



ORGANISATION SCIENTIFIQUE
ET TECHNIQUE INTERNATIONALE DU VOL 'A VOILE
- O.S.T.I.V. -
INTERNATIONAL SCIENTIFIC AND TECHNICAL
ORGANISATION FOR GLIDING
(Affiliated Member of the Fédération Aéronautique
Internationale, F.A.I.)

President: L.M.M. Boermans

Delft, January 8, 2008

International Gliding Commission

Meeting on February 29 and March 1, 2008
Rome, Italy

REPORT ON THE ACTIVITIES OF THE INTERNATIONAL SCIENTIFIC
AND TECHNICAL ORGANISATION FOR GLIDING (OSTIV),
for the period March 3, 2007 to February 29, 2008,
by Loek Boermans, President of OSTIV and Helmut Fendt, Chairman of the SDP.

On January 2, 2008 our highly respected Honorary Member Prof. Dr. **Piero Morelli** passed away. Piero has been OSTIV Board Member for many years, Member of the Sailplane Development Panel since its foundation more than 40 years ago, and Chairman of this Panel from 1976 to 1998, 22 years. In this way he contributed enormously to safety in gliding. Therefore OSTIV and the gliding community are very, very much indebted to this great man for all his activities, for the benefit of gliding and in particular safety, worldwide!

On March 30, 2006 our highly respected Honorary Member Lt. Col. **Floyd J. Sweet** passed away at the respectable age of 91 years.

Floyd was one of the founding editors and publishers of our **Journal of Technical Soaring** in 1970, when he was the chairman of OSTIV's Technical Section. Production went on for several years until the late '70s when the Soaring Society of America took over production and distribution.

OSTIV published its congress papers, painstakingly edited by Cedric Vernon, initially in the Swiss Aero Revue and since 1970 also in Technical Soaring. In 1986 it was decided to continue publication in Technical Soaring only. This process went on in a very satisfactory way for many years, until some years ago, due to financial problems at SSA, publication of Technical Soaring became seriously delayed. The OSTIV Board and SSA Board decided to cease cooperation after Volume 27. After a successful testing period with a new printer the OSTIV Board decided to take the publication process in own hands, starting with Volume 28. With the great help of our Honorary Member Bernald Smith, Board Member prof. Mark Maughmer and the new Chief Editor prof. Edward (Ward) Hindman, a process has been elaborated to catch up the publication scheme as fast as possible.

And now it is really a great pleasure for me to state that we are back on track again! The future of our publication medium, vital for OSTIV, is secured.

Address: OSTIV c/o TU-Delft
Fac. Aerospace Engineering
Kluyverweg 1
NL-2629 HS Delft, The Netherlands

Phone: +31.15.278.6387
Fax : +31.15.278.3533
e-mail: l.m.m.boermans@lr.tudelft.nl

Awards

At the Opening Ceremony of the FAI General Conference on 11 October 2007, OSTIV's Honorary Member and member of the Sailplane Development Panel **Allan Patching** received the highest international award in gliding, the **FAI Lilienthal Award**. Allan, active in gliding for over 60 years, has been involved from the very beginning in glider construction and airworthiness matters, in particular fatigue. Highlights from his research are the early recognition of fatigue in Blanik gliders, the extended fatigue testing of a Janus glider wing which provided an important contribution to the extension of the operational life of GRP gliders worldwide, and the development of fatigue design requirements as part of OSTIV Airworthiness Standards.

At the same event OSTIV President **Loek Boermans** received the **Pirat Gehriger Diploma** for his contributions to the aerodynamic development of gliders. It was a great surprise for me and I feel very honoured!

Activities of the Panels

The annual meetings of the **Sailplane Development Panel (SDP)**, chaired by Dr. Michael Rehmet, and **Training and Safety Panel (TSP)**, chaired by Ian Oldaker, took place from 1 to 3 November 2007 at Delft University of Technology, the Netherlands. The first two days the panels met separately, and on the third day they had a joint meeting.

At the **Sailplane Development Panel** Dr. Rehmet announced his retirement as chairman of the SDP and gave an overview about SDP's work during the 9 years of his chairmanship. He proposed Helmut Fendt to be his successor and SDP accepted the change in chairmanship unanimously.

