August 25, 1987

INTERNATIONAL ASTRONOMICAL UNION UNION ASTRONOMIQUE INTERNATIONALE

FIFTY-FIFTH MEETING OF THE EXECUTIVE COMMITTEE

Liège, September 19-22, 1986

MINUTES

Present:

J. Sahade President

A.H. Batten Vice-President

R. Kippenhahn Vice-President

R.P. Kraft Vice-President

P.O. Lindblad Vice-President

M. Peimbert Vice-President

M. Peimbert Vice-President
Ya. S. Yatskiv Vice-President
J.P. Swings General Secretary

D. McNally Assistant General Secretary R. Hanbury Brown Adviser

R.M. West Adviser

In attendance : B. Manning IAU Secretary

D. Lours IAU Assistant Secretary

D. Fraipont Secretary, Liège

Welcome by the Rector of Liège University

The Rector of the University of Liège welcomed the members of the IAU Executive Committee to the Château de Colonster.

I. OPENING BY THE PRESIDENT OF IAU

After thanking the Rector of the University for his kind hospitality, the President of the IAU opened the meeting at 09.30 by welcoming the EC members.

II. INTERNAL MATTERS

II.1. Minutes of the 53rd and 54th meetings of the Executive Committee

The minutes were approved subject to minor correction. The approved version is available at the Secretariat.

II.2. Approval of the Agenda

The agenda was approved, apart from minor changes in scheduling.

II.3. Report on the Special Nominating Committee's activities

The President was happy to inform the Executive Committee that Dr. Jacqueline Bergeron (France) had agreed to serve as Assistant General Secretary for the term 1988-91. The EC uninamously agreed to this proposal. A formal letter will thus be sent by the President to Dr. Bergeron. The complete list of proposed Vice-Presidents should be finalized by early 1987.

II.4. Report by the General Secretary on the IAU Secretariat

The General Secretary reported as follows:

II.4.1. In Liège:

where D. Fraipont is part-time secretary for the IAU (also being an Institute librarian with special responsibility for the organization of the Liège Symposia), the following matters were dealt with:

- edition of Highlights,
- preparation for EC 55,
- some correspondence.

II.4.2. In Paris:

The General Secretary has essentially been at the main secretariat two days every two weeks; B. Manning, D. Lours and the General Secretary have dealt with the following matters:

- edition of two Bulletins (with the help of the Assistant General Secretary),
- edition of the Transactions XIXB which represented a substantial amount of work (discourses, resolutions, translations, etc.),
- preparation of new membership file and list,
- correspondence: letters to 900 new members, 40 Presidents of Commissions, 51 countries, etc...
- computerization of finances,
- continuous updating of addresses, etc.

An Officers' meeting was held at the Secretariat on May 14 (its main results will be described at the relevant point in these minutes.

The Secretary and the Assistant Secretary have either improved, or are acquiring, their knowledge of computing.

The secretariat was broken into on 15 July 1986: only a few items were stolen; new protection around the office has been installed by the Observatoire de Paris.

Because of the important and considerable work that had to be done rapidly after Delhi, and since nothing new has appeared before EC 55 concerning the personnel involved, the General Secretary has not looked into the long term future of the Secretariat. It is clear, however, that some change in the organisation of the work will occur shortly. A report on options for office reorganisation will be prepared for EC 56.

II.5. Statutes, By-laws and Working Rules

II.5.1. Since the EC is in favour of enlarging its size by the addition of one further member to be known as President-elect, who would normally progress to the Presidency of the Union, the By-laws have to be changed accordingly. The procedure to implement the change of By-laws will be an Extraordinary General Assembly immediately prior to the XXth General Assembly in Baltimore. The President will inform the Adhering Countries of the arrangements to hold an Extraodinary General Assembly as soon as possible. As a matter of comparison, the President-elect of ICSU is considered to be an Officer: such a decision for IAU could critically affect the financial situation of the Union.

