

INTERNATIONAL ASTRONOMICAL UNION
UNION ASTRONOMIQUE INTERNATIONALE

Forty-fourth Meeting of the Executive Committee
Trinity Hall, Dublin, Ireland
Tuesday, 15 August - Saturday 19 August 1978

P R O C E E D I N G S

The 44th meeting of the Executive Committee of the International Astronomical Union took place at Trinity Hall, Dublin, Ireland, from 15 to 19 August 1978, with daily sessions from 9.30 to 12.30 and 14.00 to 18.00. On Friday, 18 August, Birr Castle was visited during the afternoon, and the afternoon of Saturday, 19 August, was devoted to projecting slides of astronomical observatories and sites in the Democratic People's Republic of China.

Present were:

Prof. A. Blaauw	President
Mr J. G. Bolton	Vice-President
Prof. Ch. Fehrenbach	Vice-President
Dr D. S. Heeschen	Vice-President
Prof. W. Iwanowska	Vice-President
Academician E. K. Kharadze	Vice-President
Prof. S. van den Bergh	Vice-President
Prof. L. Goldberg	former President
Prof. G. Contopoulos	former General Secretary
Prof. Edith A. Müller	General Secretary
Prof. P. A. Wayman	Assistant General Secretary
Dr A. Jappel	Executive Secretary
Mrs J. Dankova	Secretary

Introductory Note:

The 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 the meeting have not been included in the present report: they will be kept in the files of the Union for further reference.

A G E N D A

- I. Opening by the President
- II. Administrative Matters
 1. Report of the 43rd meeting of the Executive Committee
 2. Approval of the Agenda
 3. Report of the President on progress in the Special Nominating Committee
 4. Report of the General Secretary on the administrative office
 5. Statutes and By-laws - authority of: (a) the IAU Finance Committee
(b) the Special Nominating Committee
 6. New Adhering Countries
 7. IAU Commissions
 - (a) Commission 10: (i) Solar Maximum Year
(ii) Sunspot Number Index
(iii) QBSA
 - (b) Acting President of Commission 28
 - (c) Termination of Commission 42 circulars
 - (d) Commission 50 - Report
 - (e) Approval of new members and consultants
 - (f) IAU PPC (Dollfus)
 - (g) Any other matter
 - (h) WGPSN
 - (k) Astronomical Telegrams
 - (l) Democratic People's Republic of China (see also item 23)
 8. General Assemblies
 - (a) The XVIIth General Assembly
 - (i) State of preparation - report of the General Secretary

- (ii) Invitation of organizations to be represented at the XVIIth General Assembly
 - (iii) Delegation by the President of authority to invite to the General Assembly representatives of other organizations to the General Secretary, and of that to invite Invited Participants to adhering bodies
- (b) The XVIIIth General Assembly- Bulgarian invitation
 - (c) Future General Assemblies

9. IAU Finances until and including 1979

- (a) Report of the General Secretary on the financial situation of the IAU
- (b) Discussion of budget for 1979, especially with regard to the Franklin Mint donation
- (c) Grants to young astronomers towards participation in the Montreal General Assembly

10. IAU Finances 1980-1982

- (a) Discussion of proposed budget
- (b) Unit of contribution

11. Publications

- (a) Report by the Assistant General Secretary on IAU publications
- (b) State of preparation of Reports on Astronomy 1979- report by the General Secretary

III. Scientific Activity

12. IAU Symposia and Colloquia- report by the Assistant General Secretary

13. Regional meetings- report by the Assistant General Secretary

14. Scientific content of the XVIIth General Assembly

- (a) Invited Discourses
 - (i) Einstein's Contribution to Astrophysics: S.Chandrasekhar
 - (ii) Stellar Evolution and Close Binaries: P. Paczynski
 - (iii) Molecular Physics in Relation to Astronomy: G. Herzberg

(b) Joint Discussions

(c) Joint Commission Meetings

15. Other Scientific meetings- report by the Assistant General Secretary
16. Draft Rules for Scientific meetings
17. Young Astronomers' Schools- report by the General Secretary

IV. Relation to other organizations

18. ICSU - 1977 meeting of General Committee
19. COSPAR - 1978 Plenary Meeting
20. CCMP - secretary
21. Other organizations
22. Possible new adhering countries
23. People's Republic of China

V. Other Business

24. Any other matter
25. Future of the IAU
26. Next meeting of the Executive Committee

VI. Closing by the President

I. *Opening by the President*

The President, Professor A. Blaauw, welcomed the participants to Dublin, where the IXth General Assembly of the Union had been held in 1955, and opened the meeting on Tuesday, 15 August 1978, at 9.30.

II. *Administrative Matters*

1. The Report of the 43rd meeting of the Executive Committee and the comments on it, as circulated to the members and advisers, were unanimously approved.
2. On the proposal of the President, the Agenda was adopted, as on the preceding pages.
3. The President reported that the names of those to be proposed to the Montreal General Assembly for election to the posts of the President, General Secretary and Assistant General Secretary had already been selected by the Special Nominating Committee.

For the selection in the three vacancies of Vice-Presidents, the Special Nominating Committee had not yet entirely completed its recommendation. This recommendation depends, among others, on scientific, geographical and financial aspects. The discussion that ensued led to the conclusion that ~~the Southern Hemisphere should be represented on the future Executive Committee.~~

it is desirable to have/

4. The General Secretary, Professor Edith A. Müller, said that the administrative office of the IAU, with its rooms in the building of physical sciences of the Lausanne University at Dorigny, enjoys the financial and material help of the Société Helvétique des Sciences Naturelles, of the Observatoire de Genève and the Institut d'Astronomie de l'Université de Lausanne. They provide the rooms of the secretariat free of charge, pay the salary of two half-day typists at the disposal of the Union, cover the Union's postage, telegram and telephone charges, xeroxing, office material, etc.

The General Secretary further reported that she had been repeatedly in Paris to negotiate with Dr J. Boulon, President of the Observatoire de Paris, Prof. J.-C. Pecker, and others, the establishment of the permanent secretariat of the Union ~~on~~ the premises of the Observatoire de Paris. Her efforts had not, however, led to satisfactory results.

yet/

The pavilion (Pavillon ouest) adjacent to the building of the Observatoire de Paris, meant to house the administrative office, ^{badly needs} is in bad repair. It would cost 140.000 to 200.000 French francs to make it fit for use, and the French Ministry of Universities is ^{seemed} at present not prepared to allocate such a large sum. The General Secretary had therefore decided to delay the acceptance of this offer.

Director of INAG.

On the suggestion of Dr J. Delhaye, the General Secretary had also inspected the building "Observatoire du Parc Montsouris" which might come into consideration as an alternative solution. The building is the property of the City of Paris and much coveted by many personalities of the Parisian public life. Though larger than the pavilion near the Observatoire de Paris, it has the disadvantage of being rather isolated, ~~having no xeroxing facilities~~, being more expensive as regards maintenance, and also requiring repairs.

