# INTERNATIONAL ASTRONOMICAL UNION UNION ASTRONOMIQUE INTERNATIONALE

### FORTY-NINTH MEETING OF THE EXECUTIVE COMMITTEE

PATRAS, GREECE

15, 16 and 24 August, 1982

#### Proceedings

The 49th Meeting of the Executive Committee of the International Astronomical Union took place in the Hotel Averof, Patras, Greece, on August 15 and 16, 1982, prior to the opening of the XVIIIth General Assembly of the International Astronomical Union, and on August 24, 1982, at the time of the General Assembly, at the Patras University.

The meetings were held in the shadow of the illness of the President, Professor M.K.V. Bappu, who underwent a major heart operation in Munich, FRG, on August 9, 1982. Although the operation was apparently successful, complications set in a few days later and Prof. Bappu died in hospital on August 19. An emergency meeting was held by the Executive Committee, during the evening of that day, and it was decided to hold a memorial ceremony which took place on August 23. The Assistant General Secretary and Mrs. E. Völk left for Munich the next morning to convey a message of condolence to Mrs. Bappu and to assist her in whatever way possible. Prof. Bappu's body was flown to India on August 20 and the cremation, according to Hindi rites, took place in Bangalore on August 22.

#### Present at the meetings were:

Dr. M.W. Feast Dr. D.S. Heeschen

Academician E.K. Kharadze

Dr. L. Kresak

Professor S. van den Bergh

Professor R. Wilson

Professor P.A. Wayman

Dr. R.M. West

Professor E.A. Müller

Professor A. Blaauw

Vice-President

Vice-President

Vice-President

Vice-President

Vice-President

Vice-President

General Secretary

Assistant General Secretary

Adviser, Former General Secretary

Adviser, Former President

#### in attendance:

Professor R. Hanbury Brown

Dr. J.P. Swings

Mrs. B. Manning

Ms. P. Smiley

Mrs. E. Völk

Professor J.C. Bhattacharyya

Future President

Future Assistant General Secretary

Secretary

Typist

Secretary (August 15 and 16 only)

Official Representative (India)

(on August 24, during item 5.1)

The agenda are attached as Appendix I.

The following report has been prepared in the order of the Agenda items. Documents of the meeting, including those circulated prior to the meeting, are available in the Union files for further reference.

#### I OPENING BY THE CHAIRMAN

# 1.1 Attendance of Members of the Executive Committee

In the absence of the President, the 49th Meeting of the Executive Committee was opened by the Chairman of the Meeting, Dr. D.S. Heeschen, at 10.00 on 15 August 1982, at the Hotel Averof, Patras. The Chairman welcomed the members and others attending, and requested the Assistant General Secretary to give a brief report concerning the absence of the President.

Following Dr. West's report, it was agreed to send formal regrets, as well as good wishes for recovery to Professor Bappu.

# 1.2 Programme of the Meetings of the Executive Committee

The Executive Committee decided that the main burden of representing the Union throughout the XVIIIth General Assembly should fall on the most senior Vice-President, Academician E.K. Kharadze, who should also take Prof. Bappu's place at the Inaugural Ceremony. It was agreed that the meeting No. 49 would be continued on August 24, 1982 at the University of Patras, at 16.00, under the Chairmanship of Dr. D.S. Heeschen, who would also take over as Chairman of the Second Session of the General Assembly on August 26, 1982.

#### II INTERNAL MATTERS

# 2.1 Proceedings of the 48th Meeting of the Executive Committee

The Proceedings of the 48th Meeting of the Executive Committee, held in

Abastumani, in July 1981, circulated to Members and Advisers, were adopted with one correction: On page 12, paragraph (g), line 4, instead of "1982", read "1985/86".

Regarding the lack of individual members from Colombia and Cuba, as mentioned in the Proceedings, it was reported that five astronomers from Colombia would be present at the XVIIIth General Assembly. The future General Secretary could discuss the lack of members from Cuba with the Cuban representative at the ICSU General Assembly in September 1982.

#### 2.2 Approval of the Agenda

The Agenda prepared for the 49th Meeting of the IAU Executive Committee were approved, with one addition to item 4.1.

### 2.3 Report of the Special Nominating Committee

The Special Nominating Committee, convened during 1980 and 1981 by the President of the Union, has selected the following IAU Members to be proposed to the XVIIIth General Assembly at Patras as members of the IAU Executive Committee from 26 August 1982:

As President - Professor R. Hanbury Brown (Australia)

As Vice-Presidents continuing from the former period -

Dr. M.W. Feast (South Africa)
Dr. L. Kresak (Czechoslovakia)
Professor R. Wilson (UK)

As Vice-Presidents to be newly proposed -

Professor R.P. Kraft (USA)
Dr. M. Peimbert (Mexico)
Dr. Ya. S. Yatskiv (USSR)

As General Secretary - Dr. R.M. West (Denmark)

As Assistant General Secretary - Dr. J.W. Swings (Belgium)

As Advisers to the Executive Committee -

Prof. M.K.V. Bappu (India) Prof. P.A. Wayman (Ireland)

#### 2.4 Report by the General Secretary

The General Secretary reported about the IAU Officers' Meeting in Patras, February 1982, which was mainly concerned with the preparations for the General Assembly. At that time, financial matters were discussed with the Greek Local Organizing Committee. The General Secretary informed the EC that financial arrangements with the LOC had been extremely complex, and that some problems existed with the support provided by the Greek Government to the Local Organizing Committee due to the recent change of Government. It was hoped that these matters would soon be clarified.