II.5.2. Fundraising

R.M. West (as Chairman) reported on the work of the fundraising sub-committee. Every aspect of this report was then discussed: endowment fund, search for a a suitable person to investigate the initiation of an endowment fund and the proper management of such funds, corporate membership, etc. There was a consensus to maintain the present level of contribution and the funds made available for the General Assemblies; further compression of administrative costs seems unrealistic.

 $R_{\bullet}M_{\bullet}$ West will prepare a document for Information Bulletin No. 57 in order to call for reactions from the astronomical community.

The sub-committee was disbanded and the President then expressed his warmest thanks to its members for this report on behalf of the Executive Committee.

II.6. IAU Membership

The General Secretary informed the members of EC that the IAU Membership list was now completed and published by Reidel. A daily updating is performed by the Secretariat. The problem of editing a microfiche was raised, but it was agreed that the cost would be too high.

Dissemination of data. EC agreed on providing the Membership list to publishers who ask for it, provided the copyright is specified. EC further agrees that:

a) In any case, no confidential data would be provided,

b) Addresses should be sold at a high price to serious publishing houses, the final decision remaining with the GS.

c) Care would need to be ensured in wording the copyright.

II.7. Member Countries (present and future)

II.7.1. Adhering Organisations

Argentina:

has expressed the wish to increase its category from II to III. The GS and the President will convey the EC thanks to the National Committee.

China, P.R.:

has agreed to increase its category from III to V. The General Secretary will convey the EC thanks to the National Committee.

Egypt:

EC notes with satisfaction the proposed cooperation with Japan.

Finland:

announced its intention to increase its category at the last General Assembly, but no official letter has yet been received. The General Secretary will enquire.

USSR:

the President has written to the Academy of Sciences to suggest a change in category of adherence, but no answer has yet been received.

Greece:

elected a new National Committee, -the composition is not yet known.

The Republic of Korea:

has changed its Adhering Organisation.

Belgium:

from the contacts made by the General Secretary, it seems plausible to expect a single adhering organisation in the future. (It was noted that the chemists had only one organisation.)

Iran:

is still two years in arrears, but it was noted that ICSU had received a subvention recently.

Turkey:

still has problems in paying its contribution, but the General Secretary regularly receives letters as a proof of their good will.

Rumania:

after several unsuccessful attempts to establish contact, the President received a letter recently, which expressed the desire of Rumanians to maintain the links, in spite of internal difficulties.

Uruquay:

The General Secretary was visited in Paris by a staff member of the Uruguayan Embassy, who confirmed that Uruguay has a new Adhering Organisation and is interested in developing astronomy. They will do their best to pay the arrears.

Cuba:

The President will visit Cuba in October.

II.7.2. Non-Adhering Countries

Algeria:

no recent news since last approach in 1985, but written communication is difficult. Verbal contacts will however continue.

Iceland:

following advice from an Icelandic astronomer, the General Secretary will write to the Ministry of Education of Iceland to investigate the possibility of their acting as an Adhering Body.

Pakistan:

would like to adhere in 1988, because astronomical activity is developing e.g. the Observatory of Karachi is being re-established.

II.7.3. Associate Membership

The question of establishing an "Associate Membership Scheme" was discussed. It would be aimed at countries which have a developing activity in astronomy, but have not yet reached a level concomitant with full adherence to the IAU. Such status could be held for a period of 9 years, during which the country could become a member or withdraw. The annual dues would be a single unit of contribution. The President will produce a document for the next Executive Committee meeting.

II.8. Commission Matters

II.8.1. C38: Exchange of Astronomers

The Executive Committee noted with satisfaction the excellent work of the President and Vice-President of this Commission, and charged the General Secretary to convey its thanks to them.

II.8.2. C46: Teaching of Astronomy

a. This Commission (one of the EC Commissions) has a curious structure: its members are mostly National Representatives. The President and Vice-President of C46 consider they should accept more active people as members, and propose 2 types of membership: National Representatives and Ordinary Members, the essential difference being that only National Representatives can vote on Commission expenditure. The change was agreed by the EC, provided that ordinary members be selected by the Organising Committee. The AGS will prepare an article to be published in the Information Bulletin. C46 will have to prepare new rules and regulations to be effective as of the XXth GA.

b. VLPs

Lima:

The President reported on the progress of Lima's VLP: during 1986, three visiting lecturers gave courses on Stellar Atmospheres, Stellar Physics and Extragalactic Astronomy. It would be desirable if the 4 promising young astronomers participating in this programme could study abroad -possibly at La Silla to participate in observational work, but this is a question of finance.

