WEST.

INTERNATIONAL ASTRONOMICAL UNION UNION ASTRONOMIQUE INTERNATIONALE FIFTY-SECOND MEETING OF THE EXECUTIVE COMMITTEE Ile d'Yeu, France

10-13 September 1984

Proceedings

The 52nd Meeting of the Executive Committee of the International Astronomical Union was held at Ile d'Yeu, France, from 10-13 September 1984.

Present at the meeting were:

Prof. R. Hanbury Brown

Dr. M. W. Feast

Prof. R.P. Kraft

Dr. L. Kresak

Prof. M. Peimbert

Prof. R. Wilson

Prof. Ya. S. Yatskiv

Dr. R.M. West

Dr. J.P. Swings

Prof. P.A. Wayman

President

Vice President

Vice President

Vice President

Vice President

Vice President

Vice President

General Secretary

Assistant General Secretary

Adviser, Former General

Secretary

In attendance:

Mrs. B. Manning

Ms. D. Lours

Mrs. E. Völk

Prof. J.C. Pecker

IAU Secretary

Assistant IAU Secretary

Secretary

Former IAU General Secretary

(item 24 only)

President, BIH (item 22 only)

Prof. B. Guinot

The following report was prepared in the order of the agenda items: All Documents pertaining to the meeting are available at the IAU Secretariat for further reference.

I OPENING BY THE PRESIDENT

The President opened the meeting on September 10, 1984 at 09.00. He welcomed all participants and expressed, on behalf of all EC members, gratitude to the host of the meeting, the former IAU General Secretary, Prof. J.C. Pecker, for his hospitality and the excellent arrangements made for the meeting in the beautiful surroundings of Ile d'Yeu. He passed the word to Prof. Pecker who extended a hearty welcome to the Executive Committee members, adding his best wishes for a successful meeting. He mentioned that the late IAU President, Prof. Vainu Bappu, would have been the only person present who also participated in the 1971 EC meeting in the same room.

II INTERNAL MATTERS (ADMINISTRATION)

1. Report of EC 51

The EC approved the minutes of the 51st meeting subject to the deletion of the name G. Perozzi on page 21 (C 83: "Dymanics of Comets: their Origin and Evolution").

2. Approval of the Agenda

The agenda were approved with some minor modifications. The definitive version is attached as Appendix I.

3. Special Nominating Committee

On behalf of the SNC, the President informed that the following nominations to the EC (1985-88) had been made:

President (1985-88) : J. Sahade (Argentina)

Vice Presidents (1985-91) : A. Batten (Canada)

: R. Kippenhahn (FRG)

: P.O. Lindblad (Sweden)

General Secretary (1985-88)

: J-P. Swings (Belgium)

Assistant General Secretary

(1985-88)

: D. McNally (UK)

The President stated that the nominations of Vice Presidents had been a fairly easy task, but to find a suitable Assistant General Secretary had been more difficult. Two possible candidates had declined because they were too busy, and only the third person approached was able to accept the nomination.

During the following discussion about SNC matters, it was remarked that the new EC would not "cover" all disciplines; e.g. the Solar System would not be represented. The President regretted this, but drew attention to the fact that the vote of the SNC of course had to be respected.

The GS mentioned that the number of Executive Committee members might perhaps be considered too small, and that the EC might wish to discuss whether the future addition of, for instance, two more Vice Presidents ought to be envisaged. More fields might thereby be better covered by the Executive Committee and thus allow for better judgement of the contents of symposia and colloquia. However, the other EC members did not share this opinion; it was felt that the actual size of the EC was about right.

On the question whether the business of the SNC would not be facilitated if the SNC members met at least once, the President replied that this was not a practicable solution, in particular since SNC members might be potential candidates for the EC.

The EC decided that it would be useful to take up again these and other questions about the functioning of the SNC at the EC meeting in Delhi. It was agreed that the most important point is the coverage of specialties by the future EC, but that geographical distribution also is important. It would also be desirable to have in the future one or more female members of the EC

4. IAU Secretariat

The General Secretary reported about the work and activities at the IAU

Secretariat for the period September 1983 - September 1984. He welcomed Ms. Danielle Lours who took up her duty as IAU Assistant Secretary in March 1984. He thanked Mrs. Manning and Ms. Lours for their efficient and competent work to keep affairs at the Secretariat running smoothly. The work at the Secretariat has been somewhat re-organized after the departure of Ms. Smiley in October 1983. The GS visits the Secretariat about once a month. Contact by telephone and telex has proven to be very efficient and time-saving. With regard to the preparations for the General Assembly in India, matters have been greatly facilitated by the telex. The GS also thanked Mrs. E. Völk for her great contributions during the past year.

Mrs. Manning has expressed a desire to gradually step down from her present full-time to a part-time employment. The GS together with the AGS will see how this can best be arranged sometime in a not too distant future.

It was decided to computerize the IAU membership file, and the GS was authorized to proceed with the proposed purchase of IBM XT hardware, etc. as outlined in document 52/4/1. In view of the upcoming General Assembly, the EC felt that the timing for this decision was most appropriate and that the project ought to be completed not later than mid-1985.

5. IAU Structure

Commission Officers

Prof. Wayman, Chairman of the Ad Hoc Subcommittee on IAU Commission
Structure commented on his report. In general, the present structure of
Commissions is considered adequate. It is crucial, however to make the best
possible choice when nominating Commission Presidents and Vice Presidents.

Some of the current Commission Officers hold important positions at their home
institutes and are therefore unable to dedicate the necessary amount of time
to Commission business. Furthermore, it was felt that the EC should know more
about who are being nominated as Commission Presidents and Vice-Presidents.
Also, it should not be an automatic procedure that a Commission Vice-President
becomes President at the next GA. The EC ought to have a closer look at the
candidates and must assist the Commissions if there are difficulties in making
the proper choice.