The General Secretary specifically pointed out that Ms. Bergevin's work in connection with the General Assembly had been and still was outstanding and that her efficiency and expertise were of substantial help to the Local Organizing Committee. Since the General Secretary feared that the LOC might eventually be unable to fulfill its promise to support Ms. Bergevin's local costs (hotel, etc.) in full, the EC decided to do so, if necessary, when final settlement of the XVIIIth General Assembly budget will be made. It was unanimously agreed that Ms. Bergevin should not suffer any financial loss.

It was suggested that Ms. Bergevin, or another experienced person, could assist the Local Organizing Committees of future General Assemblies. After some discussion it was decided that, if the organizers in India (as the probable venue of the 1985 General Assembly) requested such services, this would be arranged, but that this assistance would not be specifically offered by the IAU.

The General Secretary furthermore reported that an agreement with the Conseil de l'Observatoire de Paris had been signed, regarding the occupation of the premises of the IAU Secretariat.

He expressed his sincere appreciation to Mrs. Manning and Ms. Smiley for carrying out their work at the Secretariat in a most efficient manner, as well as for their continued support and cooperation. The work at the IAU Secretariat mainly consists of the preparation of the IAU Information Bulletin and maintaining material for publishers, and general correspondence and administrative matters, as well as organizing and coordinating work for the General Secretary. Little use had been made of auxiliary services in Paris, Dublin, or Munich. Ms. Drouin's help during Mrs. Manning's sick leave in late 1981 was gratefully acknowledged.

Costs of the Secretariat have stayed within the given limit. One sixth of the total allocation for the period 1979-1982 has been used during the first half of 1982. These costs may, however, escalate in the foreseeable future. The available

space in Paris is limited but, with minor changes, satisfactory. Telex and Xerox facilities leave much to be desired. Attention must be given to a Word Processing System in the future. Commission lists have been transferred to computer file in Dublin.

Progress in the Paris archives has been satisfactory. Indexing IAU publications has been completed. Publication lists are available at the Secretariat upon request. It was decided to make a corresponding announcement in the Information Bulletin to draw attention to the availability of these lists.

#### 2.5 Statutes and By-laws

Deputizing of the President's role was informally discussed. It was, however, decided to postpone further discussion of this item to EC Meeting No. 50, after having seen how the agreed arrangement for replacement of the President worked out.

In connection with the ratification of the Chinese membership, the Chinese Astronomical Society (in a letter from Prof. Zhang Yu-zhe of June 1982) has proposed to eliminate the word 'country' in IAU Statutes. The EC decided that no further action was needed for the time being.

The exact implications of "Affiliation" (IAU Statute No. 5) are not clear and should be looked into.

#### 2.6 Working Rules

The following French texts of Working Rules 32 and 33 (cf. IAU Transactions XVIIB, p. 329) were adopted:

- 32. Le Secrétaire Général publiera un règlement pour les réunions scientifiques organisées our parrainées par l'Union.
- 33. Aucune relation avec des tiers, imputable à l'Union, ne sera entreprise par quiconque membre de l'Union, si ce n'est sous l'autorité du Secrétaire Général.

Following the proposal of the General Secretary, two new Working Rules were added:

34. Representatives of the Union in other bodies, especially ICSU Committees and ICSU Inter-Union Committees, shall be appointed by the Executive Committee. Nominations are sought from Presidents of appropriate Commissions.

Les représentants de l'Union dans d'autres organisations, en particulier les Comités de l'ICSU et les Commissions Inter-Unions, seront désignés par le Comité Exécutif. Les noms sont proposés par les Presidents des Commissions concernées.

35. Expenses incurred by Representatives of the Union in other bodies will be re-imbursed at the discretion of the General Secretary, within the provisions of the Budget Estimate adopted by the General Assembly. Representatives are required to obtain prior approval of the General Secretary before incurring such expenses.

Les dépenses encourues par les répresentants de l'Union dans d'autres organisations seront remboursées à la discrétion du Secrétaire Général, dans les limites du Budget adopté par l'Assemblée Générale. Les réprésentants sont priés d'obtenir l'accord préalable du Secrétaire Général avant d'engager ces dépenses.

It was decided that the Terms of Reference for the Special Nominating Committee (EC 44 Minutes, pp. 8-11) shall be incorporated into the Working Rules. The General Secretary will propose to the EC how this can best be done.

The General Secretary proposed to add the following Working Rule (cf. Minutes of EC 44, point 5a (No. 3)):

The General Secretary distributes the budget prepared by the Executive Committee to National Committees of Astronomy and/or Adhering Organizations for comments eight months before the General Assembly.

This was agreed, noting that it is not in conflict with the provisions in By-law 7.

# 2.7 IAU Rules for Scientific Meetings

The Assistant General Secretary reported that the IAU Rules (Transactions XVIIIB, p. 330) are adequate. He remarked that the majority of IAU meetings are being organized well in advance. This procedure should also be adhered to in the future to allow the EC to discuss the individual proposed meetings. It was noted that the new COSPAR Rules for Meetings (cf. EC 48 Minutes, point 5(c)) provide for some tightening of the preparations of COSPAR Meetings.