In the discussion of the problem the following views were heard:

The President was of the opinion that if there is no satisfactory reply by the end of September from Paris, another solution would have to be found. Chances are that neither of the two buildings in Paris may be available. The President suggested that the secretariat of ESO, which is to move to Garching, Federal Republic of Germany, might be interesting to the IAU. This view was seconded by Prof. van den Bergh, especially taking into consideration the fact that the future Assistant General Secretary would be in Garching. In the view of Prof. Contopoulos it is preferable to have the secretariat at the place of the General Secretary. Prof. Iwanowska supported Prof. Contopoulos' opinion and added that the secretariat should not be influenced by outside factors, such as ESO which is not international enough. Dr Heeschen felt that a permanent secretariat would be very expensive, as experienced in the case of the American Astronomical Society. Prof. Kharadze suggested to remain with the French offer, the negotiations having gone too far. The Assistant General Secretary recommended that the French offer should be accepted if a satisfactory proposal comes in by October of this year; otherwise a transitional period would have to be envisaged. Prof. Fehrenbach felt that if the French offer included acceptable alternatives, the one concerning the Villa Montsouri should not be considered. Prof. Goldberg recommended that the IAU should go to Paris as soon as possible and that other sources of financing the adaptation, such as a special UNESCO grant, should be explored. Prof. Fehrenbach was asked to intervene with Prof. Delhaye. The Executive Committee members will be informed about the developments after October 1978.

- 5a. It was agreed that the Executive Committee would propose to the XVIIth General Assembly the following rewording of Article 18.(a) of the IAU Statutes:

18.(a) For each ordinary General Assembly the Executive Committee prepares a budget proposal covering the period to the next ordinary General Assembly together with the accounts of the Union for the preceding period. It submits these to the Finance Committee for consideration; this Finance Committee consists of one member nominated by each adhering body and approved by the General Assembly. At the first Committee meeting during the General Assembly, the Committee elects a Chairman from among its members.

18.(b) The Finance Committee examines the accounts of the Union from the point of view of responsible expenditure within the intent of the previous General Assembly, and it considers whether the proposed budget is adequate to implement the policy of the General Assembly as interpreted by the Executive Committee. It submits reports on these matters to the General Assembly which approves the accounts and decides on the budget.

Paragraphs (b), (c), (d) and (e) of Statute 18 now in force will become paragraphs (c), (d), (e) and (f) respectively.

To become valid this change of Statutes will have to be carried by 3/4 of the votes of adhering bodies. Moreover, the motion must appear on the Agenda of the XVIIth General Assembly.

It also was decided that the procedural information and guide-lines for the members of the Finance Committee should read:

1. The Executive Committee has the responsibility for the accounting for the IAU finances covering the three years preceding an ordinary General Assembly and the preparation of the budget of the Union for the triennium following the ordinary General Assembly.
2. The Executive Committee submits the duly audited accounts for consideration by the Finance Committee.
3. The General Secretary distributes the budget prepared by the Executive Committee to National Committees of Astronomy and/or Adhering Organizations for comments 8 months before the General Assembly.

4. The comments of National Committees and/or Adhering Organizations are evaluated by the General Secretary and any suggested changes are discussed with the Executive Committee by correspondence.
 5. After it is finalized, the proposal for the budget is published by the Executive Committee in the agenda of the General Assembly not later than 4 months before the first day of the meeting.
 6. The finalized proposal for the budget is submitted by the Executive Committee for consideration by the Finance Committee.
 7. The Finance Committee is assisted by the General Secretary and the Assistant General Secretary who attend the meetings in an advisory capacity.
- 5b. The Executive Committee approved that the President should issue the following guide-lines to the members of the Special Nominating Committee:

SPECIAL NOMINATING COMMITTEE

Terms of Reference

- 1a) The Special Nominating Committee (referred to as the SNC) submits to the General Assembly of the Union proposals for election to the President of the Union, the Vice-Presidents, the General Secretary and the Assistant General Secretary.
- 1b) The SNC may fill any vacancy occurring among its members.

Appointment of the SNC and its term of Office

- 2a) The SNC is appointed by and reports to the General Assembly.

- 2b) The SNC remains in office until the end of the ordinary General Assembly next following that of its appointment.

Members of the SNC

- 3a) The SNC consists of
- (i) the President of the Union
 - (ii) the past President of the Union
 - (iii) a member proposed by the retiring Executive Committee
 - (iv) four members elected by the Nominating Committee from among twelve Members proposed by Presidents of Commissions.
- 3b) Other than the President and immediate past President of the Union, present and former members of the Executive Committee shall not serve on the SNC.
- 3c) No two members of the SNC shall belong to the same country.

Advisers to the SNC

- 4) The General Secretary and the Assistant General Secretary participate in the work of the SNC as advisers without voting right.

Chairman of the SNC and his
Substitute

- 5) The President of the Union is Chairman of the SNC by virtue of his office. He conducts the business of the SNC. If the President is incapacitated, the past President of the Union acts on his behalf.

Members of the SNC proposed by the
Executive Committee

- 6) The retiring Executive Committee elects by absolute majority of votes a Member to be proposed to the General Assembly for appointment to serve on the SNC. The requirements of articles 3b and 3c shall be respected.

Election of four members of the SNC
by the Nominating Committee

- 7 a) The General Secretary invites, not later than January of the year of an ordinary General Assembly, Presidents of Commissions, each to propose twelve Members as candidates for election to the SNC, none having ever served on the Executive Committee.
- 7 b) The names of thirty six Members with most proposals in their favour shall be included in the list of candidates to be presented to the vote of Presidents of Commissions. In case of ties, the General Secretary completes the list from the proposals received taking into consideration the widest possible representation of different astronomical branches.
- 7 c) At their first meeting during the General Assembly Presidents of Commissions select by simple majority of votes twelve out of the thirty six names, as presented to them by the General Secretary, for inclusion in the list of candidates to be voted on by the Nominating Committee. Each Commission President votes for twelve candidates.
- 7 d) If two or more from among the twelve elected candidates belong to the same country, the one with the prevailing number of votes in his favour takes precedence, the other(s) being replaced by the contestant(s) next following in the order of vote.
- 7 e) The Nominating Committee elects from the list of twelve candidates proposed by Presidents of Commissions, by simple majority of votes, the four Members to be proposed to the General Assembly for appointment to serve on the SNC. Each member of the Nominating Committee votes for four candidates.

Proposal to the General Assembly

- 8. The proposal for the appointment of the SNC to take office is presented to the General Assembly by the retiring President of the Union.

Vacancy in the SNC

- 9 a) The procedure for selecting candidates to fill a vacant office is decided, on the merits of the case, by the Chairman of the SNC in consultation with his substitute.
- 9 b) The Member to be appointed to the vacant office is ultimately elected by absolute majority of the votes in the SNC.

Conflict of Interest

- 10) If a member of the SNC is proposed to serve on the Executive Committee, the Chairman of the SNC, having heard the member concerned, takes such steps as he may consider appropriate.

Voting in the SNC

- 11) Decisions within the SNC are taken by absolute majority of votes, each member having one vote. If the votes are equally divided, the Chairman determines the issue.

