

INTERNATIONAL ASTRONOMICAL UNION
Union Astronomique Internationale

Thirty-third Meeting of the Executive Committee
Sussex University near Brighton, Sussex, England
Sunday 16 to Thursday 27 August 1970

P R O C E E D I N G S

The thirty-third meeting of the Executive Committee of the International Astronomical Union took place in Falmer (Brighton), England, in room No. 381, Arts Building C of the University of Sussex.

Sessions were as follows:

Sunday, 16 August:	9.15 - 12.30	14.00 - 18.00
Monday, 17 August:	9.00 - 12.00	14.00 - 17.00
Tuesday, 25 August:		17.30 - 21.30

Present were:

O. Heckmann, President

M.K.V. Bappu, Vice-President

W.N. Christiansen, Vice-President

L. Cratton, Vice-President

J. Sahade, Vice-President

M. Schwarzschild, Vice-President

A.B. Severny, Vice-President

P. Swings, former President

J.-C. Pecker, former General Secretary

L. Perek, General Secretary

C. de Jager, Assistant General Secretary

A. Jappel, Executive Secretary

J. Daňková, Secretary

Upon invitation by the President, the meetings were also attended by:

B. Strömberg and

G. Contopoulos

Introductory note: This report has been prepared in the order of the items overleaf in the Summary List of the Agenda.

The documents related to the Agenda, and distributed before the meetings, have not been included in the present report: they will be kept in the archives of the Union together with the report. These documents include:

The Report of the Special Nominating Committee, the applications of Cuba and Uruguay for admission, the list of proposed New Members, proposals for resolutions, various letters, such as that of Prof. Wood inviting the IAU to hold the XV General Assembly in Australia, that of Prof. Iwanowska concerning the invitation of the Polish Academy of Science to hold the XV General Assembly in Poland, etc.

A G E N D A

1. Opening by the President, Professor O. Heckmann

Internal matters of administrative nature

2. Future IAU Officers

Report of the Special Nominating Committee

3. Report by the General Secretary

a) Administration

b) Finances

c) Arrangements for the General Assembly

4. Consideration of the Agenda for the first session of the General Assembly, as printed and distributed

5. Consideration of special meetings to be held during the General Assembly

Brief for the meeting of representatives of Adhering Countries

Brief for the meeting of Presidents of Commissions

6. Admission of new Adhering Countries

Report by the General Secretary of the correspondence with Cuba and Uruguay

7. Appointment of new Members of the Union

A list of proposed new Members is given separately. The Executive Committee submits this list to the Nominating Committee for comment before giving final approval.

8. Resolutions

a) Proposals by the Executive Committee

- i) to request UNESCO to proclaim the year 1973 the year of Copernicus
- ii) to propose to ICSU the creation of an Inter-Union Commission on the Moon
- iii) to publish the Astronomical and Astrophysics Abstracts under the auspices of the IAU

b) Proposals by National Committees

Proposals with budgetary implications will be discussed under point 10 of the present agenda; proposals as regards Symposia and Colloquia under point 10 and 16

Proposals for resolutions of scientific or administrative nature are as follows:

- i) to reconsider the decision to allocate the relative length of the Reports on Astronomy of the various Commissions on the apparently arbitrary basis of the length in the 1967 report (Australia)
- ii) to recommend the introduction of a fundamental course in astronomy and geodesy in the curricula of Technical Universities (Belgium)
- iii) to create a special Commission for Exchange of Equipment within the IAU (U.A.R.)
- iv) to proclaim the year 1973 the year of Copernicus and to bring this proposal before the UNESCO (USSR)
- v) to investigate the possibility of cheaper IAU publications and thus to create conditions for a reduction of the unit of contribution paid by Adhering Countries (USSR)
- vi) to extend the interval between two General Assemblies of the IAU from 3 to 4 years as from 1973 onwards, and to pay more attention to scientific meetings with smaller attendance (USSR)
- vii) to create within one of the IAU Commissions a Sub-commission on the Physics of Unstable Stars (USSR)

c) Proposals by Commissions

Proposals with budgetary implications will be discussed under point 10 of the present agenda.