Nsukka:

The General Secretary received recently a letter from Prof. Okoye requesting that the money kept in reserve for the Nigerian Visiting Lecturers be used at improving the instrumentation at Nsukka, so that this equipment be linked to the VLBI network.

Professor Okoye, presently staying in Bonn, was invited to report orally to the Executive Committee. But, following his presentation and after extensive discussion, it was agreed that the IAU had already made a big effort in helping to repair the existing radiotelescope, and could not reassign the VLP money for other purposes outside the programme. Prof. Okoye will have to look to other sources for financing the equipment. The General Secretary will nevertheless contact the VLBI network Committee to inquire about their interest, and seek the advice of Dr. Walsh, Chairman of the Nsukka VLP scheme.

Paraguay:

The Paraguayan VLP is well in hand. ICSU allocated money for 1987, so that the total amount available is now SFr. 12 000. Paraguay proposed a one-year programme, mostly oriented towards radioastronomy, because there is related competence distributed among two universities there.

The Executive Committee appointed Prof. Sahade as Chairman of the Committee. A draft VLP scheme is being set up and will be discussed by the President with the Paraguayans; Prof. Sahade will report on the results of his visit to Paraguay at EC56.

The President will enquire on the impact of these programmes: to inform future discussion of the Visiting Lecturers Project.

II.8.3. Commissions: General

a. Format of Commission Reports

The ad hoc sub-committee recommendations were specially relevant to Reports B rather than A. There is a consensus from EC members that the quality of reports depends mostly on the capability of the Presidents of Commissions. Presidents have to be reminded of the procedure described in the report of the sub-committee, and also that a Vice-President does not necessarily become President. Letters to this effect are to be sent by GS.

Commission Structure

It is agreed that the mode of election should not be imposed on the Commissions.

c. Commission Resolutions

The case of the Delhi General Assembly was recalled, where Commission Resolutions were endorsed as a package by the General Assembly. That package actually contained an "unfortunate" resolution. The conclusion of the discussion was that

- the EC must impose a firm deadline after which Resolutions cannot be accepted,
- the EC will issue guidelines on the form and content of Resolutions for submission to the Resolutions Committee,
- a member of the Executive Committee will serve on the Resolutions Committee with responsibility to ensure adequacy of the Resolutions before being voted upon by the GA.

II.8.4. C5:

a. Style book:

is making good progress. G. Wilkins has taken the initiative and put in considerable effort; no decision has yet been taken as to where and how to publish it.

b. Archiving of Data:

the General Secretary received a letter from G. Contopoulos about the storage and preservation of astronomical data. More and more data will not published but stored on magnetic tapes; tapes have a limited lifetime and need to be "refreshed". Since this problem appears to be universal, the General Secretary will discuss the matter with the President of Commission 5 so that some constructive proposals may be available for discussion at the Baltimore General Assembly, perhaps through the organisation of a Joint Discussion. He will also seek advice from the IAU representative to CODATA, G. Westerhout.

II.8.5. C19 and 31:

Following the Resolution in Delhi, the decisions of these Commissions to set up a new Earth-Rotation Service was welcomed by the Executive Committee. This service could apply to FAGS for funding at a later stage.

II.8.6. C26:

The Executive Committee noted the answers to the questionnaire sent by the President of Commission 26 to the members of his Commission, to get their opinion on the proposed discharge of C26. It was agreed to give Commission 26 further time for reconstruction by allowing the present Vice-President the opportunity to serve as President, i.e. to defer the decision to discharge the Commission until the 21st General Assembly.

II.8.7. C27:

It had been previously arranged with the Astronomical Council of the USSR Academy of Sciences that the annual support from IAU to the publication of the Catalogue of Variable Stars would be partly spent in financing travel grants for USSR astronomers to scientific meetings, but because this did not cover all the money allocated, the Astronomical Council decided to spend the remaining funds in buying books from Reidel.

