

INTERNATIONAL ASTRONOMICAL UNION

TWENTY-SEVENTH MEETING OF THE EXECUTIVE COMMITTEE

NICE, FRANCE

Wednesday 15 September to Saturday 18 September 1965

Summary Report

The meetings were held at the Observatoire de Nice (Le Mont-Gros, Nice, France) at the invitation of the Director of the Observatory, Dr. J.-C. Pecker. Sessions were held as follows:

Wednesday 15 September:	9:30 a.m.-12:30 p.m.;	3:00 p.m.-6:30 p.m.
Thursday, 16	" : 9:30 a.m.-12:15 p.m.	
Friday, 17	" : 9:30 a.m.-12:30 p.m.;	4:30 p.m.-7:30 p.m.
Saturday, 18	" : 9:30 a.m.-12:45 p.m.	

The following were present: P. Swings (President); W. N. Christiansen, W. Fricke, Y. Hagihara, M. Schwarzschild, A. B. Severny (Vice-Presidents); J.-C. Pecker (General Secretary); D. H. Sadler (former General Secretary); L. Perek (Assistant General Secretary). Miss Dorothy Bell attended as Assistant Secretary. Apologies were received from G. Haro (Vice-President) and V. A. Ambartsumian (former President) who were prevented from attending because of special obligations at their home observatories during this period.

Introductory note: The following report is intended primarily as a record of the decisions taken by the Executive Committee at the above meetings; it is not intended to be a complete record of all the proceedings, but it does contain brief accounts of the discussions when these are considered to be of some permanent value as a record.

The report on each item of the agenda is given the same designation as in the summary list of the agenda which follows. The items were not necessarily taken in this order at the meeting. It will be noted that the original agenda was prepared in French; however, since the meeting, itself, was conducted in English, the present Report and summary agenda are likewise given in English.

Various notes considered under certain items of the agenda, and distributed at the time of the meeting, are not included in this Report as circulated, but will, however, be attached to the copy of the Report kept in the archives of the Union. These include: tables showing the categories of adherence of member countries, and other data; documents regarding the financial situation of the Union; a proposal by the General Secretary for a change in nominating procedures; the reports of the working groups on the organization of General Assemblies and on associate national membership; a document regarding the functions and structure of IAU Commissions; proposals of the General Secretary regarding the Distribution List; documents related to the establishment of summer schools in astronomy; the text of resolutions passed at the meeting of the ICSU Executive Committee in April 1965; the report of the IAU representative on the Council of FAGS.

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INTRODUCTION

Before the opening of the first session on Wednesday 15 September, Dr. J.-C. Pecker, Director of the Nice Observatory, welcomed the members of the Executive Committee to Nice and, in particular, to the Observatory. He expressed his great pleasure that the Observatory's newly completed Salle de Réunion was being "inaugurated" by the IAU Executive Committee.

Opening by the President. The President opened the meeting with a word of thanks to the Director of the Nice Observatory and General Secretary for the welcome extended to the members of the Executive Committee. He referred to the unfortunate absence of Professors Ambartsumian and Haro and proposed that telegrams be sent to each of them expressing the good wishes of the Executive Committee.

Before introducing the formal items of agenda, the President spoke a few words in homage to the memory of Professor B. Lindblad. Professor Lindblad, who died on 25 June 1965, was President of the IAU from 1948 to 1952.

A. INTERNAL MATTERS OF AN ADMINISTRATIVE NATURE

1. Administration

a) Report of the General Secretary. The General Secretary opened his report by expressing thanks to the President, the former General Secretary, the Assistant General Secretary and the Assistant Secretary for their particularly valuable assistance during the period of transition between the General Assembly in Hamburg and the removal of the Administrative Office from Herstmonceux to Nice. He explained that the Administrative Office was now divided into two parts, the routine administrative matters being handled in Nice and the editorial questions in connection with the publication of the Transactions and IAU Symposium volumes in Meudon. He mentioned that two additional assistants had been added to the staff of the Administrative/Publications Office, but that only one of these comes under the IAU budget.

The General Secretary announced that two Information Bulletins had been distributed since the last Executive Committee meeting and that an improved system of distribution, through the intermediary of several of the Union's Vice-Presidents, had been attempted in connection with Information Bulletin No. 14.