Other proposals are as follows:

- i) que l'Assemblée Générale accepte les 500 noms proposés par la Commission no 17 pour désigner les cratères de la face arrière de la Lune (Commission No. 17)
- ii) to discuss the future of the Helsingfors Observatory which is threatened to be closed down by the authorities (Commission No. 23)
- iii) to merge Commissions 23 and 24 (Carte du Ciel, and Stellar Parallaxes and Proper Motions respectively) (Commissions Nos. 23 and 24)
- iv) to omit the superscript II from the new galactic coordinates that should be simply 1,b: the old coordinates should retain the superscript I (Commission No. 33)
- v) to recommend the introduction of a fundamental course in astronomy in University curricula (Commission No. 46)

9. Commissions

- a) Creation of new Commissions (see earlier decision of the Executive Committee to create Commissions Nos. 47 and 48)
- b) Merger of Commissions (see earlier decision of the Executive Committee to merge Commissions Nos. 23 and 24)
- c) Dissolution of Commissions
- d) Nomination of Presidents and Vice-Presidents of Commissions

The Executive Committee will, at its first session, make preliminary nominations based on those on the list prepared by the General Secretary in consultation with Presidents of Commissions. The willingness to serve of the nominees will be ascertained. The full list will be drawn up at the final session and submitted to the General Assembly for approval.

- e) Organizing Committees of Commissions

Preliminary proposals for membership in the Organizing Committees of Commissions are given separately; they have been derived from proposals made by the present Presidents of Commissions. The Executive Committee may suggest amendments for the consideration by Commissions, before the Commissions submit their final proposals.

10) IAU Finances

a) Financial Accounts and Budget

The Executive Committee has to submit a preliminary comprehensive budget to the Finance Committee which reports direct to the General Assembly. Requests from Commissions for grants may still arrive, and hence some details will have to be discussed between meetings.

- i) Approval of budget in general terms; the "Report on IAU Finances" also including the preliminary supplementary budget for 1970 has been circulated. The preliminary budget for the years 1971, 1972 and 1973 is given separately.
- ii) Approval of individual projects as proposed by Commissions, and as included in the preliminary budget for the years 1971-1973, given separately.
- iii) Recommendation to the new Executive Committee to approve the "Financial Authority to the General Secretary" and to authorize the transfer of responsibility for the bank accounts of the Union.

b) Proposed unit of contribution

The Executive Committee resolved at its meeting in Frascati to maintain the unit of contribution paid by Adhering Countries on the present level of 900 gold francs per year.

11) The Transfer of the Administrative Office to Utrecht

Questions relative to staff, contracts, bank accounts, etc.

12) Publication policy

Consideration of the offer by Reidel to print the Transactions of the Union in the form of a journal

13) Working Rules

The Working Rules to be drawn up according to the new version of the Statutes and By-laws, and as approved at the 32nd meeting of the Executive Committee, will have to be adopted formally. The Executive Committee will have to decide where to publish the Working Rules.

14) XVth General Assembly

Discussion of the two invitations by Australia and Poland.

15) Consideration of the future Special Nominating Committee

prior to its discussion by the Nominating Committee and by the Executive Committee, according to rules.

Scientific Activity of the IAU

16) Scientific meetings

a) Symposia

i) The Symposia to be held in conjunction with the XIVth General Assembly in 1970 were discussed and approved at the 32nd meeting of the Executive Committee in Frascati (Nos. 41-46)

ii) The Symposia proposed for 1971 are as follows:

+ Wolf-Rayet and Of-Stars. La Plata, Argentina,
March-April 1971

+ UV and X-Ray Spectroscopy of Astrophysical and
Laboratory Plasmas, Utrecht, Netherlands, 1971

+ The Moon, School of Physics, Newcastle-upon-Tyne,
England, 23-26 March 1971

+ The Rotation of the Earth, Morioka, Japan,
Spring 1971

+ Star Formation, Charlottesville, Virginia, U.S.A.
Spring 1971

+ The Sun's Outer Layers, Sydney, Australia,
1971 (or 1973)

iii) Symposia in 1972 and later:

+ Extended Atmospheres and Circumstellar Matters in
Spectroscopic Binary Systems, Victoria, Canada,
in 1972