#### 2.8 Membership Proposals

In addition to approx. 730 names proposed by Adhering Bodies, 36 names were

proposed to the IAU for membership without having received support of the Adhering Bodies. The General Secretary suggested that all be accepted, and that Reidel be informed accordingly in order to prepare the corresponding address labels.

Following a question raised by Prof. Wilson, it was emphasized that retired IAU members shall not be deleted from the List of IAU Members, but only those who are no longer active in Astronomy.

#### 2.9 Membership of Adhering Bodies

The General Secretary reported that correspondence with representatives of astronomy in <u>Turkey</u> has failed, so far, to provide adequate reason for a change of Adhering Body in that country, as requested by some. Therefore, the Adhering Body in Turkey will continue for the present time as

Astronomi Dernegi Baskani Universite Rasthanesi Universite, Istanbul, Turkey

Regarding the <u>China</u> issue, the General Secretary reported that all provisions of the XVIIth General Assembly resolution have now been fulfilled there being two adhering bodies. The EC members decided that the membership of China should be ratified early during the first session of the General Assembly, in accordance with the terms originally agreed. Any further points would have to be discussed afterwards, preferably in preparation for the 1985 General Assembly.

A letter of application for adherence to IAU had been received from the Syrian Cosmological Society. There are no IAU members in Syria, but it adheres to IUPAP through that Society. A representative attended the Patras General Assembly. The General Secretary was of the opinion that Syrian IAU membership should not be approved now, since it is not obvious that Syria has any academic institution of the type that normally serves as IAU Adhering Body; limited information is available about teaching or research activities in astronomy. It was suggested that the future General Secretary take the matter up with the Syrian delegate to the ICSU General Assembly in Cambridge, September 1982, especially in view of the desire to encourage contact with non-member countries.

The General Secretary drew attention to a letter, received by him on 6 July 1982, from King Abdulaziz University, Faculty of Science, in Saudi Arabia, regarding membership. Prof. van den Bergh remarked that the Saudi Arabian efforts had not yet reached a state that would justify membership. He proposed that an explanatory pamphlet be prepared about IAU, its history, status and aims.

No other countries, whose membership had been discussed in the past, have formally applied, and none are expected to do so in the near future.

### 2.10 Administrative Programme at Patras

The expected attendance at the XVIIIth General Assembly was somewhat lower (approx. 1850) than at Montreal. Courtesy attendance was expected, among others, from Drs. Hoskin (IUHPS) and Westerhout (URSI). It was regretted that UNESCO and COSTED, despite early IAU invitations to attend the General Assembly, were unable to send representatives.

The Executive Committee agreed that, in the absence of the President, the General Secretary should handle the meetings of the Finance Committee and of the Official Representatives on August 17 and 21, 1982, keeping Dr. Heeschen informed. Dr. Heeschen was requested to be Chairman of the meeting of Official Representatives on August 21, 1982. He should be assisted by the General Secretary.

It was reported that Prof. W. Fricke (FRG) was reluctant to serve once again as Chairman of the Finance Committee, but that Prof. D. Walsh (UK) had declared his willingness to be elected as Chairman or as Secretary of the Finance Committee.

The following persons were suggested to serve on the Resolutions Committee during its meeting on August 23, 1982: P. Pismis (Chairperson, Mexico), B. Hidayat (Indonesia), and A.H. Batten (Canada). (Since Prof. Pismis did not come to Patras, it was later agreed that M. McCarthy (Vatican) would serve as Chairman).

# 2.11 Agenda, XVIIIth General Assembly

The Agenda, listed in Appendix II, were agreed to.

# 2.12 Resolutions at the General Assembly

The following motions, proposed by the Executive Committee, would be put to the XVIIIth General Assembly:

### I. Item 4(c) of the Agenda

Motion of the Executive Committee:

The General Assembly of the Union

noting that progress has been achieved in restoring full adherence to the IAU of China, as was anticipated at the XVIIth General Assembly of 1979 at Montreal, and that agreement was obtained by 1 May 1980 on the mode of listing, in the official list of

member countries, two adhering bodies for China as a temporary measure,

ratifies

the arrangements made by the Executive Committee for the adherence of China to the Union during the period elapsed since the XVIIth General Assembly.

#### II. Item 13(d) of the Agenda

1. The Executive Committee,

having examined

the proposal of the President of Commission 22 to establish a Meteor Data Center of the Commission at the Observatory of Lund in Sweden,

proposes

the allocation of SwFr 1.800 per annum as a financial contribution to the costs of such a center, so established for the period 1983-85.

2. The Executive Committee,

noting

the expressed wish of the official representative of the Swedish National Committee of Astronomy at the XVIIth General Assembly of 1979 at Montreal that fellowships for students from developing countries be encouraged,

and recognizing

the valuable discussions carried out in the interim by the Working Group of Commissions 46 and 38 on the Education of Astronomers from Developing Countries,

proposes

that a sum of SwFr 35.000 be allowed during the period 1983-85 to support the carrying out of a Contract Scheme for Visiting Lecturers with a sponsoring institution in a country newly entering into astronomical work, to be selected before June 1983, as the result of active enquiry within IAU member countries and other selected countries.

