



Report

Organization Scientifique et Internationale du Vol à Voile (OSTIV)
International Scientific and Technical Gliding Organisation
www.ostiv.org

Rolf Radespiel, President

International Gliding Commission
Meeting on 8 and 9 March 2019
Budapest

Braunschweig, February 2019

Report on the activities of OSTIV for the period 1 March 2018 to 1 March, 2019

1. Review of OSTIV Board Operations

Extended Board of OSTIV:

President: Prof. Dr. Ing. Rolf Radespiel, Germany

Vice-President: Prof. Dr. Mark Maughmer, USA

Members: Prof. Dr. Zafer Aslan, Turkey; Dr. Goetz Bramesfeld, Canada; Dipl.-Ing. Michael Greiner, Germany; Dr. Judah Milgram, USA; Richard Carlson, USA; Dr. Ing. Lukas Popelka, Czech Republic; Ir. Gerard Robertson, New Zealand.

The Journal "Technical Soaring (TS)" is an Online Journal, appearing quarterly. TS is downloaded from <http://journals.sfu.ca/ts/index.php/ts>. Chief Editor is Dr. Arne Seitz, Germany.

Note that the TS issues of the last 12 months are only accessible by login. This is a privilege of members only. Non-members can download TS from the 13th month after publishing.

The Board worked on means to improve the outreach of OSTIV. These are

- all previous OSTIV publications are being digitalized,
- free membership to students,
- establishing joint technical sessions sponsored by OSTIV and AIAA on sailplane research and technology, to be held annually as part of the AIAA Aviation Conference.

Significant efforts of Board members went into the preparation of the OSTIV Congress in Hosin, Czech Republic, see item 3 of this report.

2. Panel meetings

The **Sailplane Development Panel (SDP)**, chaired by Michael Greiner, had its annual meeting 28/29 July 2018 in Hosin, Czech Republic. The SDP also hosted an Expert Group meeting on Electric Flight on 27 July. The experts discussed

- possibility of establishing joint standards in electric flight
- funding possibilities of joint research activities
- Status of FES batteries
- Rule making activities at EASA.
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The general meeting of SDP on 28/29 July covered the items

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- update on developments at EASA
- computing gust load factors
- assessment of glider load spectra
- status of LiFePO4 batteries in sailplanes
- plans of future work in sailplane crashworthiness

The next SDP meeting will be in Cologne, Germany, on 11 October 2019.

The **Training and Safety Panel (SDP)**, chaired by its new leads, Richard Carlson and Henrik Svensson, will meet in September of the year 2019, in the US. Detailed dates, places and schedules to be announced

The **Meteorological Panel (MP)**, chaired by Prof. Dr. Zafer Aslan, will have its biannual meeting on 7 and 8 March 2019 in Frankfurt, Germany. There will be around 15 briefings on a variety of subjects of meteorology, as well as panel discussions.

3. XXXIV OSTIV Congress

The XXXIV OSTIV Congress was held at the site of the 35th World Gliding Championships in the 18m-, 20m-, and Open Class, in Hosín, Czech Republic, from 28 July - 3 August, 2018. The Congress addressed all scientific and technical aspects of soaring flight including motorgliding, and ultralight sailplanes.

The Call for Abstracts had resulted in 37 submissions. This allowed the organizers to arrange for 5 days of Congress including a day of Congress Excursion. The Congress took place in a suitable hangar building, on the site of the Championships. This allowed for excellent interactions between Congress and Championships participants. The two outbreak sessions of the Congress, which took place in the large WGC hangar, were well attended. These sessions featured the following two presentations:

Fritz Kießling: ON THE HISTORY OF FLUTTER PREDICTION AND PREVENTION

Loek Boermans: ON THE WAY TO GLIDE RATIO 100:1.

The logistics of the Congress were very well prepared by the local organizer, Dr. Lukas Popelka. The participants greatly enjoyed the OSTIV Excursion to the HpH sailplane manufacturer and to the historic Kutná Hora town on Wednesday, 1st August. OSTIV also acknowledges the manifold support received by the WGC organizers, during the period of Congress preparations, and during the days of the Congress, as well as significant financial support provided by the major sailplane manufacturers.

4. XXXV OSTIV Congress

The next OSTIV Congress will take place in Summer 2020. It could be held either in conjunction with the 36th FAI World Gliding Championships 2020, Stendal-Borstel, Germany (18m, 20m, Open), or with the 36th FAI World Gliding Championships 2020, Châlons-en-Champagne, France (Club, Std., 15m).

The place of the Congress will be soon decided based on availability of Congress facilities at these sites.

5. OSTIV Awards

OSTIV presented four awards to renowned scientists and engineers in the field of sailplane technology during 2018.

Dr.-Ing. Fritz Kießling received the **OSTIV Plaque with Klemperer Award** for providing practical flutter analysis methods for high-performance sailplanes.

Dipl.-Ing. Helmut Treiber received the **OSTIV Prize** for the introduction of carbon fibres in sailplane construction.

Dr.-Ing. Karl-Heinz Horstmann and Dipl.-Ing. Armin Quast received the **OSTIV Prize** for their lifelong contributions to the science and technology of sailplanes and soaring flight.

OSTIV thanks these individuals for their great contributions to gliding.

Rolf Radespiel