

UNION ASTRONOMIQUE INTERNATIONALE  
INTERNATIONAL ASTRONOMICAL UNION

39th Meeting of the Executive Committee

Observatoire de Haute-Provence, Saint-Michel Observatoire, France

Tuesday, 27 August - Thursday, 29 August 1974

P R O C E E D I N G S

The 39th Meeting of the Executive Committee of the International Astronomical Union was held in the Observatoire de Haute-Provence, on 27, 28 and 29 August 1974. The sessions started at 09,00 and ended at 17,00, with a break for lunch. The meeting was preceded, on Monday, 26 August, by an Officers meeting, and followed, on Friday, 30 August, by an excursion to Grenoble to inspect the Campus of the XVIIth General Assembly.

Present at the meeting of the Executive Committee were:

I. Goldberg, President  
J.G. Bolton, Vice-President  
Ch. Fehrenbach, Vice-President  
W. Iwanowska, Vice-President  
B. Lovell, Vice-President  
E.R. Mustel, Vice-President  
B. Strömgren, former President  
G. Contopoulos, General Secretary  
Edith A. Müller, Assistant General Secretary  
A. Jappel, Executive Secretary  
J. Dankova, Administrative Assistant

P.O. Lindblad, Vice-President, was prevented by illness from attending the meeting. C. de Jager, former General Secretary, was excused.

Prof. J. Coulomb, President of IOSU, participated on invitation by the IAU President in the meeting of Thursday, 29 August, from 9,45 to 11,00. Two young French astronomers, Dr C. Froeschle of the Nice Observatory, and Dr L. Prévot, of the Observatory of Marseille, attended as observers at the invitation of the Executive Committee.

INTRODUCTORY NOTE: This report has been prepared in the order of the items overleaf in the Summary List of the Agenda. The documents related to the Agenda, and distributed before and during the meeting, have not been included in the present report. They will be kept in the archives of the Union for further reference.

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- I. OPENING BY THE PRESIDENT
- II. INTERNAL MATTERS OF ADMINISTRATIVE NATURE
  1. Reports of the 37th and 38th meetings of the Executive Committee
  2. Approval of the Agenda
  3. Report of the General Secretary on the Administrative Office, Archives and the future Headquarters of the IAU
  4. Questions regarding the Statutes and By-laws
    - (a) J.-C. Pecker's motion as regards elections into Special Nominating Committee
    - (b) J.-C. Pecker's motion regarding discussion of preliminary budget by Adhering Organizations, and as regards elections into the Finance Sub-Committee
    - (c) D.H. Sadler's motion to revise Resolution 1 of XVth General Assembly
  5. Questions regarding Working Rules  
Early announcement of Symposia and Regional Meetings
  6. Report of the President on progress in the SMC
  7. Commissions
    - (a) Final composition of Commissions Nos. 49 and 50
    - (b) Programmes of Commissions Nos. 49 and 50
    - (c) Task Groups of W.G. on Planetary System Nomenclature.
    - (d) Young Astronomers' Schools
    - (e) Commissions Rules
    - (f) Commission membership
  8. General Assemblies
    - (a) State of preparation of the XVIIth General Assembly
    - (b) XVIIth General Assembly (Canada - U.S.A.)
    - (c) Interval between General Assemblies
    - (d) Remarks on General Assemblies
  9. Finances
    - (a) Report of the General Secretary on the present financial situation of the IAU. -Increase of the unit of contribution. -Individual membership fees
    - (b) Reduction of Canada's category of adherence
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  10. Publications
    - (a) Report of the Assistant General Secretary on IAU Symposium volumes and other IAU publications
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III. SCIENTIFIC ACTIVITY

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Report by the Assistant General Secretary
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VI. CLOSING BY THE PRESIDENT

## I. OPENING BY THE PRESIDENT

The President opened the meeting on 27 August at 9,00 with a word of thanks to Prof. Fehrenbach for his invitation of the Executive Committee to Haute-Provence. He welcomed the participants and said that he was glad to see among them two young astronomers, MM. C. Froeschle of the Nice Observatory and L. Prévot of the Marseille Observatory, invited to attend as observers. The President regretted the absence, due to illness, of P.O. Lindblad and of C. de Jager, who was prevented from attending the meeting by the launching of the first Netherlands' satellite.

He conveyed to the members of the Executive Committee the best wishes of Prof. Bok.

Dr Ch. Fehrenbach announced details concerning accommodation, meals and the excursion to Grenoble. He invited the members of the Executive Committee, their wives and the Staff to a dinner on Wednesday, 28 August, which also would be attended by Mr and Mrs Coulomb, and by the deputy of Forcalquier and his wife.

## II. INTERNAL MATTERS OF ADMINISTRATIVE NATURE

### 1. Reports of the 37th and 38th meetings of the Executive Committee

The Proceedings of the 37th and 38th meetings of the Executive Committee had been distributed and commented upon. The comments had been incorporated in the Reports. In this form, the Proceedings were approved by the present meeting.

### 2. Approval of the Agenda

The Agenda, as prepared by the General Secretary and circulated before the meeting, was approved with the following additions: 8.(d) Remarks on General Assemblies; 20.(b) Proposal for an International Solar System Decade; 20.(c) Any other matter.