The General Secretary apologized for the large discrepancy between the price of Transactions of the IAU, Volume XIII as tentatively announced in Information Bulletin No. 13, and as finally given in Information Bulletin No. 14. Through a misinterpretation of the contract with the publishers and the last-minute rush to insert the prices of this volume in Information Bulletin No. 14, Members of the Union were not allowed as large a discount as was agreed at the previous meeting of the Executive Committee. The General Secretary therefore asked the present Executive Committee to give a posteriori approval to the prices of Transactions XIII as given in Information Bulletin No. 14. This approval was given. The Executive Committee asked the General Secretary, in this connection, to report as soon as possible on the sales of this volume.

The General Secretary called the attention of the Executive Committee to the financial difficulties which the Union now faces. In this connection he presented various documents related to the Union's budget and to the new categories of adherence chosen by member countries as from 1965. The members of the Executive Committee unanimously agreed that the categories of adherence chosen by some countries (in relation to the astronomical activity in those countries) were manifestly too small. The General Secretary was therefore requested to send a circular letter to all Adhering Organizations providing information regarding the new categories of adherence chosen by member countries, the number of individual Members in each country, and other relevant data, and asking them to re-consider the possibility of choosing a higher category of adherence.

In connection with the discussion of the financial situation of the Union, the General Secretary mentioned the approach he had made to the ICSU requesting an increase in the allocation made by Unesco, through the ICSU, to the IAU, but added that such an increase is highly unlikely. He also mentioned the various individual contracts between the IAU and Unesco for Symposia (e.g. Nos. 23 and 25) and special projects (summer schools in astronomy and the exchange of astronomers). The General Secretary pointed out, however, that it was very unlikely that Unesco would be willing to continue the financial support of Symposia, but that the Union might seek Unesco's assistance in other fields of activity.

Various measures to economize were briefly discussed, especially as regards publications, which is one of the largest items of expenditure. It was agreed to defer detailed discussions on this question until the next meeting of the Executive Committee when the returns from sales of publications, and other sources of income, could better be examined.

b) Special Nominating Committee. The question was raised as to whether the late Professor B. Lindblad, who was elected a member of the Special Nominating Committee at the twelfth General Assembly, should be replaced on this Committee. As there was no precedent in this regard and no special provision in the Statutes, or elsewhere, for such an eventuality, the Executive Committee agreed that Professor Lindblad should not be replaced. The General Secretary should, however, inform Adhering Organizations of this decision.

The General Secretary presented a written proposal for certain changes to be made in the present system of designating a Special Nominating Committee. A short discussion followed and it was agreed that a few changes were desirable. However, since the present system was set up as a formal resolution, it should not, as a question of courtesy, be changed without the approval of the General Assembly. The Executive Committee asked the General Secretary to attempt to learn for what reasons the Special Nominating Committee, in its present form, was originally established.

c) Future of the IAU Administrative Office. The Assistant General Secretary extended a preliminary invitation, on behalf of the Czechoslovak Academy of Sciences, to set up the IAU Administrative Office in Prague at the expiration of the term of office of the present General Secretary. The

question of the location of the publications office would have to be examined in detail, in connection with the nomination at the thirteenth General Assembly of the future Assistant General Secretary, and other considerations. For this reason it was agreed that it was premature to take any decision on these questions at the present time.

2. General Assemblies

a) Working Group on the Organization of General Assemblies. The Executive Committee discussed the written report of this working group (composed of MM. Fricke, Pecker, Perek, Sadler and Schwarzschild) as presented by the General Secretary. It was agreed that certain internal administrative changes were necessary, and might be applied in the organization of the thirteenth General Assembly, but that no drastic change of policy was desirable at the present time. A pressing need was expressed for the inter-communication between Presidents of Commissions as regards the organization of meetings during the General Assembly. The General Secretary should urge Presidents to specify in advance the nature of their meetings (i.e. scientific or administrative); also a briefing session for Presidents of Commissions at the beginning of the General Assembly was considered essential.

b) Thirteenth General Assembly. The Assistant General Secretary presented a brief report on the progress made in the material organization of the thirteenth General Assembly in Prague. He reported that all local preparations were well under way and requested the advice of the Executive Committee on certain points of detail. A discussion of the scientific content of the thirteenth General Assembly was postponed to item B.1 of the agenda.

c) Fourteenth General Assembly. The General Secretary reported that a preliminary invitation had been received to hold the fourteenth General Assembly (1970) in Argentina. Some doubt was expressed as to the desirability of accepting such an invitation in light of the firm invitation which had been received from another country in the Southern Hemisphere (Australia) for 1973; the great distance involved and climatic conditions in Argentina during the period when General Assemblies are normally held were also brought to question. Various other countries (Belgium, Egypt, Greece, U.K.) were mentioned as possibilities. It was believed that a firm invitation from the U.K. might be extended if such an invitation would be welcomed by the Executive Committee. The Executive Committee reacted favourably to this possibility. The General Secretary was requested, in the meantime, to obtain further particulars from Argentina regarding their invitation.