Proposals for election of Officers of the Union

- 12) The proposal of the SNC to the General Assembly for election to the President of the Union, the Vice-Presidents, the General Secretary and the Assistant General Secretary shall be published in the agenda of the General Assembly four months before the first day of the meeting, and presented to the General Assembly by the retiring President of the Union.

Expenses

- 13) The possible travel expenses incurred with the activity of the SNC shall be borne from the budget of the Union.

6. It was noted that there is no application for admission as new Adhering Country before the Executive Committee.

- 7a. (i) The proposal of Dr G. Newkirk, President of IAU Commission No.10, regarding the project Solar Maximum Year (SMY) was re-discussed and endorsed. The project is aimed at studying in detail the flare phenomenon, i.e. pre-flare, during flare, and post-flare phenomena, during the peak in solar activity in the course of 1980. Thus it will consist of the following three parts: Flare Build-up Study, the Study of Energy Release in Flares, and the Study of Travelling Interplanetary Phenomena. The studies will be chaired by Z. Svestka, D. M. Rust, and M. Dryer respectively.

The SMY project was endorsed by COSPAR and, on the proposal of Prof. C. de Jager (past President of COSPAR) and the approval of G. Newkirk, it was agreed to appoint Dr S. F. Smerd and Prof. V. E. Stepanov as members of the SMY for the IAU. A close cooperation between the SMY and the Solar Maximum Mission (SMM) is envisaged. Prof. G. Withbroe was suggested by G. Newkirk for the establishment of the liaison between the two projects. The Executive Committee endorsed this proposal.

- (ii) The General Secretary informed the Executive Committee of the formation, within IAU Commission No.10, of a Preliminary Working Group on Solar Activity Index which is to examine the problem of standardizing the Zurich Sunspot Number Index. The members of the Working Group are: Dr J. Eddy (Chairman), Dr L. Dezsö, Dr H. Nussbaumer and Dr A. Shapley. COSPAR had resolved at its Innsbruck Plenary Meeting that the index should be continued.
- (iii) It was noted with satisfaction that the responsibility for the preparation of the Quarterly Bulletin of Solar Activity had been transferred to Dr F. Moriyama of the Tokyo Astronomical Observatory. The first number produced in Japan had already appeared, and the first instalment of \$2,200.-U.S. to the QBSA had already been paid by FAGS.
- 7b. The Executive Committee learned with regret of the resignation, for poor health, of Prof. B. E. Markarian from the post of President of IAU Commission No.28. Prof. B. E. Westerlund, Vice-President of the Commission, was appointed Acting President of Commission No.28 until the end of the XVIIth General Assembly.
- 7c. It was resolved to continue the IAU grant of \$300.- per triennium, originally allocated to Commission No.42 for the RS CVn-systems co-ordinated programme, for the purpose of preparing and mailing the semi-annual Bibliography and Program Notes on Close Binaries.
- 7d. The brochure "Report & Recommendations of Commission 50 (Identification & Protection of Existing & Potential Observing Sites)", prepared by the Vice-President of Commission 50, Prof. F. G. Smith, was circulated. The General Secretary said that 10 copies of the booklet had been sent to UNESCO, 10 to ICSU, and 3 copies each to National Committee of Astronomy. As to the rest, Prof. Smith would be asked how to distribute them. Prof. Smith had participated, as IAU representative, in the meeting of the International Commission on Illumination (CIE), Technical Committee 4.6, which had been held in Grenoble, France, on 22 June 1978. The report of Commission 50 had been presented to this meeting.

Prof. van den Bergh considered Recommendation 5 ("Aircraft should not be allowed in the sky more than 10° above the horizon, as viewed from the observatory site, nor within 5 km horizontal distance from the site") impracticable and Prof. Kharadze felt

that it is exaggerated. Prof. Goldberg said that the recommendations evidently are not to apply to already established observatories. The President considered the recommendations good in long range planning and recommended to express to Comm.50 the willingness of the Executive Committee to help, if the need arises.

7e. The following co-options by Commissions were approved:

Commission No.10 "Solar Activity", President Dr G. Newkirk, Jr.: Prof. G. van Hoven had been co-opted as consultant. Commission No.16 "Physical Studies of Planets and Satellites", President Dr T. C. Owen: Ch. A. Cross and Y. S. Tjuflin had been co-opted as consultants. Commission No.34 "Interstellar Matter and Planetary Nebulae", President Dr G. B. Field: H. Gerola, D.P. Gilra, and B. L. Lutz had been co-opted as new Commission members. Commission No.42 "Close Binary Stars", President Dr G. Larson-Leander: K. G. Kron, B. F. Marino, E. F. Milone and R. M. Williamon had been co-opted as new Commission members. Commission No.46 "Teaching of Astronomy", President Dr E. V. Kononovich: Chun-Shan Shen and Tao Kiang had been co-opted as new Commission members.

7f. Dr A. Dollfus is worried about the future of the Planetary Photograph Centre at Meudon, as its Curator, Dr Servajean is to retire in August 1979, and the appointment of his successor is uncertain. Dr Dollfus has asked the Union's help in securing for Dr Servajean's successor a firm salaried position at the Observatoire de Paris.

The General Secretary had asked Dr Owen, President of Commission No.16, Dr Anders, President of Commission No.17, Dr Gehrels and Dr Baum ^{to evaluate the role of} whether they consider the Centre important. Two replies were positive (Owen, Gehrels), two negative (Anders, Baum). It was emphasized, in the main, that the access to the photographic material is difficult.

The discussion that ensued showed that more first-hand information is needed, especially as regards the work done on the basis of the documents supplied by the Centre, that the appointment of Dr Servajean's successor is entirely in the hands of Dr Boulon, the President of the Paris Observatory, and that the IAU has no authority to interfere, as requested by Dr Dollfus. However, Dr Boulon will be requested to make sure that the documentation of the PPC is well preserved.

It was agreed to inform Dr Dollfus that the IAU grants to the Lunar and Planetary Photographic Centre at Meudon would be continued over the next term of office that, however, no further steps would be taken by the Union. He will also be asked to ensure that the photographic material is more accessible to the astronomical community.

- 7g. The Executive Committee was informed
- after having been directed during many years, and very ably, by P. Herget*
- (i) that the Minor Planet Center had been moved to the Smithsonian Observatory; and
 - (ii) that a Working Group on Nutation had been formed within Commission No.4. The Working Group, to make recommendations to the XVIIth General Assembly, consists of P.K. Seidelmann (Chairman), C. C. Counselman III, J. Kovalevsky, M. L. Smith, R. O. Vicente, J. G. Williams and Ya. S. Yatskiv.

7h. The Executive Committee approved the names as in Appendix C of the Minutes of the Fifth Meeting of the Working Group for Planetary System Nomenclature and endorsed the appointment of V. V. Shevchenko as Chairman of the Lunar Task Group. It was also resolved that henceforward the names assigned by the WGPSN would be published in the Transactions of the IAU and not, as previously suggested, in ICARUS. It was suggested that the unassigned names (name bank) might be published on microfiches attached to the Transactions volume.