#### III. Item 18(b) of the Agenda

The Executive Committee proposes to the General Assembly that a new Commission of the Union be established in respect of the search for life in the Universe.

#### 2.13 Commissions

It was reported that there are, at present, six Commissions with more than 200 members. It was furthermore noted that the task of Commission President is connected with a good deal of work. However, no major or serious complaints about the size of commissions have so far been received by the Executive Committee.

A letter from Prof. Papagiannis was included in the documents for EC Meeting 49, regarding a new Commission with the proposed title: Bioastronomy: Search for Extraterrestrial Life. After some discussion, it was decided that this Commission would be given number 51, and that its title should read: 'Search for Extraterrestrial Life'. As President, the EC suggested M. Papagiannis (USA) and as Vice-President, N.S. Kardashev (USSR). (It was later decided that Prof. F.D. Drake (USA) would also become Vice-President of this Commission).

Attention was drawn to a letter from Prof. M. Kuperus suggesting that Commission 43 be re-established. Its earlier title 'Plasmas and Magnetohydro-dynamics in Astrophysics' could become 'Plasma Astrophysics'. Prof. Müller reported that, during Symposium 102 in Zürich (August 1-5, 1982), a number of participants proposed that astronomers should get jointly involved in this matter with solar and plasma physicists. It was decided to request Commission 49 to elaborate a proposal and submit it to the EC.

It was approved that the name for Commission 26 was changed from 'Double Stars' to 'Double and Multiple Stars'. The EC feels that 26 is a very small and highly specialized Commission, which could eventually be included in some other comission, e.g. within a general re-organization, but that no action should be taken now.

The change of name for Commission 34 from 'Interstellar Matter and Planetary Nebulae' into 'Interstellar Matter' was also agreed upon.

The EC then discussed the proposed Commission Presidents and Vice-Presidents in some detail. A number of outstanding questions was raised. (Further discussion with the Commissions involved during the period of the General Assembly, clarified all issues and the definite list of Commission Presidents and Vice-Presidents was agreed upon before the second session of the General Assembly on August 26; the final list, Appendix IV, is printed in IAU Transactions, Vol. XVIIIB).

Concerning the question of nomenclature of solar system bodies, in particular of newly discovered satellites to the major planets, a point which had caused some contention between EC 'Working Group for Planetary System Nomenclature' and Commission 20, the EC members felt that it would be advantageous if a full discussion of all aspects of this matter could be held in Patras, involving all

persons who are connected with this issue. (The discussion took place and the result was reported to EC 50).

A number of projects of Commissions were discussed, for which IAU funds had been requested. These projects are included in the 1983-85 Draft Budget as follows (application for external funding indicated):

Commission	Project I	IAU Draft Budget Provision 1983-1985	Application to External Source (unconfirmed) Years 1983 plus
6 19 (with IUGG)	Telegram Bureau Project Merit support	Item 4.3.1 Sfr 10.000	ICSU/UNESCO \$16.000
20	Minor Planet Center	Item 4.3.2 Sfr 10.000	
22	Meteor Data Center	Item 3 Sfr 6.000	
27	General Catalogue Variable Stars	Item 4.3.4 Sfr 10.000	
27	Information Bulletin Variable Stars	-	-
38	Exchange of Astronomers	s Item 4.1 Sfr 58.000	ICSU/UNESCO \$20.000
38/46	Visiting Lecturers Schem	eme Item 4.2 Sfr 35.000	UNESCO \$40.000

# 2.14 Special Nominating Committee, 1982-1985

The General Secretary had received proposals for membership from most Presidents, and a list of 36 names had been compiled. From this list, each President should propose 12 names and, from of reduced list of 12 names, the Nominating Committee would chose 4 names. To these would be added one or two persons, selected by the Executive Committee (cf. point 5.3).

# 2.15 Executive Committee Report 1979-1982

This report (including the Financial Budget for the year 1982) was published in IAU Information Bulletin No. 48 and agreed to, subject to a number of minor corrections. These would be taken into account before publication in Transactions Vol. XVIIIB.

It was decided, on the recommendation of the Finance Committee, to itemize salary totals to future EC reports, and to facilitate the comparison of the budget, year by year, by a change in the format of the presentation of the Financial Report

It was felt that the number of documents which are being sent to Adhering Bodies by the IAU Secretariat could be reduced by limiting the number of recipients to one, or at most two, per Adhering Body.

### 2.16 Financial Reports

The Executive Committee gratefully acknowledged that India and South Africa have doubled their contributions to the Union (by increasing their category from 2 to 3).

Poland had requested that its category be reduced from three to two units. It was felt that any action on this should not encourage other countries to do the same. The general opinion of the EC members is that contributions to IAU are small compared to the contributions to other organizations. IAU offers more than most other organizations and works very efficiently. It was agreed that Poland be allowed to fall in arrears, but that it must retain its category. It was also agreed that the Union would let the debt accumulate, and that the possible cancellation of these arrears could be considered at a future date.

The General Secretary presented to the EC a Report on IAU Finances, as per 1 July 1982. This report shows a total balance of Swiss Francs 758.172.-. It also indicates that the contributions from Iran for 1979-1981 remain unpaid; it was decided that appropriate measures should be taken to ascertain that payment will be forthcoming.

