychology in connection with soaring;
- Human and medical factors in aircraft design and operation;
- Piloting techniques;
- Flight operation in controlled airspace;
- Safety devices.

Joint Sessions:
Joint Sessions are collecting topics of general interest in the field of gliding as:
- General philosophy of competition classes;

- Documentation of badge and record flights;
- Common interests with other air sports like hanggliding, paragliding, microlights and ultralights;
- Human-powered flight; Solar-powered flight.

Deadline for Abstracts and Final Paper:
The deadline for the Abstracts –max. two A4 pages including figures- was **1 May 2010**. Letters of acceptance together with instructions for paper preparation were mailed **15 May 2010**. Deadline for the paper – max. about 10 pages including figures - is **1 July 2010**, guidelines on the *Technical Soaring* website (journals.sfu.ca/ts/). Please use the form below to send a copy of your Abstract to the OSTIV Secretariat, clearly marked as either scientific-, technical-, training and safety- or joint-session.

Oral presentations at the Congress will be limited to 30 minutes and should consist of highlights of the written paper. The paper will be automatically submitted for publication in OSTIV's refereed international journal *Technical Soaring* (ISSN 0744-8996) after the Congress.

There is **no registration fee** for the Congress!

If you would like further information about OSTIV or the Congress, or if you wish to attend the Congress, please complete the form below and send it to the OSTIV Secretariat.

Call for nominations OSTIV Plaque / Klemperer Award:
At OSTIV Congresses an OSTIV Plaque and Klemperer Award is presented to the person who has made a most noteworthy scientific or technical contribution to soaring flight. The prize for the year 2010 will be presented during the Opening Ceremony of the XXX OSTIV Congress. All Active and Individual OSTIV Members can send in nominations. In making such nominations, particular attention should be given to recent contributions to soaring flight by the nominee, although earlier outstanding work will also be taken into account. Nominations should include details of the nominee's contributions and a short biography. All nominations for the OSTIV Plaque / Klemperer Award must be received by L. L. M. Boermans, the President of OSTIV, c/o TU Delft, Faculty Aerospace Engineering, Kluyverweg 1, NL-2629 HS Delft, The Netherlands. But, the **1 May 2010** deadline has passed.

Note of interest / Abstract XXX OSTIV Congress, 28 July – 4 August 2010

Please send this form to: OSTIV- Secretariat c/o TU Delft, Faculty of Aerospace Engineering, Kluyverweg 1, NL-2629 HS Delft, The Netherlands either via e-mail to l.m.m.boermans@tudelft.nl or via fax to (+31) 15 2783533

- ❑ Please, send general information about OSTIV.
- ❑ Please, put my name on the mailing list for further information about the XXX OSTIV Congress.
- ❑ I wish to attend the XXX OSTIV Congress.
- ❑ I wish to present a paper at the Scientific Session of the XXX OSTIV Congress.
- ❑ " Technical Session
- ❑ " Training and Safety Session
- ❑ " Joint Session