### 3. Report on the Administrative Office

A. Jappel said that the facilities of the Administrative Office in Thessaloniki are satisfactory, especially thanks to the financial support the Secretariat receives from the Greek Ministry of Culture and the University of Thessaloniki. The recent events in Greece had not influenced the activity of the Office. The archives continue to be kept in Belgium and in Czechoslovakia. The transfer of the IAU files for 1970-1973 from Utrecht to Thessaloniki was arranged, free of charge for the Union, by the former General Secretary: they were moved by a special car of the Space Research Laboratory, so that the work of the Office could be continued without interruption.

The IAU files 1967-1970 were moved, free of charge for the Union, to the archives at the Ondrejov Observatory, by the Staff.

The question of a permanent seat in Paris is still open. It was resolved that the General Secretary should take up this matter in due time.

### 4. Questions regarding the Statutes and By-Laws

(a) Prof. J.-C. Pecker suggested that ancient members of the Executive Committee should not become members of the Special Nominating Committee. B. Strömgren remarked that this suggestion may only concern the 4 members of the Special Nominating Committee elected by the Nominating Committee.

After a lengthy discussion, B. Strömgren, seconded by Ch. Fehrenbach, advised that the Statutes should be changed to the effect that former members of the Executive Committee may not be elected by the Nominating Committee into the Special Nominating Committee.

Other members of the Executive Committee suggested that a recommendation to that effect should be made, but no change in the Statutes.

The Executive Committee eventually voted in favour of changing the Statutes as suggested by B. Strömgren, and instructed the Officers to prepare the text of the necessary motion for the next meeting of the Executive Committee.

Presidents of Commissions will be advised of the proposed change of Statutes.

(b) On the suggestion of Prof. Pecker it was agreed that the preliminary budget of the Union should be circulated 4 months prior to the General Assembly to National Committees for discussion.

(c) Dr Sadler criticized the way in which Resolution No. 1 of the XVth General Assembly had been voted in. This resolution concerns the voting right of Adhering Organizations not having paid their contributions to the Union in due time. Dr Sadler considers this resolution invalid, as it had not been on the Agenda of the General Assembly and as it had not been put by the General Assembly on the Agenda prior to voting on it. He suggests to ignore this resolution as non-existent. The Executive Committee agreed with the opinion of Dr Sadler and resolved to consider Resolution No. 1 of the XVth General Assembly as invalid. This will have no practical consequences.

In this connection it was agreed that Presidents of Commissions should recommend to the General Secretary which Commission resolutions should be published in the Information Bulletin. B. Lovell and J.G. Bolton will send the General Secretary those resolutions of Commissions 28 and 40, adopted during the XVth General Assembly, which are to be published in the next Information Bulletin.

#### 5. Questions regarding Working Rules

Dr Perek and Dr Broesche requested that Symposia, Colloquia and Regional Meetings should be announced well in advance in the Information Bulletin. In the discussion it was noted that this procedure would be desirable; however, practical considerations sometimes make it impossible. National Committees and Presidents of Commissions will be invited to make their proposals for future meetings 2 years in advance. A similar note will be published in the Information Bulletin. G. Contopoulos summarized the discussion by saying that there would be no change in the Working Rules, that, however, every effort would be made to respect the suggestions made by Perek and Broesche in practice. Exceptional cases would have to be decided by the Executive Committee.

#### 6. Report on Progress in the SNC

The President briefly informed the meeting that the Special Nominating Committee had been busy, but that no definite suggestions could be reported for the time being.

#### 7. Commissions

(a) Final composition of Commissions 49 and 50.

The Executive Committee approved the composition of Commission No. 49, "The Interplanetary Plasma and the Heliosphere", as follows:

Acting President: W.I. Axford, Vice-President: A. Hewish. Organizing Committee: J.E. Blamont, A.Z. Dolginov, J. Geiss, A. Hundhausen. General members: Ansari S.M.R., Blackwell D.E., Brandt J.C., Burgeois P.E., de Jager C., Dennison P.A., Durney B., Dyson J.E., Ingham M.F., Jokipii J.R., Lust , Kakinuma C., Kaplan S.A., Lotova N.A. (Mrs), MacQueen R., Mestel L., Newkirk G.A., Pikel'ner S.B., Pflug K., Pneuman G., Parker , Reay N.K., Ring J., Roach F.E., Roberts J.A., Roxburgh I.W., Rumsey N.J., Schmidt , Severny A.B., Smerd S.F., Sonett C.P., Sturrock P.A., Surovatski j S.I., Svestka Z., Tanaka , Tinsley B.M. (Mrs), Wallis M.K., Wilcox J.M., Wild J.P.

The following persons could not be approved, as they are not IAU Members: Coles, Cronyn, Hirschberg, Houminer, Rickett, Shawhan. Prof. Axford will be informed that they can be opted as Consultants.

The composition of Commission 50, "Protection of Existing and Potential Observatory Sites" was approved as follows:  
President: M.F. Walker, Vice-President: R. Cayrel. Organizing Committee: C.A. Anghuila, F. Bertola, A. Blaauw, H.A. Bruck, D.L. Crawford, H. Elsäßer, S.C.B. Gascoigne, S. van den Bergh. General members: Ardeberg A., Bhattacharyya J.C., Boyarchuk A.A., Dommanget J., Haupt H., Kubiceła A., Markkanen T., Mavridis I.N., Mendoza E., Osawa K., Treanor P., S.J., Wayman P.A., Woolley Sir R., Woszczyk A. Consultant: McInnes B.