The budget proposal, unchanged from EC 48, for the period 1983-85 was approved to be presented to the Finance Committee, cf. Appendix III.

It was proposed that the allocation for entertainment to the General Secretary and the Assistant General Secretary should be increased from \$ 400 to \$800. This matter was postponed, for final decision, to EC Meeting 50. Financial Authority to the General Secretary was agreed upon (cf. Minutes of EC 50).

Provided the 1983-85 budget would be adopted by the General Assembly as proposed, it was decided to increase the IAU allocation to scientific meetings as follows:

Maximum amount for symposia: Swiss Francs 10.000 each
"for colloquia: Swiss Francs 5.000 each

Concerning the ICSU grant for the Young Astronomers' School in Kenya (1982) which will not be held, it was considered to re-allocate this money to Commission 38, provided ICSU agrees to this.

#### 2.17 Publications

The General Secretary reported that Reidel have proven to be fully efficient and cooperative and that all IAU publications have appeared in time. However, Dr. Heeschen remarked that shipping proceedings to the U.S. is somewhat slow and that he had received complaints that too much time lapses between payment and receipt of a book. (Reidel claims that this was due to certain problems with their U.S. agent, but that the matter has been clarified and things seem to be working out fine at present.)

Publication of IAU symposia has been smooth and speedy; all editors have worked efficiently. Colloquia proceedings are not controlled by IAU, and there have been some delays in publishing.

The question was raised how it could be made possible to identify proceedings of <u>IAU</u> colloquia as such. It was decided that guide-lines for the lay-out of title pages of IAU Symposia and Colloquia and Regional Astronomy Meeting Proceedings should be the subject of a discussion between the future Assistant General Secretary and Commission 5.

The cost per page of IAU publications is about the same in 1982 as it was in 1974, and it was felt that the prices are very reasonable. The EC appreciates the discount granted to IAU members by Reidel, as agreed in the contract.

The format of Highlights and Transactions, and in particular that of Commission Presidents' Reports should be discussed by the EC before summer 1983 in order to propose recommendations to be agreed upon at EC Meeting 51.

A less expensive edition of Reports on Astronomy (Transactions Vol. XVIIIA) will be available at Patras during the General Assembly. The page size has been somewhat reduced. It is available at a price of US \$ 5.- (if ordered earlier), or US \$ 12.- 1400 copies were printed at a cost to IAU of about US \$ 11.- per volume.

# 2.18 Publication Contract 1983-1985

The contract for Reidel which was agreed to by EC 48 (1981) had been prepared and signed and was ready to be handed over to Reidel.

### 2.19 Future General Assemblies

The IAU had received an invitation to hold the XIXth General Assembly in India, and this invitation would be read at the second session of the General

Assembly on August 26. It was reported that the Assembly would definitely not be held in Bangalore, as originally anticipated, but in New Delhi, since it offers an appropriate Convention Centre with a large auditorium and a total of 29 conference rooms. The possible dates for the XIXth General Assembly were discussed by the EC members, i.e. either August/September or November 1985. There was a general preference for November.

Some EC members enquired whether there might be any problems in obtaining visas for IAU members to enter India, but the General Secretary replied that, following careful consideration by Prof. Bappu in 1981, no difficulties were foreseen.

It was decided to discuss the invitation with the Official Representatives during the meeting on 21 August 1982.

Regarding the XXth General Assembly in 1988, it was felt that Baltimore would be a good choice, especially since the Space Science Institute will probably be in full operation by then. It was reported that rooms and food are reasonably priced, according to U.S. standards. The fact was stressed that arrangements will have to be made well in advance. The conclusion of this discussion was that the invitation to come to Baltimore definitely ought to receive a positive reply.

A letter (dated 2 July 1982) was received by the General Secretary from Prof. de Jager regarding the frequency of IAU General Assemblies. Prof. de Jager expressed the opinion that the intervals between IAU Assemblies should be adjusted to the 2-year COSPAR terms, i.e. should be increased to 4 years instead of the current 3 years. Prof. Blaauw felt that this letter represented Prof. de Jager's own, personal impression and should not be considered an official COSPAR statement. Following discussion, and recalling the opinions expressed at the Montreal General Assembly on this question, it was unanimously decided that the IAU, being an old and traditional organization, should not adjust to COSPAR procedures, and that General Assemblies of the IAU will, therefore, continue to be held every three years.

A further point of discussion was financing of IAU meetings. This matter is becoming increasingly difficult. It was reported that COSPAR will not accept any invitations unless the necessary local funding has been guaranteed.

#### III SCIENTIFIC ACTIVITY

### 3.1 Scientific Activity of Commissions

The General Secretary reported about the publication of IAU Transactions

Vol. XVIIIA with the Commission Reports and the scientific programme at Patras.

Dr. Seidelmann of Commission 4 has informed the EC that the 1980 IAU Theory of Nutation has now been adopted by all Commissions involved, except that Commission 24 had withdrawn from the proposal.

The Style Handbook has remained unchanged for many years. A revised version is being compiled by Commission 5 and Dr. S. Mitton.

### 3.2 IAU Symposia and Colloquia

The Assistant General Secretary reported about the meetings that had taken place since the 48th EC Meeting and the preparations for the meetings held in conjunction with the XVIIIth General Assembly.

A total of 21 meetings has been proposed since August 1981; 9 of these have been formally proposed; for 10 more, preliminary information is available and 2 were withdrawn.

