

# Retrospection on the XIIIth OSTIV Congress in Vršac, Yugoslavia

## General

As usual, an OSTIV Congress was held during the period and in the neighbourhood of the World Gliding Championships, and took place from July 13 to July 21 inclusive. For this purpose, the Aeronautical Association of Yugoslavia made available to OSTIV a very suitable school-building, a Teachers' Training College, in the centre of the city of Vršac, whilst the participants in the Congress were accommodated in a simple, but good hotel in Bela Crkva, about 37 km from that city.

A bus connection – free of charge for the participants – was organized between this hotel, the site of the World Championships and the Congress building; there was every hour a special OSTIV bus, bringing the participants from the airfield to the Congress building and back. Although it was a pity that the Congress could not be held on the gliding site, and that the participants had to make a bus-trip of about 37 km every day from and to their hotel, the fact that a regular bus-service existed between the Congress building and the airfield, and that the participants in both World Championships and OSTIV Congress took their meals in the same building, made good contact possible between the scientists, engineers and sporting men. The official opening of the XIIIth OSTIV Congress took place in the City Theatre of Vršac on July 13 at 11.00 a. m.

Technical and scientific sessions were held from Friday, July 14 to Wednesday, July 19 and on Thursday, July 20. On Wednesday, an interesting and fine excursion was organized for the Participants, also attended by the chairman of the International Gliding Committee of FAI, Pirat Gehriger. At the early hour of 4.30 a. m. busses departed to Beograd, where the participants boarded a hydrofoil boat, which transported them with a speed of about 70 km/h down the Danube to the biggest hydro-electric power system of Europe at Djerdap, near Kladovo, 241 km from Beograd. Favoured by sunshine, one had a fantastic view of the famous «Iron Gate». 52 people took part in the excursion, which ended at 8 o'clock in the evening. After the General Conference of Active Members of the OSTIV on Friday, July 21, the Congress wound up with a festive dinner in the evening of the same day, also attended by team captains and representatives of the press.

## Opening Ceremony

Introduced by Prof. Dr. D. Popovic of the Aeronautical Association of Yugoslavia, the Prime Minister of Serbia, His Excellency M. Bojanic, welcomed participants and guests, and wished the participants besides a successful Congress a pleasant stay in his country. After the Mayor of Vršac, Mr. D. Radic, had expressed his pleasure that his city, Vršac, was the host of the XIIIth OSTIV Congress, Mr. L. A. de Lange opened the Congress. In his speech Mr. de Lange pointed out that the aim of OSTIV, as laid down in its Constitution, is still not generally understood, whilst its relation to and cooperation with the Fédération Aéronautique Internationale, the FAI, and the special character of the OSTIV Congresses are not fully appreciated either. Since it was the tenth time that he had the honour of addressing the representatives of the international gliding world on the occasion of the opening of an OSTIV Congress, Mr. de Lange wished to make use of this anniversary speech to give once more a clear picture of the position of OSTIV in the striving after the further development of soaring flight as well as in the use of the sailplane to collect new scientific and technical knowledge for the benefit of aviation in general. Specifically, he asked for better coordination and communication between the representatives to CIVV and OSTIV within each national organization. «It should be impossible that the opinion of one national organization on a given subject in the FAI differs from the same organization's opinion on the same subject in the OSTIV. It is in the interests of good teamwork between the FAI (CIVV) and OSTIV, that the representatives of the Active Members in these two bodies should discuss the problems beforehand with each other and with other experts **in their own organizations**, and should thus determine a **joint** national point of view.»

After having expressed his thankfulness for the invaluable help during the preparations, given by the Aeronautical Association of Yugoslavia and by the Technical University of Beograd, the President of OSTIV declared the XIIIth Congress opened. Thereupon, Mr. de Lange presented the OSTIV Plaque 1972 with Klemperer Award to Mr. Paul F. Bikle (USA), and gave OSTIV Diplomas to the winner of the Plaque, to Dr. George R. Whitfield (England) and to Dr. Dimitriy A. Kovalov (USSR).

Since Prof. Dr.-Ing. M. Nenadovic had been admitted to hospital shortly before the beginning of the Congress, Dipl.-Ing. M. Ilic read Prof. Nenadovic's inauguration lecture, giving a clear picture of the history of gliding in Yugoslavia and the design of Yugoslavian sailplanes to date. It was a very interesting talk.