(b) Programmes of Commissions 49 and 50

W.I. Axford, President of Commission 49, proposed the following programme for his Commission:

- 1) The region where the Solar Wind joins the Sun (Solar Corona, Corona-Chromosphere Interface)
- 2) Zodiacal light
- 3) Radio observations (interplanetary scintillations, Solar noise)
- 4) Heliosphere, Interaction with the interstellar medium
- 5) Theory (including Stellar Winds in general)
- 6) Direct observations of the Solar Wind as far as they pertained to the above and to questions of an astronomical nature (e.g. the composition of the Sun, mass loss, etc.)

This programme was approved with the remarks (a) that the solar wind in general is of interest to astronomers and (b) that Commissions 21 and 40 should be contacted for collaboration as regards items 3 and 4 respectively.

M.F. Walker, President of Commission 50, submitted for approval a large-scale site testing programme to be carried out by the IAU which would cost about \$ 750.000 U.S. The Executive Committee considered this proposal and decided that the IAU is not the proper organism for doing site testing itself. Each country has to solve its problem. Furthermore, the IAU will have to be careful not to make recommendations that are known to be impossible. Therefore, Commission 50 should concentrate its efforts:

- 1) on finding out what measures are being taken in the individual Member Countries as regards protection of existing and potential observatory sites
- 2) on ascertaining what the IAU can do in this respect
- 3) on investigating in which other way Commission 50 can be of assistance. This would mean that the Commission were to establish a list of sites to be protected and then to work out a programme of how to protect them.

As regards lighting, Commission 50 is to proceed on its own and clarify the situation in individual countries.

It was recommended to publish the policies detailed in the Tucson Ordinance in the Information Bulletin.

(c) Working Group on Planetary System Nomenclature and its Task Groups.

The Executive Committee approved the composition of the W.G. for Planetary System Nomenclature and of its Task Groups as follows:

P.M. Millman (President), C.H. Mayer (Comm. 16), S.K. Runcorn (Comm. 17), A. Dollfus (IUCM), B.Yu. Levin (USSR Academy of Sciences), D.H. Menzel (Task Group Lunar Nomenclature), D.D. Morrison (T.G. Mercury Nomenclature), G.H. Pettengill (T.G. Venus Nomenclature), B.A. Smith (T.G. Mars Nomenclature), T.C. Owen (T.G. Outer Solar System Nomenclature).

Task Groups:

Lunar Nomenclature: D.H. Menzel (Chairman), A. Dollfus, F. El-Baz, K.P. Florenskij, H. Masursky, S.K. Runcorn

Mercury Nomenclature: D.D. Morrison (Chairman), C.R. Chapman, M.E. Davies, A. Dollfus, O.J. Gingerich, R.W. Goldstein, J.E. Guest, A.D. Kuz'min, B.A. Smith

Venus Nomenclature: G.H. Pettengill (Chairman), R.M. Goldstein, A.D. Kuz'min, M.Ya. Marov, H. Masursky

Mars Nomenclature: B.A. Smith (Chairman), A. Dollfus, I.K. Koval', M.Ya. Marov, H. Masursky, S. Miyamoto, C. Sagan

Outer Solar System Nomenclature: T.C. Owen (Chairman), K. Aksnes, N.S. Bobrov, M.E. Davies, D. Gautier, B.A. Smith, V.G. Tefjel'

It was agreed that additional names or changes in the composition of the Task Groups would henceforward be proposed by the Chairmen of the Task Group in question and approved by the Working Group. However, the Executive has to be informed. Changes in the composition of the Working Group itself are to be approved by the Executive Committee.

The General Secretary reported that the Working Group had met in Ottawa, June 1974. S.K. Runcorn had not attended. The meeting adopted ten resolutions:

- I. Basic Principles for Planetary System Nomenclature
- II. Latin Terms for Different Types of Features, to be used in Planetary System Nomenclature
- III. Possible Name Categories for use in Planetary System Nomenclature
- IV. Schedules for Map Production
- V. Advance Notice of Meetings
- VI. Procedure in Task Groups
- VII. Lunar Mapping
- VIII. Nomenclature for Mercury
- IX. & X. Nomenclature for Mars

These resolutions were endorsed. The Executive Committee expressed its appreciation for the work done by the Working Group and especially its President, Dr Millman. Resolution IV. will be brought to the attention of NASA.

(d) Young Astronomers' Schools.

The General Secretary reported that the Young Astronomers School held at St. Miguel, Argentina, from 13 May to 7 June 1974 was attended by 60 participants (39 from Argentina, 9 from Brazil, 7 from Chile, 2 from Peru, and 1 each from Bolivia, Paraguay and Venezuela). The School was very successful. The next Young Astronomers School will be held late in 1975 or early in 1976. The country in which it is to be organized will be decided by J. Kleczek, Secretary of the School. There are still \$ 8,000 available to this purpose.

(e) Commission Rules.

It was emphasized that Commissions should prepare rules governing their business, especially as regards the election of Presidents, Vice-Presidents and members of the Organizing Committees, and setting up criteria for Commission Membership.

(f) Commission Membership.