II.8.8. C34:

A request was received from the President of Commission 34 for travel support to an astronomer from Lund Observatory to Strasbourg, in order to assist in the publication of the new Catalogue of Galactic Planetary Nebulae. The Executive Committee declined to finance the requested travel, as a matter of policy.

II.8.9. C44:

It was decided to establish a working principle that the President of Commission 44, or a member of the Organising Committee, be the representative of the Union to IAF.

II.8.10. WGPSN:

EC approved the new names of celestial bodies submitted by WGPSN.

II.8.11. Working Group on Astrochemistry:

The Assistant General Secretary presented a proposal submitted by Prof. S.P. Tarafdar to set up a Working Group on Astrochemistry. After discussion, it is decided that the AGS will convey to Prof. Tarafdar that Commission 34 should take the first steps to establish the Working Group, given the agreement of the other Commissions involved.

II.9. General Assemblies

II.9.1. XXth GA, Baltimore

The General Secretary reported on his visits to Baltimore. The preparation seems to be well in hand. The LOC made 2 applications for funding and is optimistic of the outcome. Some hotels are already booked at a reasonable price and the Convention Center is fully adequate. The LOC has made arrangements for 3000 participants. The Registration Fee has been fixed at \$150. The Preliminary Announcement should be ready by October 1987. Members of the EC are invited to make proposals for topics for Invited Discourses and Joint Discussions as soon as possible and in any case before next Officer's meeting.

II.9.2. Future GAs

a. 1991:

Two official invitations have been issued: one from Argentina together with a detailed letter on the possible arrangements, and one from Netherlands. A thorough discussion resulted in a majority in favour of Argentina. It was decided to keep the Dutch option open as a fall back, and either to hold the next Officers' Meeting in Argentina or to send the General Secretary to Argentina, in order to check the facilities there. Netherlands will be contacted by the General Secretary to enquire whether they would like to maintain their invitation for 1994.

b. 1994:

Three official invitations have been received from Japan, China P.R. and DDR. It is to be noted that ICSU also received invitations from China and Japan, and that Japan does not presently apply the rules for free circulation of scientists, requesting that South African scientists sign an anti-apartheid declaration.

II.10. Finances

The Executive Committee took note of the Vérification des Comptes 1985 which shows a deficit of SFr 130,000 as normally foreseen the year of a General Assembly. This deficit was aggravated by the fact that some countries paid 1985 dues in 1984 and that no early payment for 1986 was expected since the proposed increase of contribution had to be approved by the Delhi General Assembly in late November.

The budget 1986-88 shows too low an estimation of the administrative costs in respect of salaries for 1986. This is because the first estimates did not take into account the compensation paid to P. Smiley and the 1986 readjustment of the Secretary's salary.

Contributions: A few countries are always in arrears with payment of dues as seen in § 2.7. As regards Venezuela, the President will take action. The Rumanian case is different, but the EC takes note of their good will.

II.11. IAU Publications

a. The General Secretary reported on the publication of Highlights, vol. 7, Transactions vol. XIXB, and 2 issues of Information Bulletin (Nos. 55 and 56). The symposia volumes appeared normally. The case of Colloquium No. 84 was raised, since no mention of the IAU sponsorship had appeared: complaint was made to the editors.

The Assistant General Secretary will revise the rules for the organisation of meetings to prevent a recurrence, and will publish the revised Rules (see 3.1 below) in Information Bulletin No. 57.

- b. Publications in developing countries. A request from Hyderabad, which had been omitted at previous EC meeting was considered favorably. It was also decided to integrate Paraguay in the distribution list.
- c. Handbook: no date for publication was determined.
- d. The IAU Pamphlet will be looked into by the General Secretary and the former General Secretary next year.

III. SCIENTIFIC ACTIVITIES

III.1 Format and Rules for Scientific Meetings

The Rules for Scientific Meetings will be revised by AGS. The main new specifications are in respect of: a title page for the meeting proceedings, particularly for Colloquia (see 2.11 (a) above); specification of the responsibilities of the SOC; the ICSU rules for free circulation of scientists to be much more clearly spelt out; adherence to these rules to be signified by the Chairman of both SOC & LOC; the of the discussions to be included in the proceedings.