## Technical and Meteorological Sessions

These took place in a pleasant airy lecture hall in the Teachers' Training College in Vršac. The technical sessions occupied three and a half days and the meteorological sessions two days.

Among the seven papers on structures and construction no less than three were concerned with flight measurements. Particularly interesting was the paper and film presented by Dipl.-Ing. H. Zacher on flutter investigations made in flight on the SB9 glass-fibre sailplane, the film showing antisymmetric wing-aileron flutter being sustained, at considerable amplitude but without failure, with un-balanced ailerons, and also how the flutter always damped immediately when the pilot tried to induce it after the ailerons had been mass-balanced. Concerning instruments the emphasis was on variometers and total-energy compensation, Prof. Westerboer presenting some very advanced electronic solutions. On performance matters there was again a good deal of emphasis on flight measurements, powered sailplanes being included in the tests reported by Dipl.-Ing. Laurson and Dr. G. R. Whitfield. Aerodynamic papers deal with a variety of subjects ranging from aerofoils (Prof. Dr. F. X. Wortmann) and fuselage airflow to stability under rigid-tow conditions and the dynamic stability of a sailplane with an all-moving tail, the latter highly mathematical subject being ably presented by Dr. Sandauer. The technical sessions were concluded with brief symposia on airworthiness requirements and powered sailplanes. The meteorological sessions opened with a presentation by Dr. Kuettner of Dr. Konovalov's diploma-winning paper «On the Structure of Thermals» which had been intended for presentation at Alpine. Dr. Kuettner's own paper on cumulus waves summarised much of the recent data on this subject and also added new information. Among other papers were several on wave soaring. Dr. T. Bradbury's was not confined to this subject, but described the whole of Mr. M. Field's recent climb to nearly 13,000 metres over southern England, and how by extensive investigation into meteorological and radar records he was able to identify with some degree of certainty such details as which particular clouds the early part of the climb was made in. Airflow and turbulence over mountains accounted for no

less than six papers and a film, many being highly theoretical studies. Prof. Reiter's paper presented a great deal of interesting data on this subject, and more time than was available could have been devoted to it with advantage. Prof. Wallington gave an unscheduled talk on methods of presenting forecasts at contests, using simplified symbols to deal with language problems where pilots of many nations are taking part. Dr. Toutenhoofd gave a progress report on the Explorer sailplane specially instrumented for cloud physics research, and showed a colour film of the sailplane in action, which was a splendid example of combining artistic and technical skills. The majority of the papers will be published in the usual way, first in either «Aero-Revue» or «Technical Soaring», and later in book form.

### General Conference

Since the minutes of the General Conference will be distributed to the Active Members of OSTIV, only a summary of the most important decisions and communications will be given here.

1. An agreement has been reached between OSTIV and the publisher of «Jane's Yearbooks» with respect to the publication of a **third** volume of «The World's Sailplanes».

An editing committee under OSTIV's editor, Mr. C. O. Vernon, will collect and approve the material for this volume. For this purpose a questionnaire has been prepared and is being distributed to designers and manufacturers. It is intended that as far as possible, all sailplanes produced since the previous volume in 1963, shall be included, except that sailplanes produced in limited numbers will be omitted unless they are of particular interest. Sailplanes from WSI and WSII, that are still being made, will also be included. OSTIV members will be able to obtain copies, through the Secretariat, at a discount below the bookshop price. The agreement was signed by the President of OSTIV in Vršac on July 15, 1972.

2. The first chapter of the OSTIV Publication «Introduction to Sailplane Technology», Dipl.-Ing. Stender's «Sailplane Weight Estimation», was published in the second part of 1969. It contains a wealth of useful data, and is often used by students in aeronautical engineering at technical universities. The imprint was 500 copies of which 250 have been sold to date. In the meantime the second chapter by Prof. Dr.-Ing. Piero Morrelli, dealing with the static stability of sailplanes, is nearly complete.