The following was recommended: 1 1/2 years before a General Assembly, the GS approaches Commission Presidents requesting them to prepare (together with their Organizing Committees) lists of nominees for Presidents and Vice Presidents. The EC will review these lists in its meeting one year before the GA and suggest changes where necessary. After acceptance of the nominations by all candidates, a list will be published in the June issue of the Information Bulletin, just before the GA. It was agreed that the new EC (after Delhi) will make the final decision regarding the implementation of this procedure.

Changes in Commissions

Some Commissions are possibly too small or have too limited a scope to justify their continued existence, e.g. Commission 26 (Double Stars); Commission 30 (Radial Velocities); Commission 19 (Earth-Rotation); Commission 31 (Time). It was agreed to suggest that

- a) Commissions 26 and 42 are combined into a single Commission. A possible new name: "Binary Stars".
- b) Commission 30 be discontinued and a corresponding Working Group be established within Commission 29.

The GS will write to the Presidents of Commissions 26, 42, 30 and 29. A final decision will be made upon receipt of their comments and if necessary, a corresponding resolution shall be put on the agenda of the 19th General Assembly.

What concerns Commissions 19 and 31, the matter should be reconsidered if BIH moves from Paris Observatory to BIPM.

Commission Reports

There was a general agreement that the reports published in Volume A are important contributions and that they shall be continued without any major changes. However, there was some concern about the usefulness of the Reports in Volume B. It was decided that the GS will write to all Commission Presidents informing them that the following points shall be dealt with in Reports B (1985):

- Any commission business that has scientific implications,
- Abstracts of major contributions,
- An outlook on the future work of the commission. Duplications of Organizing Committee membership etc. are to be avoided.

Report of the Executive Committee

The draft Report of the Executive Committee has to be made available to IAU Adhering Bodies. In the past, it was published in the Information Bulletin. The EC agreed that since the report is a draft document only, it should not be readily available for individual members until at the GA. It was, therefore, decided to adopt the subcommittee's recommendation, which reads as follows: "...it is recommended that the draft EC report prepared before the GA be circulated by multiple copies to adhering bodies in ample time for national committees to consider them prior to the Assembly, and that publication in the Information Bulletin be discontinued."

Notice of Deaths of Members, Membership Lists

The EC decided that the GS will report the 3-year list to the Assembly as before, but that it will henceforth be omitted from the formal EC Report.

The names of retired and deceased members will be kept in the computer file for future reference, but marked accordingly.

Updated membership lists shall be published once a year in an inexpensive form separately from Report B. The first list shall be available at the time of the General Assembly in Delhi.

Statutes, By-laws and Working Rules

It was decided to follow the suggestion of the subcommittee to establish a new Working Rule:

"Commissions may be designated 'Commission of the Executive Committee'. These are commissions that are involved in administrative work where questions of policy and finance require presentation to the General Assembly by action of the Executive Committee. These commissions are

responsible to the Executive Committee but they are not appointed by it."

The EC furthermore agreed that Working Rule No. 21 be amended as follows:

"Members may not, as a rule, be members of more than three Commissions,
excluding Commissions of the Executive Committee."

The GS remarked that the IAU Working Rules have now been in force for more than 10 years. They are considered very good and adequate except for one point: the order may not be entirely logical and one should consider re-arranging them at some time in the future.

6. Membership of the IAU

a) Adhering Bodies

Iran

Prof. Sobouti, Shiraz, has received a grant through IAU Commission 38, which will be used to travel to institutes in Italy, Belgium and the U.S. The EC agreed that this was a very good way of spending Commission 38 money. It was hoped that a fruitful interaction with Iranian astronomers will follow.

China

The GS visited the People's Republic of China in October 1983 in order to strengthen the relationship between China and the IAU and to show Chinese Astronomers that the IAU is ready and willing to help them. There seems to be a strong interest in astronomy in China, and the GS promised that the number of Chinese individual IAU members can be substantially increased in 1985 without a corresponding increase in the CAS contribution to IAU. The Chinese Astronomical Society has 900 members, 300 of whom are eligible for IAU membership, i.e. IAU may expect approx. 200 applications in 1985. Chinese participation (approx 11-12 persons) is expected at the Kyoto Regional Astronomy Meeting (30 September - 6 October 1984). It was agreed to encourage increased use of Commission 38 money for support to Chinese astronomers. Three scientists from China have already received money from this source.

With regard to holding future IAU meetings in China, doubts were raised

whether ICSU Rules for scientific meetings will be adhered to. The GS expressed the opinion, however, that this problem will eventually be overcome, and mentioned that he would discuss the question with representatives of CAST (the ICSU Adhering body in PRC) at the 1984 ICSU GA in Ottawa.

Cuba

The IAU membership of Cuba was briefly discussed. The fact that there are no individual members in Cuba seems to be the major problem. Furthermore, efforts to establish contacts have not been very fruitful. There has been no reply yet to a letter which the GS wrote to the Vice President of the Cuban Academy of Sciences.

Poland

Contributions from Poland have been received including 1983 and 1984. This was a welcome development in view of the earlier indications.

Roumania

No contributions have been received from Roumania during the past three years. It was reported that COSPAR has the same problem, and has taken steps to put Roumania in suspense for one year with the prospect of exclusion by the end of 1985. The GS has written a letter of enquiry to Roumania, informing that Roumania will not be granted any voting rights in Delhi if the dues (1982-84) have not been received before the General Assembly. The EC expressed concern about the lack of response from this country.