Many items were on the agenda of the 3 days meeting, e.g: jet engine powered gliders, airbrakes - pros and cons of L/D 1:5, cockpit damage report forms, new concepts for crashworthy cockpits, weak link strength and loads from winch launch and aerotows, landing gear requirements, and cooperation of EASA and OSTIV.

Two presentations were offered by guests: Prof. Dal Monte from Rome gave a presentation on the development of cockpit crashworthiness based on his experience with race boats and race cars, and Prof. Domenico Coiro gave a presentation of his work at the University of Napoli.

EASA followed again OSTIV's standing invitation to send observers to the SDP meetings and Boudewijn Deuss, EASA Initial Airworthiness Rulemaking Officer, and Stefan Ronig, PCM General Aviation, joined the meeting and participated in the discussions in a dedicated manner. The SDP Crashworthiness Subcommittee, chaired by Petr Kousal, had a workshop meeting on February 27th / 28th 2007 in Braunschweig, drafting the **"Cockpit Crashworthiness NPA"** according to the "Terms of Reference", set by EASA Rulemaking. The tight timeframe could be complied with thanks to the outstanding engagement of Petr Kousal. During the Delft meeting, EASA representative Boudewijn Deuss stressed that initiatives from SDP to EASA are appreciated.

At the **Training and Safety Panel** meeting representatives of Denmark, Sweden, Belgium, UK, Germany, Switzerland, USA, Netherlands, Canada and Austria presented their safety reports and discussed the safety audits in their countries; checklists will be exchanged. Experience with simulators in Sweden, UK and, Denmark is positive; they are used for basic instruction, instructor courses and even aerobatic training. Feedback of stick forces is needed

to get the real feel. A study on winch launching safety in UK was discussed. The work on the draft “Standard Operating Procedures” was debated; it was concluded that –similar to the OSTIVAS airworthiness requirements- a global document is needed with a set of recommended procedures, and details possibly to be controlled by the local organisations. The current document will be amended accordingly.

At the **joint meeting of the SDP and TSP** several items, affecting both panels, were discussed. Regarding cockpit crashworthiness, Prof. Dal Monte from Italy gave a presentation about lessons learned from race boats and race cars. Promotion of the “Cockpit Damage Report” (CDR) forms was on the agenda; they will be translated into French. The issue of short field landings over high obstacles and the pros and cons of L/D 1/5 was discussed. Effect of the brake-flaps, changing lift distribution and creating induced drag, was discussed. Dr. Michael Rehmet gave a presentation on weak links for aerotow and winch launch, stressing that for the winch launch a correct weak link avoids overloading the structure of the glider. SDP should get together with manufacturers to increase the possible strength of the weak links. Cockpit layout and ergonomics were discussed again; different opinions of designers and pilots were underlined. Pilots demand “single lever engine controls” but at short term, since the existing motorgliders cannot easily be changed, mental training on the ground was regarded to be very important, starting with emergency exit and going to training of engine operation on the ground. Finally, experience with microlights for aerotow was exchanged.

Next meetings of the Sailplane Development Panel and Training and Safety Panel will take place during the XXIX OSTIV Congress in August 2008 in Lüsse, Germany

The **Meteorological Panel (MP)**, chaired by Dr. Hermann Trimmel, had its annual autumn meeting – a flying session followed by a scientific session - in St.Auban, France, from 24 to 30 September 2007. After some interesting days of flying in good thermals and waves, a small group of experts worked on a new edition of the “Handbook of Meteorological Forecasting for Soaring Flight”. The World Meteorological Organization (WMO) will take over the printing costs and publish it as a “Technical Note”. It is intended to have this manual available in one year and serve as a guideline for meteorological services. On September 29 some interesting papers were presented. Main subjects were: verification of forecasts for competitions using the logger files, presentation of forecasts for competition pilots and the mountain wave project. During the discussions about “meteorological information for glider pilots on internet” it was realized that more attention should be paid to the pilot’s knowledge of meteorology and a joint working group with the Training and Safety Panel was proposed.

Next meeting of the Meteorological Panel is scheduled for September 2008, Vienna, Austria.