7i. Prof. W. J. Luyten had complained to the President that he had unrightfully been charged \$100.- for the publication of one of his communications in IAU Telegram Bureau Circular No.3210. The President considered it irrelevant that a resolution had been passed by Commission 6, permitting the Director of the IAU Telegram Bureau the exercise of discretion in accepting items for the Circulars. All that matters is, whether the terms for accepting contributions to the Circulars had duly been published and made accessible to Prof. Luyten. Prof. van den Bergh said that such terms had been published in a Circular of September 1977 (see Circular No. 3113 of 28 September 1977). Dr Marsden will be asked for clarification and detailed information on expenditure of the Bureau which is needed for considering the grant to the project.

7k. The General Secretary reported that a Chinese delegation, which attended the CCIR meeting in Geneva in February 1978, approached her through Mr. H. M. Smith with the request for an informal exchange of views as regards the adherence of the Democratic People's Republic of China to the IAU. The delegation consisted of Mr. Yang Chao Chin representing the Peking Government, Mr. Chuang Chi Hsiang and Mr Tsai Hsieng of the Time Service at the Shanghai Observatory, and of 2 interpreters.

Mr. Yang expressed the wish of China to adhere to the Union provided the Union is prepared to expel Taiwan. He urged that the IAU follow the example of IUGG and IUGS. Mr. Yang was told that the IAU is a non-political organization with its doors open to all astronomers of the world without discrimination. Mr. Yang closed the conversation with the words: "We can wait."

The General Secretary had also been informed that Dr Melchior, General Secretary of IUGG, had approached Dr Migeotte and other Belgian astronomers with the request to formulate at the annual October meeting of Belgian astronomers a motion proposing to the XVIIth General Assembly the expulsion of Taiwan from and admission of China to the IAU. The General Secretary explained to Dr Migeotte that the IAU does not see the need for the IAU to follow any example of IUGG, IUGS or any other Union.

Prof. Contopoulos expressed his full agreement with this statement and said that the IAU does not even have to follow ICSU if ICSU would accept China and expel Taiwan.

The President reported of his conversation with the Deputy Director of the Foreign Affairs Bureau of the Chinese Academy of Sciences, Prof. Chu Yung-hsing, on the occasion of the visit of a delegation of the Chinese Academy of Sciences to some scientific institutes in the Netherlands, between 9 and 19 June 1978. The interest as regards the Chinese membership in the IAU was manifest on both sides. The President referred in the conversation to the statements made at the XVIth General Assembly and provided Prof. Chu Yung-hsing with the relevant part of Prof. Goldberg's speech at Grenoble and with a copy of the IAU Statutes. Prof. Chu was thoroughly acquainted with the problem and well aware of the visits paid by Chinese groups or individuals to the U.S. and Europe and of the visits of foreign astronomers to China. It was obvious that the delegate had been briefed as regards the view of some astronomers according to which the past decisions of the IAU concerning China are invalid. He stressed that the exclusion of Taiwan from the IAU is an indispensable condition for the re-entry of China. The President felt, however, that there was a genuine desire to watch for an opportunity to reconcile the points of view of the two sides. As to the question of who would be supposed to represent the Taiwan astronomical community in the IAU if they were no members of the Union, Prof. Chu replied that this matter would have to be studied in Peking. The delegate emphasized personal rather than formal contacts and the co-operation of institutes. The general impression of the President was that there is room for negotiations, that there is a wish to continue talks.

Prof. Goldberg mentioned that he had a similar impression when he visited China, heading a scientific delegation from the U.S.A.

The Assistant General Secretary said that he ^{might become} ~~would be~~ in a position to obtain an invitation to visit China.

The discussion was then adjourned to the next day.

8a(i) The General Secretary reported on her meeting with the Canadian Committee for the XVIIth General Assembly held from 15 to 18 November 1977. The local facilities, such as lecture halls, rooms for Commission sessions, cafeterias etc., appear very satisfactory. She pointed out that so far the Local Organizers have been unable to raise money for travel grants to Montreal. She added that Dr Batten is now doing his utmost to persuade certain ethnic groups in Canada to pay the travel expenses to Montreal of some members of the Executive Committee or Commission Presidents. Hotel prices (1977) range from Can.\$24.00 to Can.\$42.00 for a single room, Can.\$28.00 to Can.\$47.00 for double occupancy.

The Invited Discourses and the General Assemblies are to be held in the large audience hall of the Queen Elizabeth Hotel which has facilities for simultaneous translation. This hall, however, would only be available free of charge if the IAU succeeded in occupying 400 rooms in the hotel (single room: Can.\$42.-, double room: Can.\$47.-). At the Student Residences of the University of Montreal 1000 rooms have been booked by the Local Organizers. The rooms are all single. The price for a room is Can.\$150.00 for 10 nights and it must be paid in advance.

Prof. van den Bergh reported on the latest developments concerning the local arrangements for the General Assembly in Montreal. The registration fee is now proposed to be Can.\$50.00 for early registration, Can.\$55.00 for late registration. One third of the registration fee would cover the expenses of the organized excursion on Saturday afternoon of the weekend between the sessions. Profs. Contopoulos, Iwanowska and Kharadze stressed that the Registration fee should be as low as possible and should not include any social events. Excursions, closing dinner, concerts, or any other social activity could be paid separately by the participants interested in any of them. Prof. Goldberg endorsed this view. Dr Batten is to be informed about the request of the Executive Committee to reduce the registration fee. Participants who have to meet on the Saturday afternoon, such as the members of the Finance Committee, Nomination Committee, etc., will meet on campus rather than during the traditional excursion. Profs. Iwanowska and Kharadze pointed out the difficulties of countries having non-convertible currencies with advance payments of the (lower) registration fee. Dr Batten will be asked to take this fact into consideration. Prof. Fehrenbach expressed his surprise about the alleged impossibility of the Canadian organizers to obtain money for travel grants. Prof. van den Bergh reported on the question regarding visas to Canada. He said that participants from countries having diplomatic relations with Canada should have no problem obtaining a Canadian visa. Participants from North-Korea and Taiwan must ask for a visa as individuals and not as national delegates with official passports.

- (ii) The list of international organizations for invitation to the XVIIth General Assembly was approved. It includes the organizations that had been invited to attend the Grenoble General Assembly.
 - (iii) The President delegated his privilege to invite to the General Assembly (1) representatives of other organizations to the General Secretary, and (2) scientists and young astronomers (i.e. Invited Participants) to the National Committees of Astronomy and/or Adhering Organizations. This delegation was approved.
- 8b. The invitation of the Bulgarian Academy of Sciences to hold the XVIIIth General Assembly of the Union in Sofia in 1982 was read. It was agreed that the Executive Committee would recommend the acceptance of this invitation to the XVIIth General Assembly, and it was suggested that the General Secretary should visit Sofia during the first half of 1979 to find out about the possibilities of the local arrangements, accommodations, etc., for the future General Assembly.
- 8c. There was no invitation as regards the venue of any future General Assembly before the Executive Committee. Possibilities would have to be explored in Israel, Japan, Mexico and Spain. Prof. Goldberg said that the U.S. might be interested in organizing the 1985 General Assembly in the Boston area.
- 9a. The Survey of IAU Income and Expenditure from 1 January to 30 June 1978, presented by the General Secretary, showed an excess of SFrs.141,929.04 of receipts over payments. This amount was considered sufficient to cover the expenses of the Union until the end of 1978.
- From the table showing the travel grants paid by Commission No.38 "Exchange of Astronomers" during the first six months of 1978 it was seen that the funds available for this purpose had been insufficiently used. The matter will be discussed with the President of the Commission, Prof. MacRae. It also was suggested that a poster on the availability of travel grants might be included in one of the next Information Bulletins.
- 9b. The balance in hand on the IAU current accounts was well above SFrs 350,000.- at 30 June 1978. With this in mind the General Secretary proposed to the Executive Committee the following estimate of the budget for 1979:

<u>Receipts</u>	<u>in SFrs</u>	<u>Payments</u>	<u>in SFrs</u>
1. Contribution from Adhering Countries	314.975	1. Administrative office	150.000
2. Revenue from publications	20.000	2. Subscription to ICSU	7.875
3. Interest on accounts	13.308	3. Commission expenses	3.430
4. UNESCO subvention through ICSU	22.320	4. Projects of Commissions	
	<hr/>	4.1. Exchange of Astronomers	45.000
	370.603	4.2. Other projects	11.450
Total	370.603	5. General Assembly	136.210
Payments	-448.753	6. Publications	12.850
	<hr/>	7. Publications for developing countries	16.667
Excess of payments over receipts	78.150	8. Executive Committee	0
	=====	9. Officers' meetings	6.550
		10. Symposia & Colloquia	34.000
		11. Inter-Union Commissions	13.500
		12. EC projects	3.334
		13. Representation	6.667
		14. Bank charges	1.220
		15. Young Astronomers' Schools	0
		16. Regional meetings	0
			<hr/>
		Total	448.753
			<hr/>

This budget was approved, and it was resolved that the imbalance of SFrs 78,150.- would be covered from the active balance as on the IAU current accounts. Moreover, SFrs. 50,000.- would be placed into a Swiss savings account.

In this connection, the General Secretary reported that the IAU had agreed to sponsor the production of a Silver Sky Map depicting the constellations according to the delineation approved by the IAU in 1928,

for which the Franklin Mint Corporation, the producers of the map, would pay the Union a sponsorship fee of \$25.000 U.S. This fee, equal SFrs. 48,156.50 had already been paid. The General Secretary proposed to use the totality of this sum for travel or subsistence grants to the Montreal General Assembly.

9c. In view of the considerations in the preceding paragraph, it was agreed that the Young Astronomers Grants for the XVIIth General Assembly would be paid from the following funds:

Franklin Mint donation	\$25.000 = 48,156.50 SFrs.
Budget item 5 (Payments)	\$10.000 = 19,300.-- SFrs.
Reserves	\$10.000 = 19,300.-- SFrs.
Budget item 4.1 (Payments)	\$10.000 = 19,300.-- SFrs. (after consultation with Prof. MacRae)
<hr/>	
TOTAL	\$55.000 = 106,056.50 SFrs. =====

This amount is to be divided in individual grants ranging from \$250 to \$450 according to where the recipients come from.

10a. The budget ^{- estimate} of the IAU for the next term of office was approved as follows:

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*Tentative Budget of
the IAU
for the years 1980/82*

Unit of contribution 1.465.00 Swiss francs
(One Swiss franc equal 0.2175926 g of fine
gold)

RECEIPTS	in Swiss francs	PAYMENTS	in Swiss francs
1. Contribution from Adhering Countries	966,900.--	1. Administrative office	
2. Revenue from IAU publications	60,000.--	1.1. Secretariat in Paris	380,000.--
3. Interest on accounts	65,000.--	1.2. Secretarial help for General Secretary and Assistant General Secretary	30,000.--
4. UNESCO contribution through ICSU	<u>66,900.--</u>	1.3. Furniture, Type-writers	20,000.--
Total receipts	1'158,800.--	2. Subscription to ICSU	24,200.--
Total payments	<u>1'182,200.--</u>	3. Commission expenses	15,000.--
Excess of payments over receipts	23,400.-- =====	4. Projects of Commissions	
		4.1. Exchange of Astronomers	70,000.--
		4.2. Teaching of astronomy	3,000.--
		4.3. Other projects	35,000.--
		5. General Assembly	140,000.--
		6. IAU publications	55,000.--
		7. Publications for Executive Committee & developing countries	50,000.--
		8. Executive Committee meetings	60,000.--
		9. Officers' meetings	21,000.--
		10. Symposia & Colloquia	130,000.--
		11. Inter-Union Commissions	20,000.--
		12. Projects of the Executive Committee	13,000.--
		13. Representation	20,000.--
		14. Bank charges	1,000.--
		15. Young astronomers' schools	60,000.--
		16. Regional meetings	30,000.--
		17. Expenses of Special Nominating Committee	<u>5,000.--</u>
		TOTAL payments	<u>1'182,200.--</u>
<u>Payments under item 4.3 (Other projects of Commissions)</u>			
Commissions and Projects	SFrs		
General Reserve*	3,280.--		
6. IAU Telegram Bureau	5,595.--		
16. Planetary Documentation	5,290.--		
17. Lunar Documentation	5,285.--		
20. Minor Planet Center	6,220.--		
27. Variable Stars Catalogs	<u>9,330.--</u>		
Total	<u>35,000.--</u>		
<i>*The reserve is to be used for such allocations as the grant to Commission 42, additional grant to Commission 6, etc.</i>			

The comments of the General Secretary accompanying the proposal were consulted. New in the proposed budget are items 1.2, (Secretarial help for General Secretary and Assistant General Secretary); 1.3 (Purchase of furniture, typewriters and other items necessary for the new permanent secretariat in Paris); 4.2. (Teaching of astronomy), 17 (Expenses of Special Nominating Committee) under Payments and the general reserve under item 4.3. Payments. The grant to Commission 4 "Ephemerides" was discontinued. The SFrs 21.000 budgeted for Officers' meetings will only cover 1 such meeting per year. The amount of SFrs 20.000 for Inter-Union Commissions may have to be increased if the Union is to help subsidize the Federation of Astronomical and Geophysical Services from its own budget. The sum of SFrs.60.000 allocated to Young Astronomers' School is meant for three such schools. If only two schools will be held during the three years' term, the allocated sum would be reduced to SFrs.40.000. In item 16 five Regional Meetings (SFrs.6.000 each) are considered. If the number of such meetings is less than 5 during the next term of office, the allocated funds would also be reduced.

It was agreed that the imbalance of the budget would be covered from the reserves of the Union.

The SFrs.380.000 under item 1.1 of Payments (Administrative office) are to cover the salaries and social charges of a secretary and a typist, the travel and living expenses of the General Secretary to and in Paris, postage, telegrams and telephones, electricity and heating, xerox, auditing, and office material.

10b. The XVIIth General Assembly will not be asked to increase the unit of contribution over and above SFrs 1,465.-.

11a. The Assistant General Secretary reported on the state of publication of IAU Symposium and Colloquium volumes. Published were: IAU Symposia Nos. 76, 77, 79 and 80, and IAU Colloquia Nos. 33, 37, 38, 39, 41, 42, 43 and 45. Moreover there were published IAU Transactions XVIB and Highlights of Astronomy, volume 4 (in 2 parts).