3. IAU Commissions

a) Election of officers (procedure). The Executive Committee discussed briefly the method of election of Commission officers. It was agreed that the present system was adequate and fair, but that it was desirable that Presidents of Commissions be strongly encouraged to consult all members of their Commissions regarding proposals for new officers; these proposals should represent the voice of the whole Commission and not solely that of the outgoing officers. It was also suggested that a three-year term of

office for Presidents is preferable, in general, to the present six-year term.

b) Functions and structure. The General Secretary pointed out that this was a topic which must be re-examined by each new Executive Committee so that Commission problems such as overlap of subject, size, coverage of new fields, etc., could be regularly dealt with. He presented preliminary proposals drawn up on the basis of suggestions made by the former General Secretary. The latter emphasized that these were only very preliminary ideas, but that he would be willing, if the Executive Committee so wished, to draft more definite proposals which the General Secretary could then circulate to the Executive Committee. If the Executive Committee considered that these proposals might serve as a good basis for discussion, then they could be submitted for consideration to Presidents of Commissions. The Executive Committee agreed unanimously to this proposal.

The feeling was expressed that re-organization was becoming urgent in the case of some Commissions, particularly the "technique Commissions"; Commission 40 was mentioned as an example. It was suggested that a Commission on "New Techniques" might be set up, or, better, that new techniques be covered by working groups within existing Commissions.

The Executive Committee agreed that certain new subjects must be taken into consideration in any re-examination of Commissions that might take place; these would include: gamma rays, X-rays, cosmic rays, interplanetary matter and relativistic astrophysics.

c) Creation of Commission on interplanetary matter. The General Secretary pointed out that the possibility of creating such a Commission had already been discussed at the 1963 meeting of the Executive Committee in Liège. At that time it was suggested that the activities of Commission 10 might be extended to cover this field. The Presidents of Commissions consulted at that time felt that such a solution was not desirable.

The present Executive Committee expressed some doubt as to whether the IAU was the appropriate Union to establish such a Commission. They therefore requested the General Secretary to consult the Presidents of interested Commissions, and other individuals particularly interested in this problem, to determine what might be the composition of such a Commission, were its creation considered necessary and desirable.

d) Commission 17. The Executive Committee approved the proposed composition of the Organizing Committee of this Commission as follows: B. Bell, K. Koziel, D. Martynov, M. Minnaert.

4. Associate national membership and relations with non-member countries

The General Secretary presented the report he had prepared following consultation with members of the Working Group on Associate National Members. It was agreed in principle that the admittance of a second category of member country was desirable but that care must be taken when revising the Statutes to make provision for refusing admittance of a country as a full member on scientific grounds. It was decided that the whole question should be reconsidered at the next Executive Committee meeting.

Members of the Executive Committee had expressed concern over the undesirable situation regarding communication with astronomers in the People's Republic of China and proposed that means be sought to improve this situation. They felt that, although no hope existed for any sort of official affiliation of the People's Republic of China to the IAU at the present time, certainly some unofficial approaches might be made. The various suggestions put forward included: i) circulating (but not in the name of the IAU) a list of the names of Chinese astronomers to western astronomers who might initiate individual contacts; ii) inviting (through the Czechoslovak Academy of Sciences) Chinese astronomers to visit Prague at a time to coincide with the IAU General Assembly; iii) inviting (through IAU Commission 5) representatives from China to present a review of astronomy in their country at the IAU General Assembly; iv) informing the President of Commission 38 on the Exchange of Astronomers of this problem.

5. Publications

a) Transactions and Symposia. The General Secretary gave a brief progress report on the publication of the Transactions and Symposium volumes. Certain delays were inevitable, especially in light of the large role the IAU was now playing, with a very limited staff, in editing the volumes. However, Volume XIII A of the Transactions had been published and several Symposium volumes were forthcoming.