III.2. Symposia and Colloquia

Following a comprehensive discussion of each proposal, including several outlined proposals which had only been received a few days before the EC meeting, the EC decided to support the following meetings:

III.2.1. Symposia

No. 132

"The Impact of Very High S/N Spectroscopy on Stellar Physics"
Paris, France, June 29 - July 3, 1987, Chairman SOC: G. Cayrel-de Strobel (France).

No. 131

"Planetary Nebulae"
Mexico City, Mexico, October 5 - 9, 1987, Chairman SOC: J.B. Kaler (USA).

No. 135

"Interstellar Dust"
Mountain View, California, USA, July 26-30, 1988, Chairman SOC:
J. MATHIS (USA).

No. 134

"Active Galactic Nuclei"
Santa Cruz, USA, August 15-19, 1988, Chairman SOC: D.E. Osterbrock
(USA).

III.2.1. Colloquia

No. 96

"Few Body Problem"
Turku, Finland, June 14-19, 1987, Chairman SOC: V.A. Brumberg (USSR).

No. 98

"The Contribution of Amateurs to Astronomy"
June 20-24, 1987, Paris, France, Chairman SOC: J.-C. Pecker (France).

No. 99

"Bioastronomy - the Next Steps"
Lake Balaton, Hungary, June 22-27, 1987, Chairman SOC: J.C. TARTER (USA).

No. 100

"Fundamentals of Astrometry"
Belgrad, Yugoslavia, September 8 - 11 1987, Chairman SOC: G. Teleki (Yugoslavia).

No. 101

"Interaction of Supernovae Remnants with the Interstellar Medium" Penticton (Canada), June 9-12, 1987, Chairman SOC: T.L. Landecker (Canada).

No. 102

"UV and X-Ray Spectra of Astrophysical Laboratory Plasmas" Beaulieu-sur-Mer, France, September 9-11, 1987, Chairman SOC: F. Bely-Dubau (France).

No. 103

"Symbiotic Phenomena"
Torun, Poland, August 18-20, 1987, Chairmen SOC: A. Woszczyk (Poland), and M. Friedjung (France).

No. 104

"Solar and Stellar Flares"
Palo Alto, USA, August 15-19, 1988, Chairmen SOC: B.M. Haisch (USA) and M. Rodono (Italy).

No. 105

"The Teaching of Astronomy" Williamstown, USA, July 27-30, 1988, Chairman SOC: J.R. Percy (Canada).

No. 106

"Evolution of Peculiar Red Giant Stars" Bloomington, USA, July 27-29, 1988, Chairman SOC: H.R. Johnson (USA). No. 107

"Algols"

Victoria BC, Canada, August 15-19, 1988, Chairman SOC: M.J. Plavec (USA).

III.3. Co-sponsored meetings

None

III.4 Regional Astronomy Meetings

III.4.1. Tenth European Regional Astronomy Meeting
Prague, Czechoslovakia, August 24-29, 1987, Chairman SOC: L. Perek
(Czechoslovakia).

III.4.2. Fourth Asian-Pacific Regional Astronomy Meeting
Beijing, China, October 5-9, 1987, Chairmen SOC: S.G. Wang (China P.R.)
and Y. Kozai (Japan).

III.5. Other Meetings

None.

III.6. Young Astronomers' Schools

III.6.1. China:

A report was received by GS on Chinese School, which appears to have been highly successful; it was attended by 52 students (43 from China PR, 1 from Japan, 4 from Hong-Kong, 3 from Thailand and 1 from Iran).

III.6.2. Portugal:

This School is now in progress, a report is expected soon.

III.6.3. Punjab:

As nothing was received from $\operatorname{Prof.}$ Gurm, EC decided to cancel the $\operatorname{School.}$

III.6.4. Malaysia:

There is a letter of interest from Dr. Othman. Further information is needed. The decision was defered until next EC meeting.