3. The new edition of the «OSTIV Airworthiness Requirements for Sail-

planes» (September 1971) has sold very well, 260 copies of the imprint of 500 having already gone. This reflects the widespread interest in the internationalization of airworthiness standards for sailplanes. From the standpoint of OSTIV, the book is a bestseller! The national Air Boards have been asked for their comments on these new requirements, and several replies have been received to date.

4. A special working conference on the standardization of weather forecasts for soaring pilots, attended by experienced, professional meteorologists from 12 countries, took place in Zell am See from April 26 to May 6, 1971. Dr. Joachim P. Kuettner, in a general review of the conference, said that one result has been the draft of a book which should become a manual for forecasting. This draft, prepared by Mr. T. Bradbury, was discussed during the Congress in Vršac, where it was decided that two manuals will be published: a small one for soaring forecasting and a second containing the background material. The World Meteorological Organization in Geneva has taken a great interest in this work of OSTIV, and offered to review the books, and to publish them under the auspices of OSTIV.

5. With respect to future courses, neither forecasters nor technical courses have been arranged for 1973. As regards the former, Dr. Kuettner remarked that the syllabus for a forecasters training course cannot be decided until the work of the group of meteorological experts has been finished, which will not be before 2½ years from now. As regards the latter, it is hard to organize such a course in the year that the finances of OSTIV are burdened by a coming Congress. Since the date of the next World Gliding Championships and OSTIV Congress in Australia is not yet definitely fixed (January 1974 or January 1975), a decision on date and place of a technical course could not be settled now. The 22nd student course under auspices of OSTIV will be held in Aalen, not far from Stuttgart, Germany, from mid August to the beginning of September. Dipl.-Ing. H. Zacher invited the Active Members of OSTIV to contact him when they are interested in these student courses.

6. In Alpine, the General Conference of OSTIV decided to cancel the Standard Class Sailplane Competition for the OSTIV Trophy, and that consideration be given to an OSTIV Prize for any outstanding improvement in sailplane technology. A proposal for this by the OSTIV Sailplane Development Panel has been discussed in the Board. If rules for such a Prize are fixed and

published, one will expect that the Prize will be given more or less regularly.

For this reason and others, the Board of OSTIV deemed it wise not to have strict, specific rules for the Prize, but to give the freedom to the Board – on advice of the Sailplane Development Panel – to make a suitable award from time to time when some significant improvement comes to light. The General Conference decided accordingly.

7. In the period between the Congresses in Alpine and Vršac, the Board met twice, both at Schiphol Airport, in November 1971 and in May 1972.

The Sailplane Development Panel in that period met once, in Hanglar (Germany) in April 1972. OSTIV entered into an agreement with «Technical Soaring», published by the Soaring Society of America, for publishing OSTIV papers for which space could not be found in «Aero-Revue».

Publication XI, comprising 190 pages, will contain all the papers and will be available at the end of this year, at US \$ 5.00 for **members** and US \$ 6.00 for non-members. The member price just covers the actual costs.

8. It was decided to increase the prices for **all** existing OSTIV publications, for members and non-members, by US \$ 0.50, because of devaluation of the US Dollar and increased handling/postage costs during recent years.

It is for the same reason that the General Conference agreed to a proposal of the Board to increase, from **January 1, 1973**, the subscription for **Active Members** by 15% to US \$ 115.00 per year and for **Individual Members** with US \$ 2.00 to US \$ 7.00/year.

With respect to the latter, one must take into account that from that date OSTIV will have to pay the Swiss Aero Club one dollar more as subscription for «Aero-Revue», which the OSTIV members receive as part of their membership benefits.

9. There are currently **25** Active Members (National Aero Clubs, Gliding Associations, Federations and Societies), **6** Associate Members (Scientific/Technical and Corporate Members) and **250** Individual Members.

10. The result of the election of Board Members was as follows:

L. A. de Lange, President  
Dr. W. Eichenberger, Vice-President  
J. Chouard  
Prof. Dr.-Ing. M. Josifovic  
Dipl.-Ing. L. Pituch  
Lt. Col. (ret.) Floyd J. Sweet  
C. O. Vernon  
P. Weishaupt  
Dipl.-Ing. H. Zacher  
Mr. Rovesti, who was member of the Board since 1968, had to resign because of illhealth. L. A. de L./C. O. V.