+ Cosmology, Poland, 1973

+ Historical Aspects of the Work of Copernicus, Poland
1973

The last two symposia are to be held in commemoration of the 500th anniversary of the birth of Copernicus.

b) Colloquia

i) The Colloquia to be held in connection with the XIVth General Assembly in 1970 were discussed and approved at the 32nd meeting of the Executive Committee in Frascati.

ii) The Colloquia proposed for 1971 are as follows:

+ Variable Stars, Bamberg, Germany, August 1971

+ Spectral Classification and Multicolour
Photometry, La Plata, Argentina, October 1971

+ Novae and related Objects, Padova-Venezia,
Italy, second half of September 1971

+ Ages of Stars, France, 1971

17) Specific Projects

The Specific Projects discussed under point 10 (a) ii) are a continuation of projects already in operation, with the only exception of the proposal of Commission No. 17 requesting financial aid for its specialized Working-Groups.

Further proposals may still be submitted.

Relations with other organizations

18) Relation with the International Council of Scientific Unions

a) Report of the General Secretary on ICSU meetings and developments within the ICSU family

b) Creation of an Inter-Union Commission on the Moon

c) Appointment of IAU representative on the ICSU Executive Committee - recommendation.

19) Representation

Report by the General Secretary

Final meeting of the Executive Committee

20) Re-discussion of problems dealt with at previous meetings

21) Resolutions adopted by Commissions not, however, by the Resolution Committee

22) Any other business

23) Closing by the President

1. Opening by the President

The President opened the meeting with a word of thanks for the English hosts, especially the L.O.C., and its Chairman, D.H. Sadler. He welcomed the Members of the Executive Committee and the advisers, and expressed his satisfaction over the full attendance.

Before passing to the Agenda, the President emphasized that the establishment of a permanent seat of the Union would have to be discussed.

The meeting then accepted the Agenda as proposed by the General Secretary.

2. Future IAU Officers

Report of the Special Nominating Committee as read by the President:

The Special Nominating Committee has unanimously recommended that the following nominations be made by the Executive Committee for consideration by the General Assembly:

- | | |
|--|---|
| as President | : Professor B. Strömgren, Denmark |
| as Vice-Presidents for
the period 1971-1976 | : Professor B.J. Bok,
United States of America
Professor Sir Bernard Lovell,
United Kingdom
Professor Dr. E.R. Mustel,
Union of Soviet Socialist Republics |
| as General Secretary | : Professor Dr C. de Jager,
The Netherlands |
| as Assistant General
Secretary | : Professor Dr G. Contopoulos,
Greece |

The full Executive Committee will then consist of the above six together with:

- | | |
|----------------------------|--|
| continuing Vice-Presidents | : Dr M.K.V. Bappu, India
Professor L. Gratton, Italy
Dr J. Sahade, Argentina |
| in an advisory capacity | : Professor Dr O. Heckmann, former
President, German Federal Republic
Dr L. Perek, former General
Secretary, Czechoslovakia |

The President then read to the meeting a draft of his introductory address to the General Assembly.

The Executive Committee approved of this address as printed in the Proceedings of the General Assembly.

In this connection it was unanimously agreed that the interval between general assemblies should not be more than 3 years, and that any change in the structure of the Union should be continuous.

3. Report by the General Secretary

a) Administration

The General Secretary reported of the work of the IAU Secretariat in Prague during the past 3 years and expressed his satisfaction. He emphasized that the volume of work has steadily increased, so that 3 permanent staff members had to cope with it. Thus the staff consisted of an Executive Secretary, of an Assistant Secretary, and of a typist. The low salaries paid in Czechoslovakia permitted this increase in the number of the staff members without affecting the budget for the administrative office. It has become necessary to divide the load of work between the General Secretary and the Assistant General Secretary: The Assistant General Secretary has exclusively to deal with all matters concerning scientific meetings (Symposia and Colloquia) and publication. He was helped by the secretary and staff of the Astronomical Institute in Utrecht. No remuneration was paid for this help. The General Secretary expressed his thanks to the Czechoslovak Academy of Sciences for placing at the disposal of the Union, free of charge, 2 rooms and all communication facilities, such as telephone, telox, etc. The archives of the Union are now partly in Bruxelles and partly in Prague. They are in excellent order. It was decided that the archives should stay where they are, and that the stock of copies of *les Astronomes et les Observatoires* 1959 should be reduced to a number satisfying archival purposes.