The General Secretary requested the approval of the Executive Committee to two minor policy changes, namely, i) to cease to publish in the Transactions the list of participants in the General Assembly and ii) to cease to distribute Symposium volumes free to participants and authors. The Executive Committee agreed to these proposed changes.

b) Distribution List. The General Secretary briefly reviewed the document he had prepared outlining the present situation regarding the IAU Distribution List for publications and the various changes which he proposed for the future. In summary, these suggested changes would provide for the discontinuation of the Distribution List in its present form. Institutions would normally purchase IAU publications through regular commercial channels; a country having difficulty in currency exchange might choose to augment its annual contribution to the Union so that institutions in that country would automatically receive publications without having to purchase them separately; developing countries would be eligible to receive IAU publications without charge. Adhering Organizations would be consulted in this matter and institutions now on the Distribution List would subsequently be informed of the decisions taken. The new system would come into operation beginning with Symposium volume No. 27 and Transactions, Vol. XIII. A change in the Statutes and By-laws of the Union would have to be proposed at the thirteenth General Assembly regarding the article on the distribution of Transactions volumes to institutions on the Distribution List.

The proposals of the General Secretary were approved in principle by the Executive Committee; however, certain practical difficulties would have to be worked out by the General Secretary in order to put the new system into successful operation.

B. SCIENTIFIC ACTIVITY OF THE UNION

1. Scientific content of the thirteenth General Assembly

a) Joint Discussions. Preliminary consideration was given to the choice of subjects for Joint Discussions to be held at the thirteenth General Assembly in Prague. Particular emphasis was placed on the desirability of introducing some of the newer fields of research and techniques into the Joint Discussions. A Joint Discussion itself might be an opportunity to discuss the possibilities of providing for the coverage of new fields, as discussed under the above item on Commissions. The Executive Committee requested the General Secretary to bring this matter to the attention of Commission Presidents. Care should be taken not to attempt to organize more than five or six Joint Discussions, as in the past, because of the limited time available during the period of the General Assembly. Several specific topics were proposed for consideration: "Fundamental Astrometry in the Southern Hemisphere", "Magnetic Fields in the Galaxy", "New Techniques in Extra-Terrestrial Astronomy". It was also suggested that the "Moon problem" might provide subject matter for a Joint Discussion.

A detailed discussion on the organization of Joint Discussions was postponed until the next meeting of the Executive Committee.

b) Invited Discourses. The Executive Committee made several specific proposals for the Invited Discourses to be given at the thirteenth General Assembly. The subjects and speakers proposed are as follows:

- A. Sandage and M. Ryle on quasars
- P. Ledoux on dynamical problems in outer stars (to be presented in French)
- A. Mikhailov on the back side of the Moon.

The Executive Committee asked the General Secretary to approach the above suggested speakers to enquire if they would be willing to accept to give these discourses.

2. IAU Symposia and Colloquia

a) Symposia. The Assistant General Secretary first gave a brief report on IAU Symposia held since the last Executive Committee meeting, namely, No. 27 ("The Construction of Large Telescopes", April 1965) and No. 28 ("Cosmical Gas Dynamics", September 1965). He then gave a progress report on the organization of symposia already approved for 1966; particulars regarding the organization, numerotation and financing of these meetings were approved, or confirmed, as follows:

No. 29 - "Instability Phenomena in Galaxies", Burakan, Armenia, U.S.S.R., 4-13 May 1966.

Organizing Committee: V. A. Ambartsumian, Chairman
M. Burbidge
J. Lequeux
A. Sandage
B. A. Vorontsov-Velyaminov

Editor: M. Arakeljan

Sum allocated: \$ 2,000 (maximum \$3,000)

No. 30 - "Determination of Radial Velocities, Toronto, Canada,
20-24 June 1966.

Organizing Committee: R. M. Petrie, Chairman
A. Blaauw, D. S. Evans, Ch. Fehrenbach,
J. F. Heard, G. Herbig, M. Plavec.

Sum allocated: \$ 1500 (maximum \$ 2,000)

No. 31 - "Radio Astronomy and the Galactic System", Noordwijk,
Netherlands, 25-31 August 1966. (Organized in co-operation
with URSI)

Organizing Committee: J. H. Oort, Chairman
A. Blaauw, G. Burbidge,
R. A. J. Coutrez (URSI), F. J. Kerr
M. Ryle, I. S. Sklovsky, L. Woltjer,
H. van Woerden (editor).