The Executive Committee approved the co-option of new members and consultants to the following Commissions:

- No. 9 (President A.B. Meinel): B.L. Klock - new member
- No. 10 (President K.O. Kiepenheuer): R.C. Altmock, G.A. Dulk, M. McCabe (Miss), D. McLean, M. Stix - new members
- No. 12 (President R.G. Giovanelli): R.C. Altmock - new member
- No. 15 (President A.H. Delsemme): L. Kresak, E.L. Krinov, R.E. McCroskey, H.U. Schmidt, A.N. Simonenko, J.A. Wood, A.A. Yavnel, J.A. Burns, D.P. Cruisbank, H.U. Keller, D.D. Morrison, L.M. Shul'man, J.F. Veverka - new members  
L.F. Burlaga, C.R. Chapman, W.K. Hartmann, T.V. Johnson, C.P. Lillie, D.L. Matson, B.J. Zellner - new consultants
- No. 20 (president L. Kresak): P.B. Babadranov, A.H. Delsemme, Y. Lieske, A.F. Sinclair, S.K. Vsekhsvyatski - new members
- No. 24 (President P. Lacroute): B. Elsmore, B.L. Klock - new members
- No. 25 (President M. Gelay): T. Gehrels - new member
- No. 31 (President H. Enslin): L.V. Morrison - new member

8. General Assemblies

(a) State of preparation of the XVIIth General Assembly.

The Executive Committee agreed, on the proposal of the French Local Organizing Committee presented by Ch. Fehrenbach, that the XVIIth General Assembly in Grenoble would be held from 17 to 26 August 1976. The members of the Executive Committee, namely: Goldberg, Contopoulos, Müller, Bolton, Fehrenbach,



Iwanowska, Mustel, visited the campus in Grenoble and found the facilities satisfactory. The General Secretary discussed certain arrangements with M. A. Boisshot, member of the Local Organizing Committee.

(b) XVIIIth General Assembly.

The General Secretary reported that he had received a formal invitation to hold the XVIIIth General Assembly in Montreal, 1979. The Executive Committee accepted this invitation unanimously and asked the General Secretary to convey the Union's thanks to the Canadian authorities.

The General Secretary visited the University in Montreal and found it very good. Unsatifactory are only the prices of hotels. The Canadian hosts, however, will do their utmost to find less expensive hotels and students' dormitories.

(c) Interval between General Assemblies.

A lengthy discussion showed that there was no clear consensus in the Executive Committee as regards the extension of the interval between General Assemblies from 3 to 4 years. It was therefore resolved to postpone this question to the next meeting of the Executive Committee. In the meantime the problem should be brought to the attention of National Committees of Astronomy whose views should then be taken into consideration.

(d) Remarks on General Assemblies.

J.G. Bolton reported that some Members, especially younger ones, had no clear knowledge of the purpose of a General Assembly. He was of the opinion that it would be useful to prepare a document on this subject, either to be distributed to the Members, or to be included in the Presidential address. Inadequate is also information on Commission meetings. In the future, efforts should be made to improve the situation.

9. Finances

(a) Financial situation.

A. Jappel reviewed the accounts of the Union as on 31 December 1973 and said that the total assets of \$ 138.758,66 U.S. compared well with the assets of \$ 137.793,66 U.S. as on 31 December 1972. He emphasized, however, that the effect of the devaluation of the U.S. dollar should be taken into consideration.

The interim balance sheet prepared for 30 June 1974 shows receipts in the amount of \$ 77.295,76 U.S., as compared with payments of \$ 63.324,29 U.S., which is satisfactory.

Just as ICSU, URSI, and the other International Scientific Unions, the IAU also suffers from the effects of continuous inflation. Dutch and Swiss statistics show an increase of 10,31% in consumer prices from 1973 to April 1974 for 8 countries with major IAU activity.

ICSU sees the following possible solutions:

- 1) reduction of activity
- 2) increase of contribution by 20 - 30%
- 3) annual increase of contribution by 10%
- 4) structure of dues tied to the consumer price index for France.

It was agreed that the IAU should recommend alternative 1) to the ICSU General Assembly in Istanbul.

As to the IAU, it was resolved to defer the problem to the next meeting of the Executive Committee. After that meeting, National Committees would be approached for their opinion.

The President stressed that the IAU would have to contribute to checking inflation by reducing the level of its activity.

W. Iwanowska warned that Poland might consider its withdrawal from the Union should the contribution be increased.

E.R. Mustel said that the increase of contribution is a problem also in the USSR.

Individual membership fees.

An inquiry into the practicability of introducing a \$ 10 U.S. fee per Member and year to be collected by National Committees brought 20 responses, some in favour, some opposing the measure.

The President said that another round is clearly indicated, in which the National Committees opposing the individual membership fees would be asked to substantiate their attitude.

B. Lovell was asked by the President to prepare a memorandum on this subject to be used by the General Secretary in his circular letter to the National Committees.

(b) Reduction of Canada's category of adherence.

The Executive Committee acknowledged the reduction of the Canadian category of adherence from VII to VI.

In this connection it was noted that France had not paid fully its contribution to the IAU for 1973 and is not prepared to pay the balance of Swiss francs 3.337,60. This attitude jeopardizes the voting right of France at the next General Assembly. Ch. Fehrenbach will investigate the matter and discuss it with F. Griwet, General Secretary of COFUSI (Comité Français des Unions Scientifiques Internationales). Copies of all correspondence concerning this case will be sent to Ch. Fehrenbach.

