Report on the activities of OSTIV for the period 3 March 2017 to 1 March, 2018

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; Dipl. Ing. Ian Oldaker, Canada; 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, see item 3 of this report.

2. Panel meetings

The Sailplane Development Panel (SDP), chaired by Michael Greiner, had its annual meeting 2017 on 5 and 6 October at the Wasserkuppe, Germany. Items discussed were
- gust load factors
- spiral dive (jointly with the Training and Safety Panel)
- electrical propulsion. SDP will form an expert group to discuss future rule making, exchange of experience and knowledge, standardization, and initiate research activities.

- technical support of OSTIV to IGC with respect to defining suitable 13,5 m class rules. The Panel completed the first draft of “BASIC REQUIREMENTS TO ENSURE
SAFETY AND FAIRNESS”. The purpose of this document is to define a minimum standard in design, so that among sailplanes, which are developed to different airworthiness codes, none falls below a certain level of safety. Compliance with these requirements can be documented by self-declaration of manufacturers. Engineers and scientists of OSTIV believe that this will be an important step for ensuring safety and fairness in future championships of soaring classes where microlight aircraft compete. The Panel Chair handed over the requirements document to IGC Bureau in October 2017.

The Training and Safety Panel (SDP), chaired by Ian Oldaker, had its annual meeting in October 2017 on 6 and 7 October at the Wasserkuppe, Germany. Items discussed were:
- safety in numbers, trends and improvements by advanced practises
- accident databases
- spiral dives (jointly with SDP)
- stall warning systems (jointly with SDP)
- simulators: A joint view at these emerging means remains to be developed
- fit-to-fly criteria, ageing instructors
- OSTIV document of best practises in gliding operations. The Panel has now accomplished a first draft, to be refined and then published

The Meteorological Panel (MP), chaired by Prof. Dr. Zafer Aslan, had its meeting on 2 and 3 February 2018 in Bremen, Germany. 19 briefings on a variety of subjects were given, in the fields of:
- waves
- thermals
- meteorological services
- training.

3. XXXIV OSTIV Congress

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

The Call for Abstracts published in October 2017 has resulted in 38 submissions, which cover all areas of sailplanes, soaring, and flight meteorology. This will allow the organizers to arrange for 5 days of Congress including a day of Congress Excursion. The organisers of the WGC have secured a suitable hangar building, to be used for the Congress, on the site of the Championships. This will allow for excellent interactions between Congress and Championships participants.

OSTIV Board, the Organizing Committee, and Congress participants look forward to making the Congress in Příbram a great success.

Rolf Radespiel