

The 4th OSTIV Congress

THE colorful World Championship Soaring Contest about which assessments and reminiscences have already been printed in earlier issues of this magazine, was not the only event of international scope and moment for the World of Motorless Flight to be held in July in Madrid, Spain. The other was the Fourth Congress of the OSTIV, that international organization devoted to the Scientific and Technical aspects of Soaring Flight which was created several years ago as a successor to the pre-war ISTUS. Previous OSTIV congresses have been held at Samaden, Switzerland, 1948; Paris, France, 1949; and Oerebro, Sweden, 1950. The OSTIV is affiliated with the FAI (Fédération Aéronautique Internationale) as an Associate Member thereof.

Meetings of the OSTIV Board of Directors and of its two sections (Scientific and Technical) convened in Madrid on July 3 and 4.

The Scientific Conference was formally opened on July 5 by the President of the Royal Spanish Aero Club, the Duke of Almodóvar del Río, and by welcoming speeches of high Spanish Government dignitaries and an introduction of the OSTIV President, L. A. de Lange, whereupon Dr. A. Raspet gave what may be called a keynote address entitled "The Potential of Motorless Flight" in which he pointed out in how many ways sailplanes and soaring flight can contribute to the advancement of science and technology.

A copious program of nearly fifty lectures and symposia had to be crowded into the all too brief span of the week of July 7-13, with morning and evening sessions each day separated by a prolonged siesta period dictated by the hot climate and belated by custom. All sessions were held in the assembly room of the luxurious club house of the Royal Aero Club at the Airport Carabanchel Alto within sight of the take-off activities of the World Championship Soaring Contest. A galaxy of exponents of the sciences and techniques of sailplane design and operation and of flight-meteorological research had convened from many countries, such as: Argentina, Austria, Belgium, Brazil, Chile, Denmark, France, Germany, Great Britain, Holland, Italy, Norway, Spain, Sweden, Switzerland, United States, Venezuela. From other countries authors who had been unable to appear in person had sent in papers

which were ready by proxy, notably from Australia, Czechoslovakia, and Yugoslavia.

Of over fifty announced specialized papers, forty-five were actually presented. These lectures were divided into several technical and scientific subject groups, although their presentation did not follow exactly the sequence in which they are reviewed here:

The lovely discussions which followed most of the lectures and the conversations carried on in several languages were a most valuable part of the Congress. So were two recapitulations, one of the Technical, the other of the Scientific Sessions for the benefit of a large audience of pilots and crews of the Championship Contest on July 13, by Drs. Raspet and Kuettner respectively, with a repetition of the films.

A general business meeting of the OSTIV delegates appointed by the National Aero Clubs of the countries participating in the affairs of the OSTIV convened on July 12. The official American delegate was Captain R. S. Barnaby. The agenda of the meeting comprised the acceptance of the Oerebro Constitution of the OSTIV with several recent amendments; Section Reports; Relations and contacts with the FAI and other international organizations of aeronautical interest; Review of the IV Congress and proposals for future activities; Treasurer's Report; Publications; Elections; Program for next two years.

Individuals and organizations may now become members of the OSTIV. The Oerebro 1950 lectures are now available in a nicely printed OSTIV Publication #1 (approximately \$.75). The table of contents is:

Introduction by the President of the OSTIV, L. A. de Lange (Holland, E)
The Airflow over an Extended Ridge, by A. Raspet (U.S.A.) (E, F)
Ways to Record Performances in Soaring, by W. Jucker (Switzerland) (G, E)
Use of Link Trainer in the Preliminary Training of Glider Pilots in Instrument Flying, by W. F. Lederman (Switzerland) (G, E, F)
Some Remarks on Glider Design and Related Subjects, by L. L. Th. Huls (Holland) (E, F)
Performance Measurements of a Soaring Bird, by A. Raspet (U.S.A.) (E, F)
Comparison Flight Tests of Orao II and Weihe, by A. Raspet (U.S.A.) and B. Cijan (Yugoslavia) (E)
E—English; F—French; G—German.



The Madrid lectures of the IV Congress will be published in two volumes, one comprising those dealing with meteorological problems, and the other with the technical and scientific papers.

The result of the elections of officers of the OSTIV for the next two years was:

L. A. de Lange (Holland).....President
W. Eichenberger (Switzerland).....Vice-President
W. B. Klemperer (U.S.A.).....Board Member
B. J. Cijan (Yugoslavia).....Board Member
W. Grandjean (Belgium).....Board Member
J. O. Gibelli (Venezuela).....Board Member
W. Hirth (Germany).....Board Member

The secretary of the OSTIV is Dr. J. P. Honig whose address is: Kanaalweg 3, The Hague, Holland.

The next OSTIV Congress is tentatively planned to be held at the place and approximate time of the next World Championship Contest, to be chosen by the FAI at The Hague in May this year.

The gracious hospitality which the IVth OSTIV Congress was accorded by the Royal Aero Club of Spain in Madrid will leave indelible memories with all who attended it.

The following is a partial list of the papers with brief comments by the author. Others will be listed in subsequent issues of SOARING.

I. The group Design Problems comprised the following papers:

1. Development of Two-seater Sailplanes, prepared by B. Shenstone (Canada) and presented by P. Brooks. The paper reviewed seating arrangements, elaborated on the British two-seater design contest results, and emphasized the practical advantages of a high performance two-seater which is still competitive when flown single.

2. The Aspects of a Low Cost Simplified Sailplane, written by H. Cronkhite (U.S.A.), presented by Lt. Col. L. D. Ely. A way was shown how new technological developments of foam plastic materials may lead to cost reductions.

3. The Development of the Yugoslav Sailplane TRIGLAV, contributed by Jaroslav Koser (Yugoslavia) and read by W. F. Ledermann. He explained the systematic flight research which led to successive improvements.

4. Applications of a Pulse Jet Engine to the Sailplane, by Roger Cartier (France). He gave an account of flights with glider equipped with Escopette valveless jet engines.

II. In a group devoted to Air Worthiness and Accident Prevention belonged the following papers:

5. Airworthiness Requirements for Gliders and Sailplanes, by L. L. Th. Huls (Holland), who emphasized the need for a requirement tailored to the purpose of the aircraft.

6. The Theoretical and Practical Fundamentals of Design for Accident Prevention, compiled by J. Schneider (Switzerland), presented by W. F. Ledermann. They emphasized proper cockpit design.

7. Investigations of Accident and Strength Requirements, by Wm. Nicole (Switzerland), whose paper was illustrated by instructive pictures referring to accidents.

8. Critical Gust, submitted by M. Mazovec (Yugoslavia), presented by Dr. A. Raspet elaborating on the conditions under which the gust load case is of particular importance.

III. The Aerodynamics of the Sailplane were dealt with in the following group of papers:

9. Measurements of Lateral Control Characteristics of Sailplanes, prepared by Jaroslav Koser (Yugoslavia), presented by Dr. A. Raspet. Precise measurements are necessary to obtain objective judgment of the response in flight.

10. Remark Concerning the Calculation of the Lift Distribution Over the Wing, submitted by Dr. Svetopolk Pivko (Yugoslavia), and read by R. Cartier. It included wings of complex plan form.