(c, d) Costs of Representation and of Officers' Meetings.

The representation of the IAU in 19 International Organizations is estimated to cost \$ 6.000 U.S. in addition to the \$ 1.650 as foreseen in the budget.

In order to reduce the expenses of the IAU, the President suggested only to hold two Officers' Meetings per year, one of which would always be in conjunction with the President's attendance at another meeting in Europe. Even so, the costs of Officers' Meetings will exceed by \$ 2.000 U.S. the amount of \$ 9.900 as in the budget.

The Executive Committee authorized the General Secretary to reserve \$ 8.000 for these two purposes and to finance them from item 17. under Payments of the Budget 1973-1976 (unused \$ 10.000 for the XVth General Assembly).

10. Publications

(a) The Assistant General Secretary reported on the state of the publication of IAU Symposia held in Australia and Poland in 1973. All volumes would be out by the end of 1974.

Transactions XV B and Highlights of Astronomy, 1973 had already appeared.

(b) Less expensive publications.

There were 3 documents before the Executive Committee in this respect: 1) a report by Commission 5 (J.-C. Pecker) on the IAU Publication Policy, accompanied by proposals of D.A. Kemp and G.A. Wilkins, 2) an offer by Imprimerie Lausanne, 3) an offer by Radio-televizija Beograd.

1) Prof. Pecker having analyzed the situation with members of his Commission recommends the following possible actions:

- a) to negotiate with Reidel for a reduction of the prices of IAU publications which would be possible due to technical efforts, and for lower prices to Young Astronomers
- b) to try at the same time to organize an ICSU Publishing Company
- c) to publish only a report on the meetings
- d) to expand the Information Bulletin to include abstracts of the papers of the Symposia, and put it on sale
- e) to organize "papers" series, preferably with running number for each paper.

2) The offer of Imprimerie Lausanne would make it possible to produce a Symposium volume by offset technique, distribution included, for \$ 22,87. (1000 copies of 600 pages each).

3. According to the offer of Radio-Televizija Beograd, 1 Symposium volume produced by offset would cost \$ 3,--, packing and postage not included.

The President recommended that the Beograd proposal should be investigated more closely. If accepted, it would be necessary to find a chief editor and 1 or 2 typists, and to nominate for each Symposium an editor capable of providing a camera-ready manuscript. He believes that there are many astronomers who would be willing to act as chief editors for the sake of astronomy and who would be satisfied with a small honorarium sum of about \$2,000 to 3,000 a year. The headquarters of the chief editor would be at his home observatory which would contribute a fraction of his working time. Tucson would be a possibility.

J.G. Bolton mentioned that facilities might also be available in Australia. The General Secretary emphasized that the whole business of publishing Transactions and Symposia (advertising, contact with the printer, invoicing and book-keeping included) would have to be conducted by the office of the chief editor.

The Assistant General Secretary remarked that if the Beograd offer failed, other printers could be found.

Also discussed were the deadlines for submitting the manuscripts, the criteria for Symposium editorship, and the necessity of retyping some papers by the Office of the chief editor. The first priority is to find a chief editor. The names of Owen Gingerich and Allan Maxwell were mentioned, and the President promised that he would sound them out on the telephone. All Executive Committee members were invited to find and suggest names for chief editors.

It was eventually agreed that the Officers should work out a detailed plan with an overall budget for the next meeting of the Executive Committee. They also should explore the possibility of other printing houses.

### (c) Free Distribution of IAU Publications.

Out of 23 institutions in Developing Countries asked whether they wish to receive IAU publications at one third of the normal selling price, the following 9 responded in the affirmative:

- Observatorio Astronomico, Cordoba, Argentina
- Instituto Argentino de Radioastronomia, Casilla de Correo 5, Villa Elisa, Pcia. de Bs. As. Argentina
- Observatorio Nacional, rua General Bruce, 586 - ZC - 08, 20 000 Rio de Janeiro, Guanabera, Brazil
- Instituto Astronomico e Geofisico, Universidade de Sao Paulo, Caixa Postal 30.627, Sao Paulo, Brazil
- Director, Uttar Pradesh State Observatory, Manora Peak, Maini Tal 263129, Tamil Nedu: 624103, India
- Director, Indian Institute of Astrophysics, Kodaikanal 3, 624103, India
- Instituto de Astronomia, Apartado Postal 70-264, Ciudad Universitaria, Mexico 20, Mexico
- Helwan Observatory, Helwan near Cairo, Arab Republic of Egypt
- Faculty of Sciences, Department of Astronomy, University of Beograd, Beograd, Yugoslavia

The Executive Committee approved that the above mentioned institutions should receive IAU Publications for the reduced price. They will be informed of the decision, the remaining 14 institutions will be informed of the discontinuation of the project.

### III. SCIENTIFIC ACTIVITY

#### 11. Scientific Content of the XVIIth General Assembly

(a) It was agreed that three Invited Discourses would be given by a French speaker. The following topics were suggested:

- 1) J.-C. Pecker: Infrared Astronomy
- 2) P. Morrison: Astronomy and Laws of Physics
- 3) I.S. Shklovsky: X-Ray Sources.