Sum allocated: \$ 2,000 (maximum \$ 2,500).

The following proposals for Symposia to be held in connection with the thirteenth General Assembly in 1967 were approved, in principle, by the Executive Committee. Numbers in the IAU series will be allocated at a later time.

- i) "Physics and Dynamics of Meteors", Tatranská Lomnica, Czechoslovakia, immediately following the thirteenth General Assembly.

Organizing Committee: L. Kresák, Chairman
Z. Ceplecha, A. F. Cook II, B. J. Levin,
P. M. Millman.

Sum allocated: \$1,000 (maximum \$ 1,500)

Note: The Assistant General Secretary was requested to propose to the organizers that both subject and Organizing Committee be enlarged.

- ii) "Planetary Nebulae", Tatranská Lomnica, Czechoslovakia, immediately following the thirteenth General Assembly.

Organizing Committee: W. J. Seaton, Chairman
L. H. Aller, K. H. Böhm,
D. E. Osterbrock, L. Perek, S. B. Pikelner,
B. A. Vorontsov-Velyaminov.

Sum allocated: \$ 1,000 (maximum \$ 1,500).

- iii) "The Structure and Development of Solar Active Regions", Budapest, Hungary, immediately following the thirteenth General Assembly.

Organizing Committee: K. O. Kiepenheuer, Chairman
L. Davis, L. Dezsö (local organization),
A. D. Fokker, J. Lindsay, R. Michard,
A. B. Severny, Z. Svestka.

Sum allocated: \$ 2,000 (maximum \$ 2,500)

Notes: The sponsorship of this meeting, which has been proposed as an IQSY symposium, was discussed at length. The Executive Committee agreed that the IAU should be the principal organizer and that the symposium should be numbered and published in the IAU series. The IQSY, as cooperating organizer, should be further consulted in this connection. It was suggested that a radio astronomer might be added to the Organizing Committee.

b) Colloquia. The Assistant General Secretary reported briefly on the three IAU Colloquia which had been held during 1965, namely "The Surface of the Moon" (Commission 17), "The Position of Variable Stars in the Hertzsprung-Russell Diagram" (Commissions 27 and 42), and "Interstellar Grains" (Commission 34). He then gave a progress report on the organization of two colloquia which have already been approved in principle by the Executive Committee, namely, "Evolution of Double Stars (Uccle, 1966, Commission 26) and "Zodiacal Light and Interplanetary Matter" (Hawaii, winter 1966-'67 - Commission 21).

Several new proposals for colloquia were presented and approved as follows:

"Blanketing Effect", Heidelberg, Germany, 17-19 March 1966 (Commission 36).

"Late Type Stars", Trieste, Italy, summer 1966 (Commissions interested: 14, 29, 35, 36).

"Variable Stars", Budapest, Hungary, 1968 (Commission 27).

3. Other scientific meetings

The Assistant General Secretary reviewed briefly the various meetings organized by other bodies in which the IAU had in some way participated. IAU participation in future meetings was discussed, and approved, as follows:

- i) COSPAR-IAU Symposium on "Moon and Planets", Vienna, 11-19 May 1966. IAU representatives on Organizing Committee: A. Dollfus, C. H. Mayer, D. H. Menzel. (No financial contribution requested)
- ii) URSI-IUGG-IAU-COSPAR Symposium on "Solar-Terrestrial Physics", Belgrade, Yugoslavia, 29 August - 2 September 1966. IAU representatives on the Organizing Committee: C. W. Allen, E. R. Mustel. IAU financial contribution: \$750.

4. Special Projects

a) Atlas of Representative Cometary Spectra. A sum of \$500 was allocated by the Executive Committee, as a symbolic contribution, for the preparation of an addition to this atlas.

b) Information Bulletin for the Southern Hemisphere. This publication, which is edited by Dr. J. Sahade, was accorded a sum of \$700 per

year for a period of two years (total: \$1,400). The possibility of extending this grant could be considered at the time of the next General Assembly.