After a thorough discussion of the 9 proposed, the EC agreed that IAU should sponsor the following: (s = symposium; c = colloquium)

<u>Title</u>	No.	Date	<u>Place</u>
Nearby Stars and the Stellar Luminosity Function	c 76	14-17 June 1983	Middletown, CT, UDS
Natural Satellites	c 77	5-9 July 1983	Ithaca, NY, USA
The Milky Way as a Galaxy	s 106	30 May - 3 June 1	983 Groningen, Netherland
Unstable Current Systems and Plasma Instabilities in Astrophysics	s 107	8-11 August 1983	College Park, MD, USA
Structure and Evolution of the Magellanic Cloud	s 108	1st week of September 1983	Tübingen, Germany, FR

The other proposals were referred back to the organizers for resubmission after further elaboration and clarification (some of these were approved at EC 50).

# 3.3 Co-sponsored Scientific Meetings

The Assistant General Secretary briefly reported about 12 co-sponsored meetings, held since August 1981. Most of these were connected with the COSPAR meeting in Ottawa, Canada, May 1982.

It was agreed to co-sponsor two further COSPAR meetings:

<u>Title</u>	<u>Date</u>	Place
Symposium on High Energy Astrophysical Sources	August 1983	E. Europe
Workshop on Venus Inter- national Reference Atmosphere	August 1983	Hamburg, Germany, FR

Clarification about the status of two meetings proposed for co-sponsorship by URSI was awaited. It was decided to co-sponsor these, if URSI would be the main sponsor.

<u>Title</u>	Date	Place
Measurement and Processing for Indirect Imagi	August 1983 ing	Sydney, Australia
Millimeter and Sub- millimeter Radio Astronomy	1984	Spain

### 3.4 Regional Astronomy Meetings

The Assistant General Secretary reported about the preparations for four meetings, in Europe and Latin America, 1983-1984. Sponsorship was accepted for:

Third Asian-Pacific Regional Astronomy Meeting
Kyoto, Japan - October 1984

with the proviso that the future Assistant General Secretary (ex officio) and a person from Taiwan should be added to the Scientific Organizing Committee.

### 3.5 UNISPACE 82

The Assistant General Secretary informed the EC about a one-day 'International Astronomy Seminar' which was organized jointly with United Nations, and held on August 12, 1982 at the Hofburg in Vienna in connection with UNISPACE 82. Every effort had been made by IAU to make this seminar a successful one, and the presentations made were excellent. Unfortunately, participation in this meeting was not as numerous as anticipated and hoped for, probably due to the very tight security regulations at the Hofburg, and to a large number of overlapping other meetings. It is expected that the proceedings will be published, probably through Reidel.

### 3.6 Other Scientific Meetings

Nothing reported.

### 3.7 Young Astronomers' Schools

The EC took note of various reports received about the Helwan, Egypt, School which took place in the period August 22 - September 9, 1981. Although the majority felt that the school, in general, had been successful, there were some dissenting voices, in particular about the effectiveness of the organization. The EC asked the General Secretary to take the various comments into consideration when future schools are organized.

The reasons for the cancellation of the 1982 school in Nairobi, Kenya, were explained (mainly lack of local support), and it was decided to agree to the requested postponement of the 1983 Mérida, Venezuela, School to January 1984. It was expressed that the full involvement of astronomers from the two Astronomical Institutes in Mérida (University and CIDA) would be desirable and should be strived for.

The question of a future successor to Dr. Kleczek who has now carried the burden of the organization of YAS for many years, was briefly discussed. Meanwhile, the EC took note that Dr. Kleczek has been confirmed in this function for another period by Commission 46.

#### IV INTERNATIONAL ACTIVITIES

### 4.1 ICSU (International Council of Scientific Unions)

The General Secretary reported in some detail about ICSU, in particular the meeting of the ICSU General Committee in Dubrovnik, Yugoslavia, 24-25 September 1981. The full report about this meeting was sent to EC members earlier. Some specific points were discussed as follows:

- Full Chinese membership to ICSU imposes a number of problems and is an extremely difficult matter. It was agreed that the General Secretary would take this up at the ICSU General Assembly in September 1982.
- Regarding the 1982 ICSU financial grant to IAU, the EC was informed that out of the total allocation of approx. \$ 18.000.- an amount of \$ 4.000.- is to be considered for re-allocation to Commission 38, since it had not been possible to spend it for a Young Astronomers' School in Kenya, as originally planned.
- There were brief exchanges of views on IAU programmes for which outside funding is sought, i.e. GERT, MERIT, Visiting Lecturers Scheme, and Exchange of Astronomers. The future IAU-UNESCO relationship, in particular the allocation of funds through UNESCO within the Medium Term Plan (1984-85) is of great

importance and every effort must be made to assure that the various IAU programmes are supported adequately. Also discussed was the involvement of India in GERT. The construction of the telescopes (incl. all technical equipment) will be supervised from India.

