

# REMARKS OF THE PRESIDENT

Although this is being written one month prior to the XXV OSTIV Congress to be held July 3-11, 1997, at Saint Auban sur Durance, France, you will receive it one month after the congress has been completed.

Unfortunately, the quarterly character of *Technical Soaring*, our OSTIV Technical and Scientific Journal, does not allow a sequence of publication and distribution adapted exactly to the time table of the congress, but I think it important to inform our readers in an overview in this issue about the papers that have been offered and accepted for the recently completed Congress. It is a remarkable list pointing to a scientific/technical meeting with a wide spectrum and a high quality of interesting topics and objectives regarding the sport of gliding and the neighboring kind of sports such as hanggliding, paragliding and ballooning. All papers will be published after being reviewed, as usual, in future quarterly issues of *Technical Soaring*, starting with Vol. 21, No. 4, the October 1997 issue.

A preprint booklet with extended abstracts (1-2 pages per paper) is available during the congress and can be ordered thereafter through the OSTIV Secretariat.

**Manfred Reinhardt, President**  
OSTIV

## PAPERS

The following papers are scheduled for presentation at the XXV OSTIV Congress at Saint Auban.

### 1. TECHNOLOGY

#### 1.1 Aerodynamics

1.1.1 Pressure measurements on variable incidence winglets. Crosby, Charles, Pretoria, South Africa.

1.1.2 An empirical criterion for laminar-to-turbulent boundary layer transition. Eppler, Richard, Stuttgart, Germany.

1.1.3 Experimental research of the configuration of wing-tip drag reduction for light aircraft. Deng, Yanmin, Hu, Jizhong, Beijing, China.

1.1.4 Sailplane winglet design. Maughmer, Mark D., Kunz, Peter J., University Park, USA.

1.1.5 Navier-Stokes computations on a laminar airfoil. Soenne, Erkki, Linköping, Sweden.

1.1.6 Numerical predictions of ground effect on NACA 0012 aerofoil. Darida, Mauro and Smrcek, Ladislav, Glasgow, Great Britain.

1.1.7 Airfoil design for sailplanes and ultralight aircraft. Reneaux, J., Thibert, J.J., Rodde, A.M., Chatillon, France.

1.1.8 Comments on progress of wing profile aerodynamics related to Standard Class glider performance. Koivisto, Pekka, Helsinki, Finland.

#### 1.2 Flight Mechanics, Performance

1.2.1 Aerodynamics, dynamics and performance prediction of sailplanes and light aircrafts. Coiro, D.P. and Nicolosi, F., Naples, Italy.

1.2.2 The effect of inertia on the winch launch. Riddell,

J.C., Harrogate, Great Britain.

1.2.3 A theoretical contribution to the problem of tow-plane upsets. de Matteis, Guido, Torino, Italy.

1.2.4 Use of satellite navigation for sailplane performance measurements. Lipp, Andreas, Braunschweig, Germany.

1.2.5 Trajectory of the parachute bag during the deployment phase. Melber, Stefan, Roeger, Wolf, Aachen, Germany.

1.2.6 Analysis of low speed performance. Hermanspan, Fred, Seattle, USA.

### 1.3 Design and Development

1.3.1 Sailplane fuselage and wing-fuselage junction design. Boermans, Loek M.M., Delft, The Netherlands, Nicolosi, Fabrizio, Naples, Italy.

1.3.2 Design and analysis of the standard class tailless sailplane DUTAG. Seffinga, B.F., Wittebrod, Ir.M.S.G., Delft, The Netherlands.

1.3.3 A comparative evaluation of emergency parachute rescue system design aspects. Woollard, Mike G., Letchworth, Great Britain.

### 1.4 Loads, Materials and Structures

1.4.1 Design proposal and wing box manufacturing of a self launching solar-powered sailplane. Romeo, Giulio, Torino, Italy

1.4.2 Heavily loaded glued joints. Eppler, Richard, Stuttgart, Germany.

1.4.3 The effect of energy absorbing foam in firm landings - dynamic and orthopaedic considerations. Johnston, Ian, Edinburgh, Great Britain.

1.4.4 Method of lifetime prediction of sailplane fiber structures. Kensche, Christoph, Stuttgart, Germany.

1.4.5 Further fatigue testing of a GFRP glider wing. Patching, Alan and Wood, L.A., Melbourne, Australia.

1.4.6 Glider ground impact tests. Ludwig, Niels, Conradi, Manfred and Roeger, Wolf, Aachen, Germany.

1.4.7 Crashworthiness of gliders. Sperber, Martin, Koeln, Germany.

1.4.8 Risk evaluation through the glider stall. Suchodolski, Stanislaw, Wisniewski, Jacek, Zak, Pawel, Warsaw, Poland.

### 1.5 Motorgliders, Propulsion

1.5.1 Study of single-blade propulsion system for retractable engine sailplanes. Balocchi, P., Beretta, M., Fumagalli, G. Vigano, Italy.

1.5.2 Design, test and certification of low drag engine installation for a high performance motorglider. de Faria Bica jun., Sergio, Porto Alegre, Brazil.

1.5.3 A method to design solar powered aircrafts. Rehmet, M., Voit-Nitschmann, R., Kroeplin, B., Stuttgart, Germany.

1.5.4 Possibilities and requirements for long endurance high flying solar powered platforms. Schoeberl, Ernst, Schweinfurt, Germany.