c) Catalog of Star Clusters and Associations. It was recalled that a sum of \$ 1,500 had been allocated, in Hamburg, to Commission 37 for the publication of the second edition of this catalog. G. Alter, President of the Commission has since reported that the original publisher of the catalog is not willing to take on the work of a second edition and therefore wished to request that the Executive Committee approve the publication of the Catalog by another publishing house, or in another form. No specific proposals were made. The Executive Committee agreed that the sum originally allocated should be reserved for this project. If a solution were found which would require a sum larger than \$ 1,500, the possibility of slightly augmenting the grant could be considered; this could be done, however, only on receipt of specific proposals. The Assistant General Secretary said that he would contact the Publishing House of the Czechoslovak Academy of Sciences in this connection.

d) Centre de Documentation des Planètes. In response to a request from A. Dollfus that the IAU sponsor the admission of the two planet centres (at Meudon and Flagstaff) to FAGS, the Executive Committee decided that it was not possible for the IAU to make this recommendation, primarily on the grounds of the enormous financial support this project would require (\$10,000 annually being the proposed budget). It was most probable, however, that the IAU would be able to continue its present financial support of the Centre, that is, \$ 2,000 every three years.

e) Bibliography of Astronomy. After a lengthy discussion on the problem of the publication of the Bibliography of Astronomy, 1881-1898, the Executive Committee agreed to the following statement and requested the General Secretary to inform the interested individuals and institutions accordingly.

The Executive Committee of the IAU:

- recognizes the significant potential value of the card catalogue compiled by Mr. Dermul and his collaborators;
- considers that the incompleteness of the catalogue in its present state is not a significant deficiency;
- feels similarly that the fact that part of the catalogue at present is not in typed form is of insufficient consequence to warrant the labour of having it typed now;
- believes that the purpose of the catalogue would not be well served by an incomplete publication, either by abstracting the whole of the material or by selecting part of it;
- is at the same time regretfully forced to conclude that the full publication of the catalogue as it now stands is financially outside the means (available for this type of project) of the IAU;
- considers it urgent, consequently, that the catalogue be transferred now to an institution, such as the Observatoire Royal de

Belgique, where it should have a permanent and safe place and where it should be freely available to scientists who may wish to refer to it;

- believes it essential that this transfer not be postponed for any reason;
- feels, after the transfer is accomplished, that the IAU, which has put much effort over a long period to provide support for this undertaking (both scientifically and financially), should be considered as having no further commitment of any kind relative to this bibliography;
- acknowledges with sincere gratitude the great efforts of those who have created this bibliographic catalogue and shall feel likewise towards any voluntary efforts to further increase its value by additions or improvements that might be made after the transfer of the catalogue.

The Executive Committee of the IAU therefore requests

- the General Secretary to inform the President of the relevant Committee of the Executive Committee of the IAU (Dr. Kleczek) of the attitude of the Executive Committee and of the action it proposes to take;
- the President of the IAU to appropriately inform the astronomers involved in the transfer of the conclusions of the Executive Committee regarding this bibliography, and to do everything within its power to expedite the transfer;
- the General Secretary, after the transfer has taken place, to authorize and request the President of the relevant Committee to consider then all problems connected with this bibliography as not appropriate for consideration within this Committee..

f) "Les Observatoires astronomiques et les astronomes". The General Secretary presented a request received from A. G. Velghe, Director of the Observatoire Royal de Belgique regarding IAU support for a new edition of the above volume. Professor Velghe proposed that the new edition appear in the form of loose sheets (which are easily substituted when corrections are necessary) instead of in bound book form. The information appearing on these sheets would be essentially the same as that contained in the previous volume. The Executive Committee agreed to the allocation of \$500 to this project, but asked the General Secretary to suggest to the editors that only basic, and relatively permanent, data be included and that a more official approach (perhaps through National Committees of Astronomy) be made when securing information for inclusion in the volume.

C. RELATIONS WITH OTHER ORGANIZATIONS

1. Unesco contracts. The General Secretary briefly reviewed the two recent contracts between the IAU and Unesco.

a) Exchange of astronomers. A sum of \$ 2,000 was allocated by Unesco to sponsor the exchange of astronomers during 1965-1966; this fund, which is

administered by Commission 38, applies particularly to astronomers from developing countries.

b) Summer schools in astronomy. The Executive Committee discussed at length the suitability of this project, for which Unesco has granted, initially, a sum of \$ 2,000. This amount was used for the organization of a meeting held in Nice, by a small committee of Commission 46, to discuss plans for establishing a summer school in astronomy. The General Secretary presented for discussion the proposals he had received from E. Schatzman, President of Commission 46 and convener of the meeting. The Executive Committee found these proposals rather vague and expressed concern over finding a way to select suitable students as well as finding suitable institutions which would accept to host such a summer school. The General Secretary was requested to encourage the President of Commission 46 to make further enquiries and to draw up more concrete proposals. In the meantime, it would be necessary to ask Unesco to extend the deadline for submitting the report of the meeting's recommendations called for under the terms of contract.