Turkey

One year ago the outstanding dues were remitted into a bank in Switzerland with the clause that the money could only be made available to IAU with specific authorization from Turkey. (The money was finally transferred to IAU in November 1984.)

3 1

Uruguay

On behalf of the IAU, Prof. J. Sahade recently paid a visit to Uruguay and met a number of people at the Academy and UNESCO. The GS subsequently wrote to some of them. We now know the names of some people in Uruguay who are interested in astronomy.

USSR

There has recently been an exchange of correspondence between the Astronomical Council and the GS regarding the attendance of USSR scientists in IAU sponsored meetings. In some cases, expected participants did not arrive, or other persons came instead without prior notification. The EC decided that if at all possible, the USSR Academy of Sciences shall be informed of grants for prospective USSR participants, at least 5 months prior to the meeting in order to allow sufficient time for visa formalities etc. If for any reasons the names of the participants are changed, the Local Organizing Committee must be informed accordingly immediately. It was remarked that a similar procedure is also desirable for Czechoslovakia, where 3 to 4 months are required for visa formalities, etc.

b) Applications from Non-member Countries

Nigeria

In a letter of 18 October 1983, Prof. Okoye informed the IAU that the Nigerian Academy of Sciences has taken the necessary steps to set up a National Committee of Astronomy. The documents available at IAU seem to be in perfect order and it is expected that Prof. Okoye will present the Nigerian application for membership to the General Assembly in 1985.

Libya

The GS reported that he has been in contact with Libya. In a letter from the University of Garyounis they ask to be considered for IAU membership and one astronomer has been proposed for individual membership. However, the pertinent documents (curriculum vitae, etc.) have not yet been received. After detailed discussion about the general level of astronomy in Libya, number of prospective individual members, etc. it was decided that Libya should be encouraged to prepare a formal application, but without pressing them too much.

Syria

There has been an exchange of correspondence between the GS and the Syrian Cosmological Society. The IAU has received two curricula vitae from persons who are interested in joining Commissions 46 and 51 respectively. Both requests were, however, considered inadequate and the feeling was that both persons are on the level of advanced amateurs. The discussion resulted in the expression of the following opinions regarding Syrian membership: IAU will need much more detailed information; IAU membership would serve the development of astronomy in Syria, but the IAU will probably not profit much from this membership now; The adhering body to IAU should be a university of scientific institute rather than the Cosmological Society.

The GS was asked to inform Syria that it is perhaps premature to apply for full membership, but that the EC has a very positive attitude towards IAU support to Syria.

c) Non-member Countries

Algeria

Since EC meeting 51 the GS had an opportunity to discuss the situation of astronomy in Algeria with Prof. Lena who has paid several visits to this country. Furthermore, he recently met with five Algerian astronomy students in Paris and subsequently wrote a letter to CNAAG. No reply has been received to date. A short report was given about a joint Algeria/USSR project. It was felt that IAU membership would probably be very useful for Algeria and should be encouraged.

Angola

No reply to the General Secretary's letter of 10 November 1983 has been received. It seems that there is very little astronomical activity, if any, in Angola. There are, however, satellite tracking activities and plans for a joint Angola/USSR solar observatory.

Malaysia

The GS has established contacts with Dr. M. Othman, a qualified astronomer. There is definite interest in a future IAU Visiting Lecturers Programme or ISYA. The GS will discuss this matter further with Dr. Othman in Kyoto.

Paraguay

The IAU has received reports from Dr. McConnell and Prof. Sahade who both visited Paraguay. There is a faculty of physics at the Asuncion University and some work is being done in astrophysics. Dr. McConnell and Prof. Sahade gave some lectures and received a very good response. The GS wrote to the Dean to get more details and is now awaiting his reply. Paraguay may be a candidate for a future IAU VLP.

Philippines

There has been extensive correspondence with Dr. Heyden, but because of the present situation in the Philippines it now seems less likely that his efforts will soon result in an application of the Philippines for IAU membership. Several people have degrees in astronomy. One of them is Dr. Vinluan who will be present at the Kyoto meeting.

Saudi Arabia

No progress has been achieved regarding Saudi Arabia. The last communication received from Prof. Khairy Aly is dated 14 November 1983. It was agreed to let this matter rest for the time being but to react positively if Saudi Arabia should approach IAU.

<u>Sri Lanka</u>

There seems to be little or no astronomical activity, and the IAU has no addresses for any institutes in Sri Lanka. Individual IAU membership was recommended by the EC for a Sri Lankan astronomer, Dr. Ratnatunga, who is presently on a post doctoral assignment in the U.S. Dr. Ratnatunga has been informed about the requirements for (future) Sri Lanka membership of IAU.

Thailand

At present, we have two contacts in Thailand. The University of Bangkok has contacted the GS about a possible VLP.

d) Individual Members

Based on the list in document 52/6d/l, the EC recommends that the following persons be nominated for individual membership in IAU from 1985: E.H. Gudmundsson and T. Saemundson (Iceland), M. Othman (Malaysia), Wan Fook Sun (Singapore; pending further information about his activities), K.U. Ratnatunga (Sri Lanka).

e) Commission Membership

A request was received from the President of Commission 48 to co-opt Drs. Linsley and Miyaji Shigeki as new members in his Commission. The President of Commission 19 requested co-option of Dr. M. Capitaine. The EC approved these co-options.

Commissions of the IAU

<u>Commission 5</u>: The GS reported that the Style Book has been finalized by S. Mitton, but that an important appendix, i.e. the list of abbreviations is still missing.

Commission 6: The 1983 Annual Report of the Central Bureau for Astronomical Telegrams was duly noted.

Commission 16: The President of IAG (International Association of Geodesy) which is part of IUGG (International Union of Geodesy and Geophysics) has approached the Working Group of Commission 16 (Reference Frames on Satellites of Planets) with the suggestion of founding a joint Cl6/IAG Working Group. This was unanimously approved.