The historical and bibliographical parts of Symposium No.80 have been published separately in Dudley Observatory Report No.13.

The Assistant General Secretary pointed out that the average price per page of the last 6 Symposia volumes (No. 74-77, 79-80) paper bound is \$0.064. This is to be compared with \$0.086 for the Symposia volumes Nos 70-73.

With 33 1/3% reduction to IAU members, the cost per page for the last six volumes average \$0.043 as compared with an average \$0.064 per page for Symposium Volumes Nos. 67-69 published 2 1/2 years earlier. If inflation of dollar prices is running at 8 % p.a. during that period this is a 'real cost' diminution of 45 %, due to introduction of camera-ready copy.

The preparation of camera-ready copy is successfully and rapidly tackled by highly competent editors with skilled editorial help but, without doubt, proves to be a severe burden to less well supported editors.

- 11b. The General Secretary said that she had informed each Commission President of the number of camera-ready pages allocated to his Commission for the contribution to the Reports on Astronomy 1979. The Reidel Publishing Company had been instructed to mail the sheets to Presidents providing for a little reserve. The deadline for sending the Commissions reports is 31 December 1978. Professor Contopoulos heard from astronomers that the division of the Reports on Astronomy in three volumes was considered to be good, though some Commissions reports were too congested. ~~The President felt that the length of the reports should be discussed by the Commissions.~~ A sample of the computerized alphabetical list to appear in Transactions XVIIIB was inspected.
12. The Assistant General Secretary reported on past Symposia and Colloquia and on already accepted or proposed future IAU meetings.
- (i) The following are the meetings held since August 1977:

Symposium No.77	Bad Munstereifel, GFR	August 1977
Symposium No.79	Tallinn, U.S.S.R.	September 1977
Symposium No.80	Washington, DC, U.S.A.	November 1977
Symposium No.81	Tokyo, Japan	May 1978
Symposium No.82	Cadiz, Spain	May 1978
Symposium No.83	Qualicum Beach, BC, Canada	June 1978
Symposium No.84	College Park, Maryland, US	June 1978
Symposium No.89	Uppsala, Sweden	August 1978
Colloquium No.42	Bamberg, GFR	September 1977
Colloquium No.43	London, U.K.	July 1977
Colloquium No.45	Torun, Poland	September 1977
Colloquium No.47	Vatican	July 1978
Colloquium No.49	Groningen	August 1978
Colloquium No.52	Tucson, U.S.A.	January 1978

On attendances, there has been correspondence on difficulties in respect of travel to and from U.S.S.R.

- (I) Delay in visas granted by U.S.S.R. The letters by N. V. Vidal, M. S. Longair were discussed.
- (II) Uncertainty of U.S.S.R. participation. The letter of F. J. Kerr was discussed.

(ii) The future Symposia and Colloquia which have already been approved by the Executive Committee are:

- Symposium No.85 "Starclusters", Victoria, B.C.,
Canada, 27-31 August 1979.
K. C. Freeman and J. E. Hesser
were proposed as editors.
- Symposium No.86 "Radio Physics of the Sun", College Park,
Maryland, U.S.A., 7-10 August 1979.
- Symposium No.87 "Interstellar Molecules", Mont Tremblant,
Quebec, Canada, 6-10 August 1979.
- Symposium No.88 "Close Binary Stars", Toronto, Ontario,
Canada, 7-10 August 1979.
- Colloquium No.44 "Solar Prominences", Oslo,
Norway, 14-18 August 1978.
- Colloquium No.46 "Changing Trends in Variable Star Research",
Hamilton, New Zealand,
5-8 December 1978.
- Colloquium No.48 "Modern Astrometry", Vienna,
Austria, 12-14 September 1978.
- Colloquium No.50 "High Angular Resolution Stellar
Interferometry", College Park,
Maryland, U.S.A., 30 August - 1 September 1978.
- Colloquium No.51 "Convection and Turbulence in Stellar
Atmospheres", London, Ontario,
Canada, 27-30 August 1979.

(iii) The following proposed IAU Symposia and Colloquia were approved:

- IAU Symposium No.90 "Solid Particles in the Solar System",
Ottawa, Ontario,
Canada, 27-31 August 1979.
- IAU Symposium No.91 "Solar and Interplanetary Dynamics",
Cambridge, Massachusetts,
U.S.A., 27-30 August 1979.
- IAU Symposium No.92 "Objects of High Redshift", Los Angeles,
California,
U.S.A., 28-31 August 1979.
- IAU Symposium No.93 "Fundamental Problems in the Theory
of Stellar Evolution", Kyoto,
Japan, 22-25 July 1980.

- IAU Symposium No.94 " The Origin of Cosmic Rays",
Bologna, Italy, spring 1980,
to be co-sponsored by IUPAP.
- IAU Colloquium No.53 " White Dwarfs and Variable Degenerate Stars",
Rochester, N.Y.
U.S.A. 31 July - 3 August 1979.
- IAU Colloquium No.54 "Scientific Research with the Space Telescope",
Princeton, N.J.,
U.S.A. 8 - 11 August 1979.
- IAU Colloquium No.55 "The Sixth International Colloquium on
UV and X-ray Spectroscopy of Astrophysical
and Laboratory Plasmas",
Toronto, Ontario,
Canada July 1980.

It should be noted that IAU Symposium No.92 had been approved with the proviso that the Assistant General Secretary would enquire as to the possible location nearer to Montreal.

Symposium No.93 had been approved subject to removal of the topic "Mechanisms of Mass-Loss" as a specific programme topic.

A further formal proposal is awaited as regards the Colloquium on "Mass-Loss from Stars", Padua or Trieste, Italy, 1980. At present it could not be approved.

(iv) The following Symposia will be co-sponsored by the IAU:

- COSPAR/IAU/IUPAP Symposium on Gamma Rays, Bangalore, India,
2-3 days in May/June 1979.
Chairman: B. V. Streekantan
- COSPAR/IAU/IUGS/URSI/IUBS/ IUGG Symposium on the Formation
of the Solar System,
Bangalore, India 29-31 May 1979.
Chairman: to be appointed.

Moreover, the IAU will co-sponsor the IAGA/COSPAR/URSI/SCOSTEP Conference on Solar Terrestrial Physics Workshop "Solar Radio Astronomy and Interstellar Scintillation",
Narrabri, W. Australia
28-30 November 1979.

The IAU representatives in these meetings will be appointed by the General Secretary.

13. The Regional Astronomy Meetings considered for 1980-1981 are:

- European Regional Meeting in Yugoslavia, Belgrade, July-August 1981
or/ Dubrovnik, October 1981
~~(provided the requirements concerning attendance are met)~~
- European Regional Meeting in Liège, Belgium, 1980
- Latin-American Regional Meeting in Merida, Venezuela, 1980 or 1981.
- The previous proposal for an Asian Regional Meeting in Alma-Ata, U.S.S.R., was withdrawn.