2. The International Council of Scientific Unions

The General Secretary reported very briefly on the meeting of the ICSU Executive Committee held in Munich from 4 to 8 April 1965. In reviewing the resolutions passed at this meeting, he called particular attention to Resolution No. 5 regarding the IUCSTR and the organization of symposia in the field of solar-terrestrial physics. He mentioned in this connection that the overlap between the numerous organizations working in this field was a very serious problem and that steps were to be taken to improve the situation (see also below C.3.b). Resolutions Nos. 1, 4 and 6 were also noted to be of interest to the IAU.

The General Secretary reminded the Executive Committee that the IAU would be represented at the forthcoming ICSU General Assembly in Bombay (January 1966) by the President, the General Secretary and the Assistant General Secretary (as an observer). The General Secretary would also represent the Union at the meeting of the ICSU Executive Committee, to be held in Bombay on the same occasion.

The Executive Committee confirmed the designation of the General Secretary as IAU representative to the ICSU Executive Committee for 1966-1967.

The General Secretary called the attention of the Executive Committee to the confusion which exists in the financing of meetings organized by inter-union bodies. He requested, and received, the approval of the Executive Committee to the following proposal: Unions would pay to the inter-union bodies in which they participated an annual lump sum; in turn, the inter-union bodies would pay the travel and per diem expenses of the statutory Union representatives; other observers would attend at the expense of their Union or institution. The General Secretary would present a proposal in this sense to the ICSU General Assembly.

3. Inter-union bodies

a) Comité International de Géophysique (CIG). The General Secretary informed the Executive Committee of the recent change in the secretariat of the CIG. It is obvious that CIG functions and terms of reference should be revised in the near future. The Executive Committee gave the General Secretary the responsibility of looking into this question, in close cooperation with Professor G. Righini, with a view towards a better coordination of all inter-union bodies dealing with solar-terrestrial physics.

b) Inter-Union Commission on Solar and Terrestrial Relationships (IUCSTR). The General Secretary reported that he had received preliminary proposals from the President of this inter-union body, Professor C. W. Allen, concerning the re-organization of the IUCSTR. Such a re-organization was considered to be necessary in order better to coordinate the activities of a number of groups now working independently in this field (IUCSTR, IUCI, IQSY, etc.). The final proposals of Professor Allen would be communicated to the Executive Committee in due course. The Executive Committee unanimously agreed to the General Secretary's suggestion to organize an informal meeting (perhaps at the time of the ICSU General Assembly) of one representative from each of the bodies interested (IAU, URSI, CIG, IUCSTR, IQSY, IUCI, COSPAR, etc.) in order to discuss mutual problems regarding cooperative programmes, organization of symposia, etc. The General Secretary was given a large measure of freedom and discretion to organize such a meeting.

c) International Quiet Sun Years (IQSY). The discussion on this item dealt primarily with the organization of the symposium on "The Structure and Development of Solar Active Regions". The decisions taken in this regard are given above, item B.2.a).

d) Proposed Inter-Union Commission on the Moon. The General Secretary reviewed the proposal made at the ICSU meeting in Munich concerning the creation of an Inter-Union Commission on the Moon. He reported that no real spontaneous enthusiasm had been expressed from any direction in favour of such an inter-union body. The Executive Committee suggested that the General Secretary consult further with the other interested Unions before giving a final reply to Dr. Menzel, originator of the proposal to create such an Inter-Union Commission.

e) Triple Commission on Spectroscopy. The Executive Committee approved the following revised membership of this Commission, as proposed by its President, Dr. Ch. Moore Sitterly: B. Edlén, G. Herzberg, J. G. Phillips, M. J. Seaton. Other minor points of reorganization proposed by the President of the Commission were also approved.