Commission 20: The 1983 Report of the Minor Planet Center was duly noted.

Commission 22: The Meteor Data Center, Lund, now receives financial support from IAU. The 1983 report was noted and will be published in the Information Bulletin in a somewhat abbreviated form.

Commission 27: It was reported that most of the money made available to this Commission in support of the General Catalogue of Variable Stars (Moscow) has not been used. A proposal by the USSR Academy of Sciences will be forthcoming to spend part of it on travel grants for Soviet astronomers to attend the General Assembly in Delhi. The EC agreed to this.

Commission 38: Travel Grants - The financial statement of IAU Commission 38 shows that approx. one half of the triennial allocation has been spent until July 1984. There have been quite a few applications for travel grants from India and recently also some from China. It was felt that in cases where

scientists travel to the U.S. for study visits, they should try to obtain funds from the US host institutes. The President of Commission 38 has been requested to report to the EC about the impact of study visits supported by IAU funds.

Commission 42: The IAU has received a request from Dr. J. Mattei for funding for the computerization and publication of AAVSO observational data on cataclysmic variables. 18 supporting letters were received with the application. The EC found this project a very good one and was in favour of supporting it. An amount of Swiss Francs 6.000 was agreed upon which must be earmarked for publication.

Commission 50: Protection of Existing and Potential Observatory Sites - The Commission International de l'Eclairage (CIE) and Commission 50 have suggested the appointment of Liaison Officers between CIE and IAU: Dr. D.A. Shreuder for CIE and Dr. D.L. Crawford for IAU. The EC accepted this proposal.

<u>Commission 51</u>: Search for Extraterrestrial life - The President of Commission 51 submitted a number of recommendations for approval by the EC (52/7/8).

- 1. Change the name of the Commission to "Bioastronomy": After a thorough evaluation of this proposal the EC was of the opinion that, for the time being, the present name of Commission 51 should be kept. The GS will inform Prof. Papagiannis accordingly.
- 2. Symposium in Hungary in 1987: The EC members thought that this was an excellent idea and recommended that a formal application be sent in due time to the AGS.
- 3. and 4. concern the nominations of future President and Vice President of Commission 51. Both recommendations were accepted by the EC.
- 5. Changes in the present Organizing Committee: All proposed changes were accepted.
- 6. The Commission proposes to establish a prize. All EC members opposed this idea, on the grounds that if there were to be a prize for outstanding contributions in the advancement of astronomy, then it should definitely be awarded by IAU and not an IAU Commission.
- 7. A total of eight consultants is proposed by the Commission. They were approved by the EC.

Possible New Commission

The GS received a proposal from Dr. C. Sterken, Brussels, for the creation of a new Commission concerned with Multisite Observing Programmes. The EC found that there is no obvious need to form such a new Commission now, but that a Working Group within an existing Commission could be considered. It was felt that Commission Presidents should be given the opportunity to discuss this at the General Assembly. Corresponding information should be published in the next issue of the Information Bulletin. The GS will contact Dr. Sterken.

8. General Assemblies

a) XVIIIth General Assembly, Patras 1982

The account of the 18th GA has finally been settled by payment of US \$ 7493.34 to the Local Organizing Committee. There are a number of IAU flags in Greece which Prof. Goudas has agreed to send to the Secretariat. They can be used for future GA's.

b) XIXth General Assembly, New Delhi, 1985

The GS reported on the meeting between the IAU Officers and the NOC and LOC members in Delhi, in January of 1984, which proved to be very beneficial to the preparations of the Assembly. The Vigyan Bhavan will be the venue of the GA. It is frequently used for UN type meetings and has ample space for approx. 1500 persons. Well above 1000 responses to the Preliminary Announcement have been received, i.e. approx. 800 - 1200 participants are expected. The NOC and LOC have applied for financial support to various governmental agencies.

Hotels have been booked, and it seems that the social events will be well arranged. Prof. A. Roy will be the editor of the Assembly Newsletter.

With regard to visa procedures, the GS has received written assurance from INSA that ICSU rules will be adhered to. Three countries have no diplomatic relations with India and the GS has discussed the practical arrangements which are necessary to ensure that it will be possible for persons from these countries to enter India. The GS has forwarded questionnaires to the astronomers in these 3 countries, and the Indian National Science Academy will see to it that visas are indeed issued. For participants who are not IAU members a confirmation will be required that they are bona-fide scientists.

The nearest diplomatic missions for participants from Israel are located in Cairo and Rome. A good solution for South Africa may be to handle this matter via London. A list of countries for which Indian visas are required will be printed in the next announcement.

An amount of about Swiss Francs 210.000 is foreseen in the IAU budget for the General Assembly. A main point of concern is the travel cost to India (52/8b/3). The EC members, the secretaries, several Commission Presidents as well as a number of young astronomers from developing countries will receive financial support. The GS has made an application to ICSU for support of young astronomers. The Air India office in Paris has been authorized by the Delhi office to negotiate for IAU the best possible rates from all cities to Delhi and back. Hopefully, it will be possible to obtain about 50% off the regular fare from some countries to India. This would of course mean, that a larger number of IAU supported participants could travel on Air India. The EC welcomed the efforts to ensure maximum participation through the availability of cheap fares. It was decided that the GS should inform the EC members in due time about the Air India tariffs and that any EC members who wished to fly with another carrier, would only be reimbursed up to the Air India level. The GS mentioned that in order to verify the forthcoming Air India offer, an approach will also be made to other companies. The LOC contribution amounts to \$ 75.000 which will be used for subsistence support to young astronomers while in India.