## 1.6 Flight Testing, Instrumentation

1.6.1 An instrument to aid "in the bucket" operation of laminar airfoils. Crosby, Charles, Pretoria, South Africa.

1.6.2 A new instrument for fuel consumption measurement in light aircraft and motorgliders. Morelli, Piero, Nuccio, Patricio, Torino, Italy.

1.6.3 The BAT-Probe - the ultimate tool to measure turbulence from any kind of aircraft (or sailplane). Hacker, Joerg M., Crawford, T., Adelaide, Australia.

1.6.4 A little flight test laboratory. Folchini, Alberto, Milano, Italy.

1.6.5 Flight test comparisons of modern flapped profiles in a standard configuration. Schofield, Paul D., Auckland, New Zealand.

## 1.7 Training and Safety

1.7.1 The personality of glider pilots: Evaluation with the QPS inventory, comparison with other sports. Gillot, G., Torregiani, M., Nizzoli, S., Dijon, France.

1.7.2 Prolonged soaring flights : recent experiments and datas. Gillot, G., Mahiddine, S., Kane-Toure, N., Dijon, France.

1.7.3 What is to be learned within "cut-away" accidents for training and safety in gliding? Gillot, G., Mahiddine, S., Dijon, France.

1.7.4 Tree methods for risk evaluation of the glider flight. Pancewicz, Tomasz, Szopa, Tadeusz, Warsaw, Poland.

1.7.5 The use of expert opinion in aggregating data for "man-glider-environment" for safety analysis. Rakotomanana, Alain, Warsaw, Poland.

1.7.6 Glider accidents in France from 1989-1993 : The role of the pilot. Caron, Frank, Paris, France.

1.7.7 Avoidable accidents. Blows, Les G., Pulborough, Great Britain.

1.7.8 Which capacities are required in elite gliding : a comparison between "elite-" and "hope-" French pilots. Gillot, G., Roe, A., Kane-Toure, N., Dijon, France.

1.7.9 What high level gliding pilots and coaches expect from a sport-psychologist. Gillot, G., Kane-Toure, N., Jovignot, Fr., Dijon, France.

1.7.10 Demonstration of longitudinal stability and spinning qualities during sailplane pilot training. Waibel, Gerhard, Poppenhausen, Germany.

## 1.8 Miscellaneous

1.8.1 Electrically- and sun-powered gliders : Do they require the definition of new F.A.I. classes? Duranti, Pierlugi, Caselle, Italy.

1.8.2 Ultra-Light Gliders. Morelli, Piero, Torino, Italy.

1.8.3 Present activities of German Akaflieds. Neumann, Jannes, Karlsruhe, Germany.

## 2. METEOROLOGY

### 2.1 Convection

2.1.1 Instability indices for atmospheric convection. Aslan, Zafer, Artvin, Turkey, Tokgoezlue, A., Isparta, Turkey.

2.1.2 Mesoscale convergence and cumulus convection. Hamann, Krzysztof E., Warsaw, Poland.

2.1.3 The ascent of a vortex ring under compressibility and buoyancy. Stuff, Roland, Göttingen, Germany.

2.1.4 Anomalous variometer readings in strongly tilted thermals. West, Julian, München, Germany.

2.1.5 Symmetric instability in some cases of cloud bands in Argentina. Schwarzkopf, M.L., Rosso, L.C., Mueller, G.V., Buenos Aires, Argentina.

### 2.2 Waves and rotors

2.2.1 Lee waves over Europe. Eckhart, Matthias, Berlin, Germany.

### 2.3 Climatology

2.3.1 Soaring in South Africa : The magic of the trough line. Fischer, Helmuth H., Johannesburg, South Africa.

2.3.2 A new approach to the climatology of convective activity. Liechti, Olivier, Benken, Switzerland, Lorenzen, Erland, Offenbach, Germany.

2.3.3 A probe of soaring a straight distance of 2000 km. Kaihe, Li, Anyang, China.

2.3.4. Thermal infrared temperatures and vertical heat flux measured by a powered sailplane. Lindemann, Carsten, Berlin, Germany.

2.3.5 Requirements, developments and trends for General Aviation forecasts in Germany. Leykauf, Herbert, Offenbach, Germany.

### 2.4 Forecasting

2.4.1 Future aspects of meteorological support for competition flights. Heise, René, Berlin, Germany.

2.4.2 PC\_met - New Application for soaring forecasting. Lorenzen, Erland, Offenbach, Germany.

2.4.3 Synergy as a powerful integrated tool for gliding meteorology. Bénichou, Patrick and Santourette, Patrick, Toulouse, France.

### 2.5 Miscellaneous

2.5.1 From the atmospheric boundary layer into the stratosphere - the story of the Airborne Atmospheric Research Group at Flinders University. Hacker, Joerg, Adelaide, Australia.

2.5.2 Soaring weather at the top of the world. Hindman, Edward (Ward), New York, USA.

2.5.3 Scientific soaring adventures. Kuettner, Joachim P., Boulder, USA.

2.5.4 Nowcasting of hazards. Wehry, Werner, Lesch, Lütz Berlin, Germany.