OSTIV SECTION

Report on the XXV OSTIV Congress at St. Auban, France, 1997

by President L.M.M. Boermans.

The XXV OSTIV Congress was held from July 3 through July 10, 1997 at St. Auban, France, together with the XXV World Gliding Championships.

At the Congress Opening Ceremony, the OSTIV Awards were presented:

The OSTIV Plague with Klemperer Award was given to Loek Boermans "for his noteworthy contribution to sailplane aerodynamics over twenty years of outstanding activity combining theoretical and experimental methods, for his enthusiasm for teaching and for his ability to transfer knowledge and know how to his university students".

The OSTIV Prize for outstanding improvement in sailplane technology was given to the design team of Stuttgart University which "in competition for the Berblinger Prize, challenged by extremely severe requirements at the frontier of technological possibilities, in three years of superbly organized work, produced the winning prototype Icare 2, a great step forward in the development of powered motor gliders".

The Special OSTIV Prize was awarded to Dave Ellis and the Cambridge team "for the first IGC approved secure, integrated GNSS flight recorder system. Their work has been instrumental in bringing GPS flight recorder technology into the sailplane cockpit".

The OSTIV Diploma for the best technical paper presented at the previous OSTIV Congress in Omarama, New Zealand, in 1995 "being of particular value to OSTIV" was given to Christoph Kensche for his paper "Influence of Composite Fatigue Properties on Lifetime Predictions of Sailplanes". His new, extensive test results and sound analysis will play an important role in extending the service life of the fleet of fiber glass sailplanes.

The OSTIV Diploma for the best meteorological paper of the previous congress was awarded to Rudolf Mathar for his paper "Stochastic Models of Thermal Convection: An Extended MacCready Theory and a Simulation Tool". His model is a very useful tool for decision making in cross country training. The simulation process runs on a standard PC; the pilot can practice and improve his tactics in flying various speeds in a stochastic random weather environment by comparing himself with other competitors.

A special OSTIV recognition went to Mark Kennedy and Cedric Vernon for their efforts in publishing OSTIV Congress papers in *Technical Soaring* and making it the worldwide source of scientific and technical information on soaring.

The keynote lecture, presented by Loek Boermans and announced as "Glide Ratio 1:80, A Solar Challenge?" dealt with the development of wing airfoils from the early 1910's on up to today's possibilities to reach 100% laminar flow through boundary layer suction generated by a solar energy driven pump. He concluded that he would have preferred as title for his lecture "Glide Ratio 1 : 85, A Solar Challenge!"

During the next six days of the Congress, 49 papers were presented on technical and meteorological subjects in the categories: Aerodynamics: Flight Mechanics and Performance; Design and Development; Loads, Materials and Structures; Motor gliders, Propulsion; Flight Testing, Instrumentation; Training and Safety; Convection; Waves and Rotors; Climatology; Forecasting.

A booklet with two-page abstracts was distributed among those attending, and a brief report about all presentations was published each days in the daily bulletin "Mondial Visions" of the World Gliding Championships. The papers will be published in future issues of *Technical Soaring*.

At the General Conference held on the last day of the Congress, a nearly complete new Board of OSTIV was elected. In the next issue of *Technical Soaring* the new Board members as well as the new Honorary Members of OSTIV will be presented.