The time-table for the preparations of the General Assembly was noted by the EC. It was agreed to shift the forthcoming issues of Information Bulletin as follows: February 1985; August 1985; March 1986.

c) XXth General Assembly, Baltimore, 1988

IAU has received an invitation from the National Academy of Sciences, Washington, to hold the XXth IAU General Assembly. The AGS reported that he had been able to visit the Baltimore Convention Center which seems very adequate for the purpose. The EC supported this venue, and the GS will inform the President of NAS accordingly and request that an official invitation be presented to the GA in 1985.

d) Future General Assemblies

The EC agreed that it would be desirable to hold a GA in Europe in 1991.

There are indications that the Netherlands might be interested in hosting an Assembly. This possibility should be further explored at the time of the Delhi GA.

PR China is interested in holding an Assembly. GS has replied to CAS that 1994 would be the first possible occasion. Regarding the question of a future General Assembly in Japan, it was felt that the 1984 Regional Astronomy Meeting in Kyoto would serve as a small-scale rehearsal.

9. Finances

a) Vérification des Comptes

The EC took note of the auditor's report (52/9a/1). It shows an excess of income over expenditure of Swiss Francs 29.000. This is mainly due to the fact that some countries paid their 1984 contributions already in 1983.

b) Status on 30.6.1984

The EC noted the status as per 30.6.84 (52/9b/1).

c) Revised Budget 1983-85

The EC discussed the proposed revised budget (1983-85; 52/9c/1) and agreed to the proposal by the AGS to increase the amount of expenditure under item 1.2 by Swiss Francs 5.000 (word processing equipment at Liège). The agreed figures are shown in Appendix II.

d) Draft Budget (1986-88)

The EC examined the preliminary draft budget (52/9d/1+2) which was presented in two ways: on a triennial basis as before and on an annual basis as suggested by the Patras Finance Committee.

The suggested increase in the unit of contribution was discussed. It was decided to propose an annual increase of 3.5% to the Delhi GA (i.e. 7.0% increase in 1986; 10.5% in 1987 and 14.0% in 1988) and also to change from triennial to annual presentation of the budget. The proposed unit of contribution is 1885 SF for 1986, 1945 SF for 1987 and 2005 SF for 1988. A notice about the proposed increase in contribution will be sent to adhering organzitions 8 months prior to the General Assembly, together with the draft budget (1986-88), as agreed by the EC (Appendix III).

The following comments were made:

Income

- 1.1 Based on 226 units (one more adhering country in category I after 1985)
- 1.2 This estimate is dependent on the UNESCO contribution to ICSU, which is uncertain after 1985.

Expenses

- 1.1 The expenses for EC meetings are difficult to foresee since it is yet unknown where the meetings in 1986 and 1987 will take place.
- 2.1 Expenses for the Information Bulletin will consist of postage fees only.

3.1 Meetings

The substantial increase in the support to IAU Symposia and Colloquia was welcomed by all members. Opinions about Regional Astronomy Meetings varied, especially as regards those in Europe. Concern was expressed about the efficiency of International Schools for Young Astronomers (and Visiting Lecturers' Programmes). It was felt that there is a lack of information on the ISYA's and the GS was asked to request from Dr. Kleczek a report about the past Schools.

The discussion resulted in the following:

- Reduce the allocation to Regional Astronomy Meetings to Swiss Francs 70.000 for the triennium 1986-88.
- Reduce the number of ISYA's from three to two, thus decreasing the total allocation to SF 50.000.
- Reduce the allocation for the Visiting Lecturers' Programmes to a total of SF 72.000.

With regard to point 3.2 it was agreed to decrease the amount foreseen in the draft budget for Commission 38 (Exchange of Astronomers) to SF 60.000.

An increase of allocations to symposia from Swiss Francs 10.000 to 12.000 and colloquia from SF 5.000 to 6.000 was unanimously agreed upon. This will start from 1986.

e) The EC briefly discussed the management of IAU funds. The question of "portfolio" operation was mentioned. The GS replied that the IAU account with Merrill Lynch yields 9-10% and that it is the intention to continue to operate in Swiss Francs, US \$, Hfl and FF. The amount held in FF has been significantly reduced by active cash flow management.

10. Publications

The following IAU publications have appeared since September 1983:

a) By Reidel:

- Proceedings of IAU Symposia Nos. 101, 102, 104, 105, 108, 110.
- Proceedings of a one-day astronomy seminar at UNISPACE 82, Vienna: "Understanding the Universe".
- Proceedings of IAU Colloquia Nos. 71, 74, 80 (78 in production).

b) Others:

- Colloquium 62; Lowell Obs. Bull.

IAU Astronomer's Handbook (1986)

A new edition of the Astronomer's Handbook is being prepared by the GS and AGS for publication in 1986. Various people, among them the Presidents of IAU Commissions have been invited to contribute. It was agreed that the schedule for publication shall be decided during the General Assembly in Delhi. Various items from the GA shall also be included.

IAU Pamphlet

An IAU Pamphlet is being prepared and will be available before the General Assembly. The EC agreed to the format and contents as described by the GS (52/10/3).

Page Charges

The question of page charges for the proceedings of two IAU colloquia was discussed. The EC unanimously rejected this practice and asked the GS to inform the organizers accordingly.

Through its publishers, the IAU sends copies of symposia proceedings and Transactions to approx. one dozen institutes in developing countries. The institutes pay about 25% of the list price, the IAU the rest (approx. 35%). Information about this scheme was published in Information Bulletin No. 52. One application for inclusion in this mailing list has been received (from Mérida, Venezuela). The EC agreed to this.