The President will contact Shklovsky and inform V.A. Kotelnikov, the Vice-President of the USSR Academy of Sciences.

(b) The following topics for Joint Discussions were preliminarily accepted:

- 1) The Abundance of the Elements
- 2) Cosmic Rays
- 3) Space Missions to the Moon and Planets (to deal with results).

The final decision as regards the Joint Discussions was deferred to the next meeting of the Executive Committee.

(c) It was agreed that no time for Commission Meetings would be allocated unless Presidents of Commissions set up a detailed programme. Presidents of Commissions will be asked to send their programmes to all Commission members.

## 12. IAU Symposia and Colloquia

The Assistant General Secretary reported on her activity in the field of scientific meetings, and proposed Symposia and Colloquia in the years to come. The previously accepted Symposia and Colloquia for 1974/1975 are as follows:

### SYMPOSLIA:

- No. 67 - Variables in relation to the Evolution of Stars and Stellar Systems
- No. 68 - Solar X-, Gamma, and EUV-Radiation
- No. 69 - Dynamics of Stellar Systems
- No. 70 - Be and Shell Stars
- No. 71 - Basic Mechanisms of Solar Activity

### COLLOQUIA:

- No. 25 - Study of Comets
- No. 26 - Reference Coordinate Systems for Earth Dynamics
- No. 27 - UV and X-Ray Spectroscopy of Astrophysical and Laboratory Plasmas
- No. 28 - Planetary Satellites
- No. 29 - Multiple Periodic Variable Stars

The co-sponsored meetings held in 1974 were:

- COSPAR, IAU, IUTAM Symposium on Satellite Dynamics: Orbits and Attitude
- SCOSTEP, COSPAR, IAU, IAGA, URSI Symposium on Solar Terrestrial Physics
- Second Cagliari Meeting on Time Determination, Dissemination, and Synchronization

Details and reports on the above meetings were presented on documents distributed during the meeting.

The following Symposia and Colloquia were accepted for 1975/1976:

### SYMPOSLIA:

- No. 72 - Abundance Effects in Classification, Lausanne, 3-7 March 1975 - date to be reconsidered
- No. 73 - Structure and Evolution of Close Binary Systems, Cambridge, U.K., late July 1975
- No. 74 - Radio Astronomy and Cosmology, Cambridge, U.K., end of July 1976
- No. 75 - Star Formation, Geneva, September 1976 (after the General Assembly)

### COLLOQUIA:

- No. 30 - Jupiter, Tucson, 19-21 May 1975  
Sponsored by Commissions 16 and 40  
The proposed Scientific Programme not to include the topic "Searches for Jupiter-size planets of other solar-type stars"
- No. 31 - Interplanetary Dust and Zodiacal Light, Heidelberg, 1-4 July (or 8-11 July) 1975  
Co-sponsored by Commissions 15, 21, 22, possibly 49, and COSPAR
- No. 32 - Physics of A - Stars, Wien, 8-10 September 1975  
Co-sponsored by Commissions 29 and 35  
Chairman: V.L. Khokhlova (USSR) instead of A.A. Boyarchuk
- No. 33 - Observational Parameters and Dynamical Evolution of Multiple Stars, Mexico-City, middle October 1975  
Sponsored by Commission 26

- No. 34 - Mercury, Pasadena, USA, June 1975.  
 Contact person: B. Murray
- No. 35 - The Compilation, Critical Evaluation and Distribution of Stellar Data (title to be reconsidered), Strasbourg, August 1976 (before the General Assembly)  
 Sponsored by Commission 5  
 Chairman: P. Iacroute  
 B. Hauck (Switzerland) added to the Organizing Committee
- No. 36 - Energy Balance and Hydrodynamics of the Chromosphere and Corona, Nice, September 1976 (after the General Assembly)  
 Co-sponsored by Commissions 10 and 12

Details concerning the Scientific and Local Organizing Committees, Scientific Programme, Editors, Publication, and financial assistance were presented in documents distributed during the meeting. A few proposals for Symposia and Colloquia were either rejected or postponed to the next meeting of the Executive Committee. The record of them is kept by the Assistant General Secretary. It was agreed that the IAU would co-sponsor the following meetings:

- The fourth IUHPS/IAU Symposium on the History of Astronomy: "The Origins, Achievements and Influence of the Royal Greenwich Observatory, 1675 - 1975", to be held at Herstmonceux, summer 1975  
 IAU representative: J. Meadows  
 IAU contribution: \$ 1.000
- COSPAR/IAU Symposium: "Fast Transients in X- and Gamma-Rays", Varna, 29-31 May 1975  
 IAU representative: K.A. Pounds

### 13. Regional Meetings

The Assistant General Secretary reported that the 2nd European Astronomical Meeting under the auspices of the IAU would be held in Triesle from 2 to 5 September 1974, and the 3rd European Astronomical Meeting on "Stars and Galaxies from an Observational Point of View" in Tbilisi, USSR, from 1 to 5 July 1975. More details can be found in Information Bulletin No. 32.

The possibility of an Asian Regional Meeting was suggested by Prof. A. Massevich. Another Regional Meeting was considered for New Zealand, and Prof. Greenstein had suggested an Inter-American Regional Meeting. These suggestions will be explored.

The Assistant General Secretary will draft a letter to National Committees asking for proposals of Regional Meetings to be held in 1977, so that the Executive Committee may consider them in 1975.