- Regarding the proposal for an ICSU press, it was mentioned that the ICSU Press Committee is fully aware of the strength of IAU publications. In view of the present, very satisfactory agreement with Reidel, IAU should wait and see how the ICSU press develops before taking any steps towards a change of publisher.
- The General Secretary is requested to express the view of the EC to ICSU that the proposed new ICSU structure and voting system is not supported by IAU. Should the new system be adopted, IAU should continue to make its request to be regarded on a par with IUPAP, etc. and of less voting power only than IUGG and IUPAC.
- The future IAU General Secretary, Dr. R.M. West, will represent IAU to the ICSU meetings in London and Cambridge, 6-17 September 1982.

### 4.2 COSPAR (Committee on Space Research)

The General Secretary reported briefly about the COSPAR XXIVth Plenary Meeting in May 1982, at Ottawa, Canada. A full report was available to EC members.

Of particular interest to IAU are the new COSPAR structure and the organization of joint IAU/COSPAR meetings. There seemed to be improved coordination between the two organizations.

The next COSPAR Plenary Meeting will take place in Graz, Austria, July 1984.

# 4.3 SCOSTEP (Scientific Committee on Solar Terrestrial Physics)

The EC took note of the General Secretary's report.

# 4.4 COSTED (Committee on Science and Technology in Developing Countries)

It was felt by the EC that COSTED has, in the past, been extremely inactive regarding IAU. The General Secretary, however, suggested that IAU should not abandon the contact, but try to improve relations through ICSU. Since Prof. Houziaux has declined to continue as IAU representative to COSTED, the EC proposed that Prof. Swarup should be asked to take over this function.

# 4.5 FAGS (Federation of Astronomical and Geophysical Services)

No changes in FAGS were reported. The question was raised whether the IAU contribution to FAGS (at present Swiss Francs 2000.— per annum) should be increased. It was decided to obtain the Commission Presidents' opinions on this point, and report to the Executive Committee for a final decision on this matter.

# 4.6 CCMP (ICSU Committee for Co-ordination on Moon and Planets)

The EC took note of the General Secretary's report.

# 4.7 CCDM (Consultative Committee on the Definition of the Metre)

Astronomers and engineers are involved in this committee. A major question is the re-definition of the metre, in terms of frequency and an adopted value for the velocity of light in vacuo. It was the opinion of the EC that astronomers per se had not specially pressed for this re-definition.

# 4.8; 4.9; 4.10; 4.11; 4.12; 4.13; 4.14; 4.15

The EC took note of the General Secretary's reports.

# 4.16 Revision of Representation

It was decided to postpone this item to EC Meeting 50, when all names would be complete.

# 4.17 Other International Bodies

IAU approval was given to the application of IUMS (International Union of Microbiological Sciences) for ICSU membership.

It was felt that the general affiliation with other bodies should be dealt with on an ad hoc basis. The decision about possible affiliation of IAF (International Astronautical Federation) and IUAA (International Union of Amateur Astronomers) to IAU would be taken up at EC 50, on August 26, 1982.

The second session of EC Meeting 49 was closed by the Chairman on August 16, 1982 at 16.30.

#### V THIRD SESSION

The third session was opened by the Chairman, Dr. D.S. Heeschen, at 16.00

on 24 August 1982, at the University of Patras.

### 5.1 Items Postponed from Previous Sessions

# (a) Place and Time of XIXth General Assembly

At the request of the Chairman, Prof. Bhattacharyya briefly presented some details about the Indian invitation to host the XIXth General Assembly in New Delhi in 1985. A question of major importance was whether the meeting should be held during the month of August, which is the customary time for IAU General Assemblies, or rather in November when the weather conditions in New Delhi would be much more favourable than in August.

Most EC members were in favour of November; this was also the opinion of many participants in the General Assembly. In particular, the National Representatives had expressed themselves in favour of November.

The EC decided to fix provisionally the dates 19-28 November 1985 for the XIXth General Assembly to be held in New Delhi, India, and to make this proposal to the General Assembly at its session on August 26, 1982. The EC thanked Prof. Bhattacharyye for his invitation and invited him to make a corresponding statement to the General Assembly.

#### (b) Human Rights

The General Secretary explained that various letters had been received concerning the case of Prof. L. Ozernoy who had not been able to emigrate from the USSR in spite of his expressed wish to take up residence in the U.S. where he had been offered a position at a major American Institute.

A thorough discussion followed in which the individual EC members expressed their opinions about how this matter could best be handled by the EC. There was a general concensus that it would be desirable to obtain advice from the appropriate ICSU Committee dealing with such matters (Safeguard of the Pursuit of Science). The General Secretary explained that the matter had been transmitted to this Committee, in July and that a reply was expected any day.

Some members of the Executive Committee felt that concern should be expressed to the President of the USSR Academy of Sciences, and it was decided to formulate a letter to this effect. (A letter was sent by the General Secretary, dated August 26, 1982, to the President of the USSR Academy of Sciences, expressing that "...the file had been transmitted to the above mentioned ICSU Committee and that the EC expresses its deep concern to the President, with the earnest

request that the measure be investigated as soon as possible, and especially that the Academy uses its great influence to assist Ozernoy to achieve his desired wish to leave the Soviet Union...".)

The matter of Dr. A. Stawikowski, Poland, was also discussed by the EC. Information had been received in early 1982 that Dr. Stawikowski, who is an IAU member, had been detained and interned in his native country, supposedly because of his connection to the Solidarity Trade Union. The General Secretary had, on two occasions, written to the President of the Polish Academy of Sciences in order to enquire about the situation, but no reply had been received so far.