IAU Official Publisher after September 1985

In February of 1984 the AGS sent out a call for tenders to a number of publishers. Following a review of the responses together with the GS and a meeting with representatives of three publishers, Messrs. Reidel were requested to draft a contract proposal for the period September 1985 through August 1991. A letter covering the main points of the draft contract was sent to the EC members on June 29, 1984. The EC authorized the GS to sign the contract.

The AGS reported that several publishers had suggested to publish an IAU journal only. The EC decided to postpone a discussion of this question to a future meeting.

The GS raised the question of the Information Bulletin's "usefulness" - what can be done to improve its image and impact? Would it be useful to aim at a "Trends"-type journal? It was agreed to discuss this matter further during the next EC meeting.

III SCIENTIFIC ACTIVITY

12. Scientific Programme, XIXth General Assembly

- Invited Discourses:

The following Invited Discourses were agreed upon by the EC members:

20 November 1985: V.A. Radhakrishnan: "Pulsars" (Vainu Bappu

Memorial Lecture), introduction: R. Hanbury Brown

22 November 1985: R.Z. Sagdeev: "Venus", introduction: L. Kresak

25 November 1985: V. Rubin: "Dark Matter in the Universe", introduction

M. Peimbert.

All speakers have accepted the invitation.

- Joint Discussions:

The GS had requested proposals for Joint Discussions and many Commission Presidents replied before the deadline. Altogether 21 proposals were discussed. The following Joint Discussions were approved by the EC:

<u>Title</u>		<u>.e</u>	Sponsoring Commissions
	I	- Reference Frames	7, 8, 19, 24, 31, 33, 40
		Chairman: J.A. Hughes	
	ΙI	- Long-Period Eclipsing Binary Stars and	
		Related Objects	42, 44
		Chairman: Y. Kondo	
	III	- Solar and Stellar Non-Radial Oscillation	12, 27, 35, 36
		Chairman: A.N. Cox	
	IV	- Radio Astronomy and Cosmology	28, 40, 47
		Chairman: K.L. Kellermann	
	V	- Stellar Activity: Rotation and Magnetic	10, 25, 29, 35, 36, 40,
		Fields	42, 50
		Chairman: B. Gustafsson	
	VI	- Evolution in Young Populations in Galaxies	25, 28, 33, 34, 37, 45
		Chairman: K.C. Freeman	
	VII	- Supernovae	27, 28, 34, 35, 40, 44,
		Chairperson: V.L. Trimble	47, 48

As previously suggested, it was decided to hold JD III in honour of prof. Chandrasekhar. The President agreed to issue an invitation together with Prof. Radhakrishnan. (Prof. Chandrasekhar declined the invitation in November 1984).

13. IAU Symposia and Colloquia

Past Symposia and Colloquia

The AGS reported that 5 IAU Symposia and 4 Colloquia were held in 1983. The number approved for 1984 is 4 Symposia and 7 Colloquia. A total amount of Swiss Francs 145.000 has been allocated to these meetings, plus an additional SF 10.000 for IAU co-sponsored meetings during the same period. This leaves a total of SF 95.000 for meetings in 1985, 70.000 of which are already

committed. The AGS had received 5 applications for symposia and 12 for colloquia in 1985 and 1986. After comprehensive discussion, the EC decided to support the following meetings:

A) Symposia

<u>S 120:</u>	Astrochemistry; Chair SOC: A. Dalgarno; Dec. 3-7, 1985;
	Bombay, India
<u>s 121:</u> *	Observational Evidence of Activity of Galaxies; Chair SOC:
	V.A. Ambartsumian; 1986; Yerevan, USSR
<u>s 122:</u>	Circumstellar Matter; Chair SOC: K. H. Böhm; June 23-27,
	1986, Heidelberg, FRG
<u>s 123:</u> **	Advances in Helio- and Asteroseismology; Chair SOC: J.
	Christensen-Dalsgaard; September 1986 (?); Aarhus, Denmark
S 124:***	Large Scale Structures of the Universe and Observational
	Cosmology; Chair SOC: to be decided; 1987; Hungary or
	Shanghai, to be decided.
S 125:****	Neutron Stars; Chair SOC: D.J. Helfand/Wang Shou-guan;
	1986; Nanjing, China;

^{*} Accepted under the condition that the meeting is postponed to 1986. The organizers will be informed that the proceedings must be published in English.

*** Accepted under the condition that the two proposed meetings "Large Scale Structures of the Universe" and "Observational Cosmology" merge.

**** Accepted if moved to 1986 and when CAS/CAST has given written guarantee of adherence to ICSU \tilde{r} ules.

B) Colloquia

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C 90: Upper Main Sequence Stars with Anomalous Abundance; Chair SOC: C. Cowley; May 1985; Crimea, USSR

^{**} Accepted under the condition that the meeting is postponed to September 1986.

- C 91:* History of Oriental Astronomy; Chair SOC: E.S. Kennedy; 14-17 November 1985; New Delhi, India
- C 92: Physics of Be Stars; Chair SOC: A. Slettebak; Mid-August 1986; Boulder, USA
- * Organizers should be advised to include Chinese colleagues in the SOC.

14. IAU Regional Astronomy Meetings

The AGS reported on two very successful metings, i.e. the Third

Latin-American Regional Astronomy Meeting held in Buenos Aires, November 28
December 3, 1983, and the Seventh European RAM, held in Florence from

December 12-16, 1983. The resolutions adopted at the Latin-American Meeting

were published in Information Bulletin No. 52. A detailed report about the

European RAM appeared in Europhysics News. The Eighth European RAM will take

place in Toulouse, France from September 17-21, 1984. Also included in the

documents is a report of the SOC Chairman for the Sixth Asian-Pacific Regional

Astronomy Meeting about the preparations in Kyoto.