14a. The Invited Discourses for the Montreal General Assembly had been agreed upon at the 43rd meeting of the Executive Committee and are as follows:

1. Einstein's Contribution to Astrophysics- Speaker: S. Chandrasekhar
2. Molecular Physics in Relation to Astronomy - Speaker: G. Herzberg
3. Stellar Evolution and Close Binaries- Speaker: B. Paczynski

All speakers have accepted the invitation. Profs. Chandrasekhar and Herzberg wished to leave the exact title of their discourse to further considerations. Prof. Herzberg had been asked by the General Secretary whether he would be willing to give his lecture in French. It was decided that Prof. Herzberg could very well give his Discourse in English inasmuch as there will be simultaneous translations into French for all 3 discourses.

and Prof. Iwanowska proposed that a stand-by
should be considered
Prof. van den Bergh felt ~~it advisable to consider somebody in~~
~~reserve for Prof. Chandrasekhar. Prof. Iwanowska seconded Prof.~~
~~van den Berg's proposal and~~ added that a reserve should be considered for each speaker or that at least the possibility should be examined of having the lectures, prepared by the speakers, read by somebody else. John Wheeler was proposed as reserve for Prof. Chandrasekhar in case he should be prevented to go to Montreal. Prof. Kharadze proposed that typed manuscripts of the Invited Discourses should be available beforehand. He also said that it would be useful to have preprints of the papers to be presented at Symposia and Colloquia distributed in two to three copies to each National Committee of Astronomy. Prof. Fehrenbach emphasized that the interpreters need necessarily the texts of the papers to be translated. The General Secretary said that she had asked all speakers to bring to the General Assembly their manuscripts in camera-ready form.

14b. The Joint Discussions agreed upon for the XVIIth General Assembly are as follows:

1. Large Scale Velocity Fields on the Sun. Sponsored by Commission 10, co-sponsored by Commission 12. Co-chairmen and editors: M. Stix and P. Gilman. Programme to be formulated later.
2. Exploration of the Solar System. Sponsored by Commission 16, co-sponsored by Commissions 17 and 44. Organizing Committee: T. Owen, E. Anders, M. Ya. Marov. The programme to include: the Moon, Mercury and Mars (Sources of Meteorites and other accrediting material, Chronologies on the Surfaces of the Inner Planets from Cratering Statistics); Venus - Results from Recent Missions (The Atmosphere: general review, clouds, composition, dynamics, aeronomy, the surface) Jupiter - Results from Voyager Mission (the atmosphere, the magnetic field and radiation belts, the satellites).
3. Nuclei of Galaxies. Sponsored by Commission 28, co-sponsored by Commission 33, 34 and 40. Organizing Committee: W. B. Burton (Chairman), R. D. Ekers, J. Lequeux, H. Okuda, D. Osterbrook, V. I. Pronik and D. W. Weedman. Programme: Nuclei of normal Galaxies, nucleus of the Milky Way.
4. Ultraviolet Astronomy- New Results from Recent Space Experiments. Sponsored by Commission 34, co-sponsored by Commission 28, 29, 44 and 45. Organizing Committee: A. K. Dupree (Chairman), F. Bertola, R. Davis, G. B. Field, M. Hack, B. Hauck, B. E. Markarian, M. Peimbert, T. P. Snow and R. Wilson. Programme: Stars and Stellar Systems (Hot Stars-Planetaries, Hot Stars-Subluminous Stars, X-ray sources- Compact objects/ Globular clusters, Cool Stars, Peculiar Stars, Summary); Interstellar Medium (Hot Components, Interstellar Clouds, Summary); Extragalactic (Normal Galaxies, Seyfert Galaxies, Quasars and BL Lac Objects, Summary).
5. Very Hot Plasmas in Circumstellar, Interstellar and Inter-galactic Space. Sponsored by Commission 34, co-sponsored by Commissions 10, 28, 44, 48 and 49. Organizing Committee: W. I. Axford (Chairman), S. A. Colgate, R. Cowsik, A. Hewish, F. Pacini, D. Sciama and G. S. Vaiana. Programme: The Sun (solar corona, coronal heating, solar flares), The Solar System (Interplanetary medium, the Jovian magnetosphere); Interstellar Medium (hot component, diffuse X-rays, supernova remnants); Galactic Sources (stellar coronae, X-ray sources,

galactic nuclei); Extragalactic Sources (galactic haloes and winds, hot gas in the local group, hot gas in clusters, hot gas between clusters); Acceleration Mechanisms (flares, magnetic reconnection, shock waves).

6. Stellar Instabilities. Sponsored by Commission 35, co-sponsored by Commissions 12, 27, 42, and 48. Organizing Committee: A. N. Cox (Chairman), M. J. H. de Groot, D. J. Faulkner, I. Iben, P. Ledoux, T. J. Moffett, J. R. Percy, R. J. Tayler, V. P. Tsessevich, A. J. Wesselink. Programme: Instabilities Occurring in Stellar Evolution: Secular Instability, Pulsation Instability, Dynamical Instability.

7. Physics of the Chromosphere-Corona-Wind Complex and Mass-Loss in Stellar Atmospheres. Sponsored by Commission 36, co-sponsored by Commissions 10, 12, 29, 35 and 44. Organizing Committee: D. Mihalas (Chairman), R. Bonnet (Co-chairman), G. Brückner, A. G. Hearn, Y. Kondo, H. Lamers, G. Newkirk, T. Snow, R. N. Thomas, A. B. Underhill, J. Ziolkowski. Programme: Observational Evidence of Stellar Chromospheres, Coronae and Mass-Loss (Introduction, Stars of spectral type earlier than the Sun, Solar and late-type stars, X-ray sources); Observations of the Solar Chromosphere-Corona-Wind Complex (Large-scale structure of the corona, a high resolution view of the solar chromosphere and corona); Physics of Dissipative Processes in Stellar Atmospheres (Global instabilities in stellar atmospheres and their implications for chromospheric and coronal heating, small-scale dissipative processes in the solar atmosphere); The Propulsion and Dynamics of Stellar Winds and their Influence on Stellar Evolution (The solar wind, stellar wind theories, effects of mass and angular-momentum loss in stellar winds on stellar evolution).

8. Extragalactic High Energy Astrophysics. Sponsored by Commission 40, co-sponsored by Commission 28, 44, 47, and 48. Organizing Committee: H. van der Laan (Chairman), R. Giacconi (Co-chairman), G. R. Burbidge, F. Pacini, W. L. Sargent. Programme: Active Nuclei and Seyferts; Radio Galaxies and Quasars; Clusters; High Energy Astrophysics and Cosmology.

14c. The topics proposed by Commissions for Joint Commissions' Meetings were as follows: Nomenclature of Stellar, Galactic and Extragalactic Objects (Commission 5, 34, 37, 40, 45, 48); The MHD of Sunspots (Commissions 10, 12, 44); The Coming Solar Maximum and the Solar Maximum Missions (Commissions 10, 12, 14, 44); Space Astrometry and supporting programme to provide

new fundamental data for Stellar Astronomy (Commissions 24, 33), Polarimetry (Commissions 25, 9, 40); Automatic Collections and Reduction of Photographic and Spectrometric Data (Commissions 25, 30, 45); Space Techniques for the Observation of Double Stars Commissions (26, 44); Stellar Rotation (Commissions 29, 36, 45); Stellar Abundances (Commissions 29, 36, 45); The RS CVn-type and the BY Dra-type variables (Commissions 42, 27, 40, 48) and Strategies for the Search for Life in the Universe (Commissions 44, 16, 40).