4. Representation

a) International Radio Consultative Committee (CCIR). The Executive Committee agreed to the following proposal made by H. M. Smith, President of Commission 31:

"...the representatives of the IAU appointed to such organisations as the CCIR on matters within the province of Commission 31 should

be the current holders of the offices of President and Vice President of the Commission. In many cases it may be appropriate for the B.I.H. to be represented also...".

b) Upper Mantle Project. The Executive Committee approved the General Secretary's proposal that the IAU should not be represented in this project.

c) Solar Particles and Radiations Monitoring Organization (SPARMO). The Executive Committee decided that the IAU should not name an additional representative to this organization but that the General Secretary should request FAGS to allow C. de Jager, already a Vice-President of SPARMO, to represent the IAU, if Professor de Jager would be willing to serve in this double capacity.

d) ICSU Abstracting Board. The Executive Committee confirmed the approval, already given by correspondence, that J. Kleczek, President of Commission 5, should represent the IAU on this Board.

e) Proposed ICSU committee on critically evaluated numerical data. In response to an invitation for the IAU to be represented on this committee, which is being set up by the ICSU Working Group on Critical Tables, the General Secretary consulted the President of Commission 14. As a result, the names suggested to the Executive Committee were: G. Herzberg, R. W. Nicholls, J. G. Phillips and Ch. Moore Sitterly. The Executive Committee proposed that the name of B. Rosen be added to this list as a possible representative.

5. Federation of Astronomical and Geophysical Services (FAGS)

D. H. Sadler, IAU representative on the Council of FAGS, presented a report he had prepared for the Executive Committee giving general information about FAGS as well as an idea of some its current problems. He pointed out that one of the main items of interest to the IAU, which was also an item to be discussed at the forthcoming meeting of the FAGS Council in Paris, was the composition of the Directing Boards of the Permanent Services of FAGS. In particular, the Directing Board of the Bureau International de l'Heure was to be reviewed and the Executive Committee was asked if it would agree to the following proposed composition:

President: The President of IAU Commission 31 - at present H.M. Smith (U.K.)

Members: The Vice-President of IAU Commission 31 - at present N. N. Pavlov (U.S.S.R.)
A member (possibly two members) nominated by IUGG
The Chairman of CCIR Study Group VII (Time and Frequency) - B. Decaux (France)
The Director of the Service (ex-officio, the Director of the Paris Observatory - at present J. F. Denisse).

The Executive Committee unanimously agreed to this proposed composition.

D. VARIA AND FORMAL ITEMS

1. Universal use of the metric system. In reply to a request from the editor of a scientific journal, the Executive Committee agreed that the IAU should encourage the use of the metric system as widely as possible, exclusively or in addition to any other designation which may be given. The Executive Committee asked the General Secretary to write to editors of scientific journals expressing this point of view, and to prepare a formal resolution in this connection for consideration at the next meeting of the Executive Committee.

2. Publication of Variable Star Catalog translations. The Executive Committee agreed to the proposal that this work, for which a grant had already been made, be carried out in the U.S.S.R., instead of in the Netherlands. Among other advantages, this would help to resolve certain financial problems between the IAU and the U.S.S.R.

3. Proposal by USSR Academy of Sciences. The General Secretary called the attention of the Executive Committee to a letter and proposal he had received from the USSR Academy of Sciences regarding the organization of international cooperation for the possible reception of signals of extra-terrestrial origin. The Executive Committee agreed that no immediate action should be taken to organize meetings or detailed discussions on this subject, but that the General Secretary should consult the Presidents of Commissions which might be interested as to what steps might eventually be taken in this connection.

4. Creation of IUPAP commission on collisional problems. The Executive Committee endorsed a proposal from IUPAP for the creation within IUPAP of a commission on certain aspects of atomic and molecular physics and agreed that the General Secretary should inform the IUPAP of this endorsement in principle. However, the IAU would not wish to make any formal commitments in this connection.

5. Committee on General Relativity and Gravitation. The question was raised as to whether the IAU should enter into closer cooperation with this Committee. The Executive Committee suggested that the General Secretary should consult the President of IAU Commission 28, who could perhaps set up a working group within his Commission to deal with this and related questions. (This matter might be considered of the same nature as the problems described above, item A.3.b).

6. Twenty-eighth meeting of the Executive Committee. The Executive Committee unanimously agreed to accept the invitation extended by the Assistant General Secretary, on behalf of the Czechoslovak Academy of Sciences, to hold the next meeting of the Executive Committee in Prague. The dates set for the meeting were 15-19 September 1966.

J.-C. Pecker
General Secretary

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