As regards the Fourth Latin-American RAM (November 19-21, 1984, Rio de Janeiro), a request was received by the organizers to spend part of the IAU funds on the publication of the proceedings (in Revista Astronomia Mexicana). Brazil has allocated US \$ 3000 for this purpose, but cannot transfer any of this abroad. Although this is not common practice, the EC agreed to this suggestion and requested the AGS to contact the organizers and inform them accordingly. The Brazilian allocation will in this case have to be spent for travel and subsistence grants.

Due to the General Assembly, no Regional Astronomy Meetings are foreseen for 1985. *

An invitation was received to hold the Fifth Latin-American RAM in Mexico in 1986. The EC discussed this proposal and requested the AGS to inform Dr. Rodriguez of the acceptance of this invitation.

A further proposal was received from Dr. Bumba to host the Ninth European

RAM in Prague in 1986 or 1987. It was felt that 1987 would be preferable.

15. Co-sponsored Meetings

Past Co-sponsored Meetings

At the time of EC 52, the AGS was not yet in the possession of the reports by the IAU representatives to the Meudon (URSI) and Graz (SCOSTEP, COSPAR) meetings. Three members of the EC had attended the COSPAR meetings in Graz and reported.

Future Co-sponsored Meetings

Two applications for co-sponsorship had been received and were discussed by the EC:

- a) "The Interaction between Statistics and Astronomy" (proposed by the International Statistics Institute): After brief discussion it was agreed that the IAU should await more information about this meeting. The Officers were authorized to make a decision during the next Officers' Meeting.
- b) "Comparative Studies of Magnetospheric Systems" (proposed by the Centre National d'Etudes, with a possible co-sponsorship by SCOSTEP). This application had already been discussed at EC 51. Additional information had in the meantime become available and co-sponsorship was approved by the EC. Dr.
- A. Pedersen will be requested to act as IAU representative.
- c) "Optical Devices" (proposed by G. Wlérick). Although there was some reluctance about IAU co-sponsorship of this meeting, the EC, after some discussion, accepted co-sponsorship. It was decided that Dr. Wlérick should be appointed IAU representative to this meeting.

16. International Schools for Young Astronomers

Of the three Schools discussed at EC 51, the one in Punjab was regarded as most desirable, due to its location close to the General Assembly. However, the situation in that region has changed, and alternative venues ought to be considered. It was finally agreed that the preparations for the School in Punjab should be continued, but that the GS was authorized by the EC to move the School to Delhi in early 1985, if this would be deemed necessary.

The ISYA Secretary, Dr. J. Kleczek, is much in favour of a School in Portugal. During the discussion, it was mentioned that a School is organized

in Spain every year by RGO; it was suggested that young Portuguese astronomers should attend.

There has been an informal invitation to hold a School in Bogota, Colombia, possibly in 1987. Before this proposal can be discussed in detail, however, more information must become available.

In order to prepare a detailed discussion about the future of ISYA's, the GS was requested to write to the National Committees of Astronomy in those countries where the past five Schools have been organized to obtain information on the overall success of the Schools, their impact on astronomy in the area, etc.

17. Visiting Lecturers' Programme

a) Lima, Peru

A contract between the Universidad Nacional Mayor de San Marcos and IAU was signed on 7 February 1984. A coordinating subcommittee for the Lima VLP had been established, chaired by Prof. J. Sahade, who will also be the first lecturer in Lima. The GS reported that he had discussed this VLP with Prof. Sahade and that there was agreement on all details. Some lecturers have been named for 1986, but some still have to be found for 1985.

Other forms of support to this VLP include significant contributions to the library in $^{\prime}$ Lima.

Nsukka, Nigeria

The situation in Nsukka was reported to be more difficult. A contract had been drafted and also approved by both parties, but subsequent events in Nigeria have delayed the official signing. The success of the VLP in Nigeria depends on the availability of the 10 m radio telescope, which was donated to Nsukka, but has not yet been put into operation. An American engineer, who was in Nigeria for the installation contracted malaria and is unwilling to go back for the final adjustments. A substitute will have to be found. The GS was asked to pursue this matter, together with the Chairman of the CC, Prof. D. Walsh.

In March of 1984 the GS had written to several journals requesting subscriptions for Universidad Nacional Mayor de San Marcos and University of

Nigeria, either free of charge or at reduced cost. Positive replies were received from the Royal Astronomical Society, Astrophysical Journal and Astronomy & Astrophysics. In addition, the European Space Agency agreed to send literature to Lima.

Future Visiting Lecturers' Programmes

The possibility of short visits by official "IAU lecturers" to other places was briefly discussed. It was felt that it would be preferable to await the outcome of the current VLP's before deciding about any future action.

18. Other Scientific Projects

GERT, INISSE

The President reported about the historical background and present status of GERT. Prof. Swarup, one of the initiators of GERT, has recommended to IAU not to take further action on GERT, which is based on an outdated concept.It was suggested that Profs. Hidayat and van der Hucht try to obtain funds from Indonesian authorities to build an optical telescope there. An exchange with radio astronomers in the USSR was proposed. The GS was requested to discuss this with Prof. Hidayat during his forthcoming visit to Kyoto.

INISSE was originally linked to GERT. UNESCO's idea is now to have a 'travelling' institute. The GS will discuss this matter further with UNESCO and other involved parties.

IV INTERNATIONAL ACTIVITIES

19. ICSU

a) General Committee and General Assembly, 1984

The GS informed the EC that he was going to represent IAU at the forthcoming ICSU General Assembly in Ottawa. A Multidisciplinary Symposium was being organized, dealing with Global Change, Teaching of Science, and Gene Technology. It was menioned that some Commission 50 might contribute to the ICSU Global Change project.

b) Report of IAU to ICSU for 1983

The EC members noted the IAU Report to ICSU.

c) ICSU-IAU Finances

The EC took note of the document IAU/ICSU Contributions 1980-84.