### 14. Other Scientific Meetings

It was decided that C. de Jager should represent the IAU at the XXVth International Astronomical Congress to be held in Amsterdam from 30 September to 5 October 1974.

E.A. Müller was appointed the IAU representative in the UNESCO 18 General Conference, Paris, 15-16 November 1974, and the IAU observer at the World Meteorological Congress, to be held in Geneva, end April - beginning May 1975.

### IV. RELATIONS WITH OTHER ORGANIZATIONS

#### 15. ICSU

The General Secretary reported that the XVth General Assembly of ICSTU would be held in Ankara and Istanbul, from 18 to 27 September 1974, and that he would represent the IAU there. The meeting will, among others, elect the new ICSTU Officers for which there are the following candidates: President: Prof. H. Brown (USA), Vice-President: Prof. F.B. Straub (Hungary), Secretary General: Sir John Kendrew (U.K.), Treasurer: Prof. D.A. Bekoe (Ghana).

The General Secretary, as official representative of the IAU at the ICSU General Assembly in Ankara and Istanbul, had applied, on 20 July, for a Turkish visa at the Turkish Embassy in Washington. He received no reply, nor was the visa issued until his departure from Washington on August 24 for the meeting of the Executive Committee. The President brought this fact to the attention of Prof. Coulomb, President of ICSU, by his letter of 29 August, in which he emphasized that if the meeting in Turkey took place without the presence of Dr Contopoulos, the IAU would not be bound by any decision reached by ICSU there. Members of the Executive Committee cabled to their National Committees to propose the cancellation of the ICSU meeting or change its venue for the case that Dr Contopoulos is not given the visa.

IAB (ICSU Abstracting Board)

The full board meeting was held in Berlin, 8-12 July 1974. It was attended by J.-C. Pecker as IAU representative.

16. FAGS (Federation of Astronomical and Geophysical Services)

As from 1975 on, Prof. G.A. Wilkins will be the General Secretary of this organization, and will cease to be the IAU representative. The Executive Committee appointed Dr B. Guinot as its new representative (alternate Dr H. Enslin). G. Contopoulos was released from this function, on his own request. Prof. Wilkins' reports on FAGS and CODATA were acknowledged.

The 7th Meeting of CCDS (Comité Consultatif pour la Définition de la Seconde) was held at Sèvres, France, from 9 to 11 July 1974. Prof. W.M. Markowitz, who attended the meeting as IAU representative, sent in a report. In this connection it should be noted that Prof. Wilkins who had attended the joint meeting of Commissions 4 and 31 in Sydney and participated in drafting its resolution on ET and TAI, recently criticized this resolution. The General Secretary will clarify the matter by correspondence.

17. IUCM and IUCMP

The General Secretary reviewed the situation and said that the IAU, IUGG, IUGS and URSI had agreed to propose to ICSU the dissolution of IUCM (Inter-Union Commission for the Moon) and the creation of a new Inter-Union Commission for the Moon and Planets - IUCMP. This proposal is still to be discussed with COSPAR, which, for the time being, prefers a loose liaison group of Union representatives to a formal Inter-Union Commission. The General Secretary read the proposal made to ICSU and a tentative constitution of IUCMP. It was agreed that if IUCMP comes into existence, the Union would be represented by P.M. Millman (E. Anders as alternate). A. Dollfus was suggested as Secretary.

18. People's Republic of China

The President gave a brief account of the developments since the meeting of the Executive Committee in Sydney. He said that the visit of the ICSU Officers to China had not been productive and that that of H. Brown to Taiwan only confirmed the status quo. Thus it became necessary that the IAU make its own diligent effort to bring the People's Republic of China back to the Union. He put forward the proposal that Taiwan should be considered as "part" or "province of China". Prof. J. Coulomb, President of ICSU, who attended the discussion on China, emphasized that the People's Republic of China does not intend to deal with separate Unions or Commissions. In his view it is impossible to expel Taiwan from ICSU; however, if the Istanbul General Assembly decides otherwise, the new ICSU President would have to act accordingly. It would not be embarrassing if the IAU called Taiwan a "part of China". The IAU representative may propose to the ICSU General Assembly the adoption of a similar resolution.

The President thanked Prof. Coulomb for his valuable information and resumed the discussion which resulted in the following draft resolution to be submitted to the ICSU General Assembly by G. Contopoulos:

The Executive Committee of the IAU considering the important contribution of the scientists of the People's Republic of China in the promotion of science,

recognizing therefore the desirability of the People's Republic of China becoming a Member Country of ICSU, realizing, however, that the People's Republic of China is reluctant to join ICSU while Taiwan continues to be a Member, and considering the fact that the People's Republic of China is, so far and de facto, not in a position effectively to represent scientists working in Taiwan

urges ICSU to explore every possible means for bringing the People's Republic of China into ICSU without denying representation to Taiwanese scientists, and, as an example,

suggests that Taiwan be, for the purposes of ICSU, henceforward listed as a part of China, and that this be expressed in all official documents of ICSU by having the designation "Taiwan" followed by the words "(part of China)".

This draft resolution was approved by the Executive Committee. W. Iwanowska and E.R. Mustel abstained from the voting.