15. The Assistant General Secretary presented a list of International conferences of astronomical interest to be sponsored by other international scientific organizations.
16. The Draft Rules for Scientific Meetings, as prepared and complemented by the Assistant General Secretary, were approved subject to further comments. The draft is filed among the documents distributed during the present meeting.
17. The General Secretary reported on Young Astronomers' Schools:
 1. The School at National Observatory, Rio de Janeiro, Brazil, with practical training in optical and radio astronomy in Sao José dos Campos, held from 21 November - 22 December 1977, was very successful. The programme was even broader than proposed. The director of the School Dr L. M. Barreto had sent in a detailed report.
 2. The School in Nsukka, Nigeria, under the directorship of Prof. S. E. Okoye, is in progress. One of its positive effects is the fact that the Nigerian Government resolved to establish an astronomy department at the University in Nsukka. A report on the School, prepared by Prof. Okoye, will be sent in in due time.
 3. Prof. Fehrenbach advocated a future Young Astronomers' School in Algeria. The General Secretary said that in Dr Kleczek's view Algeria has no sufficient funds for organizing such a School in the near future, but he would examine the possibilities. Prof. v.d. Bergh remarked that there exists a possibility to obtain financial support from the Canadian Government for educational programs in Francophone countries.
18. The General Secretary briefly reported on the meeting of the ICSU General Committee held in Budapest, Hungary, in September 1977, and referred to its resolutions as published in IAU Information Bulletin No. 39, especially as regards the expulsion of Taiwan from IUGG and IUGS.

The next General Assembly and meeting of the General Committee of ICSU will be held in Athens, September 1978. One of the items on the Agenda is the future of SCOSTEP. One of the following three possibilities will be decided:

- 1) to dissolve SCOSTEP
- 2) to have it replaced by another Committee
- 3) to transform it into a permanent scientific committee of ICSU

Prof. Contopoulos felt that if SCOSTEP were to have national members, this might lead to unpleasant financial implications for the Unions. The General Secretary said that the COSPAR plenary meeting in Innsbruck, June 1978, favoured the prolongation of SCOSTEP until 1985.

Prof. Goldberg recommended to keep the SCOSTEP programmes running without giving it a Union-like status.

19. At its Plenary Meeting in Innsbruck in May/ June of this year, COSPAR reconsidered its future during lengthy open discussions on "COSPAR in a Changing World". The Unions were particularly concerned with duplications that often occur between the Unions and COSPAR. The majority of the Plenary decided for the continuation of COSPAR and adopted some minor changes in its internal structure. It was resolved that beginning with 1980 the COSPAR Plenary will meet every two years only. The new president of COSPAR is J.-F. Denisse (France).

As regards the ISSP (International Solar System Program) it was decided at the COSPAR meeting that if the steering committee does not produce a definite programme until the 1979 plenary meeting, the ISSP will be dissolved.

The steering committee of PEDAS (Potentially Environmentally Detrimental Activities in Space) under the Chairmanship of K. Rawer (G.F.R.) met during the COSPAR meeting. The terms of reference include 13 subjects each of which is to be discussed in a report by an expert. These reports are being collected and then edited to a final Report by the redaction committee composed of K. Rawer (Chairman of PEDAS), E. A. Müller (IAU), and M. Rycroft (COSPAR W.G.2 "Experiments in Interplanetary Space and in the Magnetosphere"). The report on possible

detrimental effects on space activities for infrared astronomy is still missing. The President of Commission 44 had been requested to prepare such a report or to charge someone to do it.

20. The General Secretary reported that Dr H. Masursky had been appointed secretary to CCMP (Coordinating Committee for the Moon and Planets), and added that it is hard to define the difference between CCMP and ISSP. Prof. v.d.Bergh suggested that the IAU might dispense with CCMP. Prof. Contopoulos said that this could only be done after consultation with IAU Commissions. The General Secretary was of the opinion that it would be useful to wait until the next year to see how ISSP would work out.

21. The status of FAGS (Federation of Astronomical and Geophysical Services) has become uncertain. Its finances are derived from various sources: UNESCO contributes \$25,000.- directly and \$10,000.- in the form of a contract. The ICSU contribution to FAGS amounts to \$15,000.-. The expenses of FAGS were \$49,600.- in 1977 and are budgeted with \$49,950.- for 1978. It is now expected that the UNESCO subvention will be stopped and the question arises whether the Unions could provide the funds necessary for FAGS. Another source of income might be a contribution from WMO (World Meteorological Organization) and annual fees from adhering organizations. URSI is prepared to contribute \$1,000.- to \$2,000.- a year. The question whether the IAU really needs FAGS or whether it is only interested in the services of BIH, IPMS, QBSA, and IUWDS (Bureau International de l'heure, International Polar Motion Service, Quarterly Bulletin of Solar Activities and International Ursigram and World Day Service), and whether therefore only these four services should be financed by the IAU, will have to be consulted with Dr Enslin. The proposal resulting from this consultation will be circulated to the members of the Executive Committee. No change is to be made in the present IAU budget as far as this problem is concerned.

As to the IAB (ICSU Abstracting Board) it was resolved to continue the IAU yearly contribution of \$360.--.

22. Saudi Arabia had shown its interest to adhere to the Union. Prof. M. K. Aly had been informed of the conditions under which a country may become an IAU member. No other application has come in.

23. The discussion of the People's Republic of China, adjourned earlier, was re-opened after a brief informal meeting with Prof. Tao Kiang who had reported on his impressions during his visit in China. It was felt that visits of the members of the Executive Committee would be welcome in China, and ~~Prof. Goldberg suggested that the President should go to China or/and join any Dutch delegation visiting this country.~~ Prof. Wayman said that he expects to be invited to China and that he would go there as Director of the Dunsink Observatory. The President considered the possibility of his going to China early in 1979 and felt that ^{an} his immediately following visit to Taiwan would be useful.

A suggestion was made that China should be invited to send observers to the Montreal General Assembly.

24. There was no other business to be discussed.
25. It was agreed that the 3 years intervals between two General Assemblies should be maintained.

The standards of admission of new Members to the IAU had been set down in Dr Kovalevsky's report and published in Information Bulletin No.39. The National Committees of Astronomy had been asked to adhere to these standards as closely as possible when proposing new IAU Members.

It was noted that Cuba and Uruguay have no individual Members in the IAU. This fact will be brought to their attention.

26. The next meeting of the Executive Committee will be held in Montreal, Canada, on the occasion of the XVIIth General Assembly, with full day sessions on 12 and 13 August and an afternoon session on 21 August 1979.
- VI. The President closed the meeting on Saturday, 19 August, at 12 o'clock with a word of thanks to the participants in the meeting and to the organizers for the carefully prepared arrangements, services and hospitality.

Edith A. Müller

Edith A. Müller
General Secretary

October 1978