In addition to the basic allocation from ICSU to IAU for 1985, special grants in the amount of US \$ 25.000 had been requested. The GS was reasonably optimistic that approx. 9.000 to 10.000 will be approved by ICSU.

d) ICSU Structure and Statutes

The GS reported about the new, draft statutes of ICSU, which will be discussed at the next ICSU General Assembly. The EC took note.

e) CCMP, ICSU-AB

The ICSU Executive Board has decided to recommend to the ICSU General Assembly to abolish CCMP. At the same time, it is suggested to include the functions of CCMP into an appropriate COSPAR sub-committee. (This actually happened at the COSPAR Plenary Meeting in July 1984). The EC took note.

ICSU-AB is changing its structure and has adopted a new name, ICSTI (International Council for Scientific and Technical Information). The EC took note and decided that the IAU shall continue to be represented to ICSTI. The GS will take up the matter with the IAU representative, Prof. W. Heintz.

g) IUCAF

The GS explained the situation around the Vega project to planet Venus and Comet Halley. It has been decided to emit radiosignals within the OH 1667 MHz band. Profs. Sagdeev and Blamont, on behalf of the Vega project, have discussed this matter with the Chairman of IUCAF, Dr. H. Findlay, the President of COSPAR and the IAU GS. It has been decided that Prof. Blamont will submit a comprehensive technical report to IUCAF which will make this matter known to all involved parties, in particular radio astronomers.

The IAU EC agreed that it would be best to allow these transmissions in view of the lack of time before launch and because of the scientific importance of the project. However one should let it be universally known that this was an absolute exception and that future violations will not be permitted. IUCAF will act as a "watchdog" for IAU, URSI and COSPAR in this matter.

g) CTS

The EC took note of the IAU involvement in the preparations for a major CTS conference to be held in Bangalore, India, in August 1985.

20. UNESCO

The GS reported about contacts with UNESCO, in particular with Prof. Kaddoura, Assistant Director General for Science. UNESCO has contributed to the Kyoto Regional Astronomy Meeting, and it is hoped that contributions shall also be received for future IAU activities, mainly in developing countries. The possible withdrawal of the U.S. from UNESCO may have some effect on the ICSU contribution to IAU. More will be known about this in the course of 1985.

21. COSPAR

The GS and Prof. Wilson represented the IAU to the COSPAR Plenary Meeting in Graz.

A number of minor matters were discussed including possible co-sponsorship with some COSPAR meetings and the implications of the QUASAT project for radio astronomy.

COSPAR has adopted new statutes. A major change is the way in which Bureau members will be elected. In particular, the participating Unions will be asked to nominate candidates for the COSPAR President's list.

The EC took note.

22. BIH

At the request of the President, Prof. Guinot Director of BIH, briefly reported on recent developments. He mentioned that the BIH incorporated atomic time measurements around 1960, but that it had been felt for some time that this was no longer an obvious task of astronomers. The BIH now has two functions: time keeping and rotation of the earth. Due to various circumstances, including shortage of personnel, it had been suggested early 1984 to transfer the TAI to the BIPM. Prof. Guinot would be employed by BIPM at least until 1987 in order to organize the transfer. After that, BIPM would take over this service.

During the ensuing discussion, the EC thanked Prof. Guinot for his many services to astronomy and it was felt that, although it would have been preferable that all parties, including the appropriate Unions, would have been consulted at an earlier stage about this move, there were indeed sound reasons for it. The EC agreed, provided it can be ensured that astronomy does not suffer and that atomic time, as before, will be readily available for astronomical sciences. Prof. Guinot said that he would convey this message to BIPM and he expected that an appropriate resolution would be formulated for adoption by the 19th GA.

23. FAGS

The EC took note of the co-option of CDS into FAGS and the study of SIDC by a FAGS ad hoc committee.

It was decided to keep the current level of contribution of US \$ 2.000 per annum to FAGS.

24. IUAA

A list of suggestions for closer interaction between IAU and IUAA had been received by IAU from the President of IUAA. The EC felt that this list did not represent a viable starting point for closer relationship and suggested that the President of IUAA, together with one or more officials of that Union, be invited to participate in the Delhi GA. This would facilitate direct interaction between IUAA and individual IAU Commissions.

The former IAU General Secretary, Prof. J.-C. Pecker, at the invitation of the President, described a project concerning an international symposium to be held in 1987 in Paris under the auspices of the French Astronomical Society. The subject would be professional/amateur interaction, and the meeting would be the first of its kind. The EC suggested that IUAA be invited to participate and that a formal application for IAU co-sponsorship be sent as soon as possible to the AGS. The EC would consider such a proposal favourably.

25. Next EC Meeting

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The next EC meeting will be held in Delhi on 17 and 18 November 1985. The exact place and time will be decided later.

26. Other Business

The EC briefly reverted to points 3 and 5. It was decided not to make public the list of SNC nominations to the EC at this time, but to inform the Adhering Organizations about three months before the GA. Prof. Kresak will make a suggestion to the other members of the EC concerning the functioning of the SNC.

Prof. Wayman reported that an abbreviated report of the ad hoc sub-committee will be prepared and sent to the GS for inclusion in the February 1985 issue of the Information Bulletin. It was also decided that a short version of the EC Report (1982-84) shall be published in the August 1985 issue. The GS will look into this to see how it can best be achieved.

VI CLOSING BY THE PRESIDENT

The President closed the meeting on 12 September at 18.10 thanking all members and secretaries for their efficient work. He reminded everybody about the visit to the Paris IAU Secretariat which would take place on 14 September 1984.