#### 19. Grants for XVIIth General Assembly

It was agreed that approximately the same amount as in the case of the Brighton General Assembly would be set aside for grants to young astronomers towards their participation in the XVIIth General Assembly.

#### V. OTHER BUSINESS

##### 20. (a) Symbol of the IAU.

The General Secretary emphasized that it would be desirable to have a symbol of the IAU for use on its official stamp. It was recommended to ask J.-C. Pecker for suggestions. The matter will be rediscussed at the next meeting of the Executive Committee.

##### (b) Proposal for an International Solar System Decade.

The General Secretary summarized W.H. Pickering's memorandum of 28 June 1974 in which he proposes to launch an International Solar System Decade. This proposal, seconded by S.K. Runcom, had also been sent to COSPAR, who set up an ad hoc Committee for its further study. This Committee is made up of W.H. Pickering, G. Newkirk, L. Kresak, A. Dollfus, A. Kliore, A.D. Kuz'min, T. Obayashi, and M.J. Rycroft. The project is to advance international cooperation in the planning of space experiments and missions, stimulate ground-based optical and radio observations, especially during missions, develop interest in solar system astronomy and widen the range of scientists and disciplines in the interpretation of results. J.G. Bolton was of the opinion that similar work should be initiated by a definite programme, that however Pickering's memorandum does not propose specific scientific action, as it only shows what could be done. E.R. Mustel also felt that the document is vague, that much preliminary work would have to be done, especially in intergovernmental discussions. The President pointed out that the memorandum does not mention a budget, and does not say how the project should be financed. In the U.S.A., discussion goes on whether to launch shuttle or unmanned projects. Ch. Fehrenbach supported the views expressed by Bolton and Mustel. The General Secretary pointed out that COSPAR postponed the decision for a year. B. Lovell agreed in principle with what had been said by Mustel and Bolton, but welcomed the project provided there is money enough.

The discussion can be summarized as follows:

The Executive Committee finds the project interesting, provided it does not interfere with other astronomical programmes. Much will depend on the available funds.

##### (c) Any other matter.

General Problems. B. Strömgren emphasized that there are 3 problems of major importance which have to be satisfactorily solved in the near future.

- 1) Publication policy
- 2) General Assemblies
- 3) Regional Meetings

The IAU publication policy had amply been discussed during the meeting.

The next meeting of the Executive Committee will have to go deeper into the problem of the size and organization of General Assemblies. The time devoted to formalities and business will have to be shorter. More attention should be paid to questions from the floor and to the resolutions of Commissions. Commission business should take up no more than 1 hour, the remaining time must be covered by a well prepared programme.

As to the regional meetings, the Union will have to find its way, and be in contact with National Committees, ESO, Astronomische Gesellschaft, and other such societies. It will be necessary to formulate the programmes of the meetings clearly and well in advance. Regional meetings are for all those that come to General Assemblies, but particularly for young astronomers who do not yet qualify for Symposia and Colloquia.

E.R. Mustel felt that the resolutions to be adopted by General Assemblies call for more and wider discussion which, however, according to Ch. Fehrenbach, would require one more session.

The President suggested that the Officers would have to design a procedure for detailed examination of proposed resolutions.

B. Lovell said that the Union is growing, that the size of General Assemblies becomes unmanageable, and that they lose their meaning. W. Iwanowska felt that there is a limiting factor: if we reach the number of 5,000 Members, we will have to stop, discuss science at scientific meetings and reserve General Assemblies to administration.

The General Secretary stressed that individual membership is an advantage and should not be abolished. The President advocated the formation of divisions in the Union (as in U.S.A. astronomy). Another possibility of checking the growth of the Union is, according to B. Lovell, stricter rules for acquiring IAU membership.

The President recommended to find statistics on the attendance at General Assemblies.

The discussion resulted in 2 resolutions:

- a) Presidents of Commissions will be encouraged to remove inactive members and critically to accept new members.
- b) The next Officers meeting is to select points from the proceedings of the Executive Committee which should be published in the Information Bulletin.

The word was given to the invited observers, representing young astronomers, who had the following to say:

L. Prévot: The IAU is useful and the present meeting showed even more how important it is. Impressing is especially the organization of Symposia and Colloquia, and how carefully are considered the criteria for or against holding a meeting. The political questions are delicate and require tactful handling. The scope of the work of the Executive Committee is more than he could have imagined.

C. Froeschle: The General Assemblies of the Union are a good institution as they bring together different people. Regrettable is the lack of communication between the Executive Committee and National Committees, as he could witness as a member of the French National Committee. The growth of the Union should be checked by establishing rules for admittance, perhaps international standards. As to the Commission meeting, he found that too many short communications are a burden.

#### Contact with non-astronomers doing astronomical work

The General Secretary felt that it would be useful if the Union got in closer contact with such people. The President experienced in Poland that one Symposium held in conjunction with the Extraordinary General Assembly was to 60% attended by non-Members. According to the General Secretary such people may become IAU Consultants.

21. The next meeting of the Executive Committee will be held in Greece, from 19 to 22 August 1975. It will be preceded, on 18 August, by an Officers meeting. The place of the meeting is still to be announced.



VI. CLOSING BY THE PRESIDENT

The meeting was closed by the President on Thursday, 29 August at 18,30.

*G. Contopoulos*

G. Contopoulos  
General Secretary

Thessaloniki 7 September 1974