My name is: ……

My affiliation is: ……

My address is: ……

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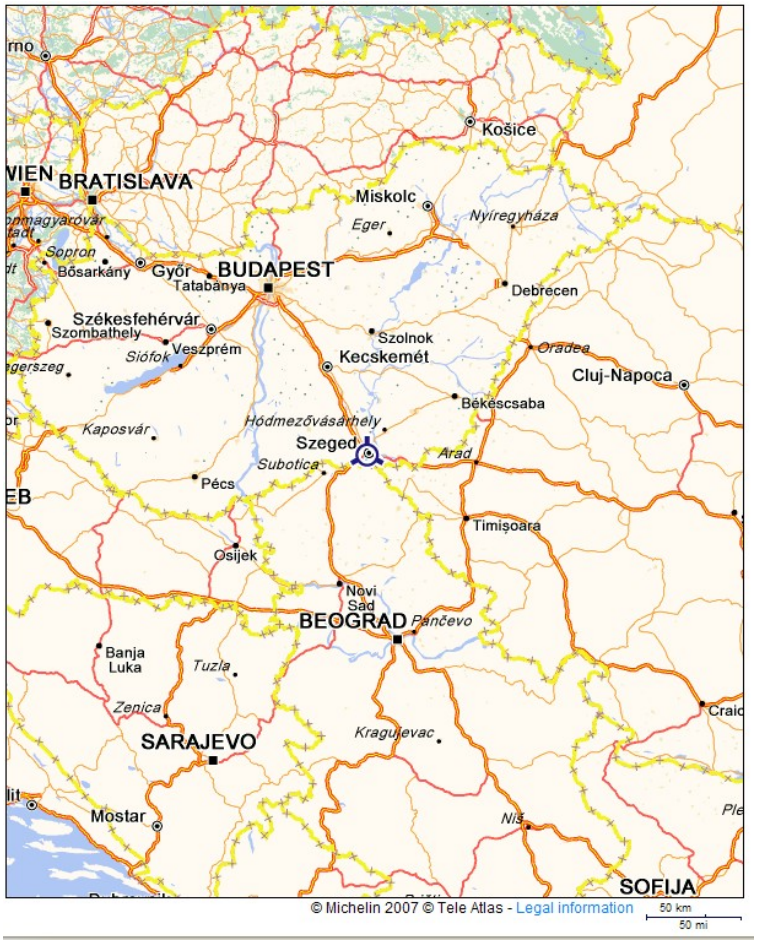
Phone: ……..
Fax: ……..
E-mail: ……..

The Provisional title of my paper is: ……

The Abstract of my paper is described in the overleaf.

Tentative time table:

- Sailplane Development Panel meeting: Monday 26 and Tuesday 27 July
- Opening Ceremony: Wednesday 28 July
- Technical Sessions: Thursday 29, Friday 30 and Saturday 31 July
- Excursion: Sunday 1 August
- Technical/Scientific Sessions: Monday 2 and Tuesday 3 August
- General Conference: Wednesday 4 August



Papers received as of press deadline (1 June 2010):

Author(s)	Titles
Baardman, B.	Cumulus Humilis: Wireless mesh-networking for gliders
Bosman, J.	Computational Fluid Dynamics (CFD) Transition Models for Sailplane Wing/Fuselage Design
Fövényi, A.	Making Thermal Activity Forecasts at the Hungarian Meteorological Service
Gäb, A., C. Santel	Numeric Simulation of Glider Winch Launches
Gedeon, J.	State of the Natural Parameter Method for Chaotic Data Analysis and Modeling
Gorisch, W.	Glider's Rate-of-climb Exerted by Atmospheric Turbulence
Hartmann, J.	Experimental Verification of the Passive Tip Blow-Out Yaw Control System Design Calculations
Hindman, E., et al.	An On-line Meteorological Self-briefing System for Glider Pilots
Hindman, E., et al.	Improving an Atmospheric Numerical Model using Meteorological and Glider Flight-recorder Data
Jonker, A., J. Bosman	The Effect of Water Absorption on the Performance of Composite Materials
Knauff, T.	A Ten-year Review of Glider Accidents
Kolláth, K.	Indirect Effect of Saharan Dust Aerosols on High-level Clouds may ruin Thermal Activity
Polyanszky, Z.	Non-mesocyclone Tornadoes in Hungary
Popelka, L.	CFD and Wind-tunnel Testing of Passive Flow Control Devices on Sailplane Ailerons
Sachs, G., et al.	Wind Effects on Maximum-Range Sawtooth Flight
Sachs, G., et al.	Flight Recording of Dynamic Soaring in Albatrosses Using Miniaturized GPS Loggers
Sachs, G., et al.	Maximum Range Performance of Electric Motor Gliders with Retractable Engine
Scherrer, M., S. Melber	CFD in sailplane design - LS6 winglet design experience
Souckova, N., et al.	Parametric Study on Flapped Airfoil Lift Enhancement by Vortex Generators
Zhang, N., et al.	Measuring 3D Wind Fields in Mountain Waves using Sailplane Flight Data
Zsolt, S.	Collision Warning for General Aviation (Trajectory Prediction)