The EC expressed the hope that both of these cases could soon be resolved, so that the persons involved could continue, in the most efficient way, their contributions to astronomy.

#### (c) Meetings

The Assistant General Secretary reported briefly about discussions with organizers of meetings proposed for IAU sponsorship. It was expected that full details would become available for many of these by the time of EC 50. He furthermore referred to discussions with representatives of the D. Reidel Publishing Company, who had expressed an interest in publishing a series of future IAU Colloquia. This would help identify IAU Colloquia as such in astronomical libraries.

Reidel had also proposed to include, in the registration fee for future IAU meetings, a small sum for automatic distribution of the resulting proceedings. This would be advantageous for the sales volume.

It was noticed that, since the introduction of a 50% rebate to IAU members, the sales of paperback copies have increased.

The EC felt that it would be useful to further investigate the above proposals.

# 5.2 Resolutions Committee

The General Secretary reported about the work of the Resolutions Committee, which had received approx. 30 commission resolutions. They had been classified to be read, or to be endorsed only within the blanket resolution at the General Assembly. It was intended to publish all resolutions in the next day's issue of the newspaper 'Astrocosmos'.

# 5.3 Report of the Nominating Committee

The General Secretary reported that the Nominating Committee had approved all but two of the names in the lists. This was because the persons concerned had just obtained their PhD. The Nominating Committee felt that a period of 3 years should normally elapse between the PhD degree and application for IAU membership. The EC agreed that this was a useful rule.

### 5.4 Report of the Finance Committee

The General Secretary reported about the discussions held with the Finance Committee and later with the official representatives of Adhering Bodies.

The Finance Subcommittee, with Dr. D. Walsh as Chairman, and Drs. Boyce, MacConnell, Ruben, Velghe and Wild as members had met with the General Secretary on three occasions and reported to the Finance Committee, at its second meeting on August 21, 1982. The Subcommittee had examined the accounts for 1980 and 1981 and concluded that they were in order. The Secretariat was complemented on the high standard of presentation.

The Finance Subcommittee had examined the budgetary proposal for 1982 and recommended to the Finance Committee that it be adopted.

The Subcommittee had further discussed the budgetary provisions for 1983-85, proposed by the EC. It concluded that the expenditure itemized in the proposed budget was appropriate for the proper functioning of the Union, and that the proposed increase in the unit of contribution to Swiss Francs 1760.—was necessary.

The Finance Committee discussed the Subcommittee's report at length and on the basis of a vote of 26 for, 0 against, with 11 abstentions, the Finance Committee recommends to the General Assembly adoption of the 1983-85 budget proposal.

Some further recommendations were included in the report of the Finance Committee, which would be presented to the General Assembly.

Summing up, the General Secretary mentioned that abstentions, maybe even negative votes should be expected at the General Assembly. However, comments on the proposed increase of the unit of contribution had not been received from the Adhering Bodies.

### 5.5 Tasks to be Completed at the General Assembly

# (a) Special Nominating Committee

In addition to the matters discussed during the first sessions of the EC, the General Secretary reported on the selection of names for the Special Nominating Committee (1982-85). With the addition of two names, taken from the list 12, proposed by the EC, the following persons should be asked to participate in the new Special Nominating Committee: Profs. I.S. Shklovsky; H.C. van der Hulst; C. Hayashi; R. Kippenhahn; D. Osterbrock, and J.I. Smak. In addition to these, the new IAU President, Prof. R. Hanbury Brown will act as Chairman and the new General Secretary and Assistant General Secretary will be advisors to the Special Nominating Committee.

### (b) Commission Matters

The General Secretary reported that no commissions would be discontinued, but a new commission, 51, had been proposed ('Search for Extraterrestrial Life'). The list of new Presidents and Vice-Presidents was being compiled and would be presented to the General Assembly (Appendix IV).

Prof. H. Masursky was proposed as the successor of Prof. Millman, Chairman of the WGPSN. It was decided to leave to EC 50 the decision about the outstanding issue concerning the naming of solar system objects, expecting that agreement would be reached before then.

# (c) Concluding Speeches at the Second Session

It was proposed to invite Prof. van den Bergh to address the General Assembly with a vote of thanks and to ask Mrs. H. Hanbury Brown to speak on behalf of the registered guests. In addition, Dr. D.S. Heeschen would speak as Vice-President, in lieu of Prof. Bappu (point 21 in the agenda). Prof. R. Hanbury Brown would speak as new President, Prof. P. Wayman as retiring General Secretary and, finally, Dr. R.M. West as incoming General Secretary (point 23 in the agenda).

# 5.6 Future TAU Policies

It was decided to postpone the discussion to a later meeting of the Executive Committee.

### 5.7 Any Other Matters

The financial matters relating to the XVIIIth General Assembly, and the

settlement with the Local Organizing Committee were briefly discussed.

The EC resolved to send greetings to past Presidents and General Secretaries not present at Patras.

#### 5.8 EC Meetings

The next EC meeting, No. 50, will be held at the Averof Grand Hotel, Patras, on August 26, 1982, 15.00.

### 5.9 Closing by the President

Before closing the meeting, the Chairman expressed his appreciation of the devotion shown by the retiring EC members and thanked them for their services to the Union during the past years. The Chairman adjourned the meeting at 18.30.