IV. INTERNATIONAL ACTIVITIES

IV.1. ICSU

R.M. West reported on the Executive Board which hads just been held in Bern. His term as IAU representative has come to an end and the General Secretary will replace him. The main points to emerge from the Bern meeting were:

 ICSU issued a resolution about the attitude of India towards South African scientists. Japan has now adopted the same attitude and also requests a "repudiation document". Any action taken by the IAU should be coordinated with ICSU.

- IAU has been praised for its action towards Developing Countries, especially in what concerns the VLPs. ICSU will probably develop some Visiting Lecturers Scholarships. COSTED funding should be exploited.
- The balance between bio-sciences and other sciences in ICSU Executive Board has been revised: 5 ½ representatives from bio-sciences and 4 ½ for non-bio-sciences.
- Global Change: ICSU has set up an international programme for a decade of study of global changes: International Geosphere and Biosphere Program. The Global Change Secretariat will be situated in Stockholm: SCOSTEP will most probably be involved.
- ICSU edited a very interesting brochure on the Consequences of Nuclear War.
- Encouraged by the success of the IGY, the Executive Board of ICSU decided to organise an International Space Year in 1992 (Chairman: R.M. West).
- The total allocation of ICSU to IAU will amount to \$21,000 for 1987.

IV.2. ICSTI

The problem of the A & A Abstracts was raised. The Executive Committee considered that the continuation of the Abstracts in Heidelberg is vital. R. Kippenhahn will contact R. Wielen as soon as possible, in order to enquire on the status of the A & A Abstracting Service. He will report at next EC meeting.

IV.3. COSPAR

During the last COSPAR Plenary Meeeting, the General Secretary and COSPAR agreed that, in order to strengthen cooperation and avoid overlap of meetings, Liaison Members would be nominated. Six IAU members have now agreed to act as Liaison Members between COSPAR and IAU.

IV.4. SCOSTEP

A new programme STEP (Solar-Terrestrial Energy Program) has been set up by SCOSTEP, which requires representation by the Scientific Unions on the Steering Committee. P.C. Simon was unanimously proposed as the IAU representative to this Committee.

IV.5. IAF

See § 2.8 under Commission 44.

IV.6. CODATA

See § 2.8 under Commission 5.

IV.7. IUPAP

EC notes that this Union established a new Commission on Astrophysics (with a strong emphasis on High Energy Astrophysics): P. Ledoux is the Chairman and P. Maltby the Secretary of the new Commission.

IV.8. GIREP

The Assistant General Secretary reported on a GIREP meeting held in Elsinore, Denmark, in August 1986. The aim of GIREP is to create a forum of exchange between research physicists and teachers of physics. The topic of the 1986 meeting was Cosmos -an educational challenge, i.e. an attempt to explore the role of astronomy in the teaching of physical science. To this end, the meeting was an invaluable forum for contact revealing yet again the difficulties faced by teachers when introducting a non curricular subject into main stream physics teaching while the relevance of astronomy to teaching physics was acknowledged. The lack of teaching training in astronomy was a handicap, as was the lack of quality teaching materials, to further exploitation of astronomy in teaching physical science.

V. OTHER BUSINESS

V.1. Free Circulation of Scientists

- a. EC takes notes of the good relations between IAU and the Committee for Free Circulation of Scientists of ICSU.
- b. Several Polish astronomers were unable to attend Symposium No. 123, because they were not given their visas. The General Secretary will inform the National Committee.

V.2. Next meeting of the Executive Committee

At the invitation from F.D. Drake, transmitted by R.P. Kraft, the next meeting of the Executive Committee will take place in Santa Cruz, California, September 9-12, 1987. The President thanked the University of California, Santa Cruz, for their invitation.

V.3. Other matters

The General Secretary reported that he happened to know that Ozernoy was now in the USA, although the EC had not been officially informed, despite all the efforts made by the IAU towards his emigration.

The President closed the meeting on Monday, September 22, at 16.00, thanking all the members of the EC for good discussion, and those in Liège who were involved in the logistics of the organisation of EC 55, particularly D. Fraipont.