b) Finances

The General Secretary referred to the audited accounts of the Union for the years 1967 - 1969 and to the Survey of Income and Expenditure from 1st January to 30 June 1970. He reported that the finances of the Union are sound. This good result is due mainly to the increased annual contribution by Adhering Countries and the new contract with Reidel Publishing Company. All Adhering Organizations had paid their contributions as on 31 December 1969. The account of the Československá Obchodní Banka in Prague will be closed after the General Assembly and its balance transferred to one of the other IAU accounts. The accounts at Amro Bank, Barclays Bank, Chemical Bank and Soci t  G n rale will be maintained until otherwise decided by the incoming General Secretary.

As for more details the General Secretary referred to the Report of the Executive Committee printed and distributed to Members.

c) Arrangements for the General Assembly

It was agreed that interpretation of more important parts of the General Assembly would be provided by official interpreters, especially as no simultaneous translation has been arranged for by the L.O.C. It was proposed that Drs. Houziaux and Malaise should interpret from English to French, and Drs. Reeves and Demarque from French to English. This proposal was approved.

It was suggested that the Resolution Committee should have Prof. Oort in the chair and Drs. Sadler, Perek and de Jager as members. The General Secretary then read the composition of the Finance Committee and of the Nominating Committee, and the names of the Representatives of the Adhering Countries and/or National Committees.

It was agreed that Prof. Mashevich should be suggested as Chairman of the Nominating Committee; and Prof. Stibbs as that of the Finance Committee.

It was agreed that words of thanks at the closing of the General Assembly should be pronounced by Mrs. Christiansen, for the ladies, and by Prof. Blaauw for the gentlemen.

The absence of several Presidents of Commissions made it necessary to nominate Acting Presidents in their stead. Thus it was agreed that Dr Dieckvoss would be the Acting President of Commission 8, Dr Athay for Commission 12, Dr Winkler for Commission 31, Dr Reiz for Commission 38 and Dr Bonnor for Commission 47.

4. Consideration of the Agenda for the first session of the General Assembly

The General Secretary informed the meeting that the Agenda for the General Assembly had been circulated to Adhering Organizations and/or National Committees 4 months before the 1st session of the General Assembly and that no comments and/or proposals for amendments had been received.

As to the draft Statutes and By-laws which also had been circulated to Adhering Organizations comments had been sent in by the French National Committee (Prof. Boisot), by the National Committee of the German Democratic Republik (Dr. Ruben), by the Executive Secretary of the ICSU, Dr. Baker, and by Prof. Minnis (URSI). The comments of the French National Committee will be respected, as they only concerned minor corrections in the French version which did not affect the sense. The comments of Ruben, Baker and Minnis had been discussed with them. It was resolved to distribute to the Representatives of the National Committees Information Bulletins Nos. 23 and 24 containing the English and French version of the Draft Statutes and By-laws. It was agreed that an attempt should be made to reconcile the Soviet proposal of holding the XV General Assembly of the IAU in Poland with the Australian to hold it in Sydney, which might eventually result in a change in the Agenda for the General Assembly.

5. Consideration of Special Meetings to be held during the General Assembly

It was agreed that the briefing session of the Presidents of Commissions should be held before the inaugural Ceremony on Tuesday, 18 August, in Brighton, and that of the Representatives of the Adhering Organizations at Eastbourne on 22 August. The first meeting of the Finance Committee was set for Wednesday 19 August and the second meeting of that Committee for Saturday 22 August. The second meeting of the Presidents of Commissions was to be held on Monday 24 August with the Vice-Presidents attending. Tentative agendas for these meetings were suggested and approved.

6. Admission of new Adhering Countries

The General Secretary announced to the meeting that Cuba and Uruguay had applied for admission to the Union. He said that both countries fulfilled the conditions required for admission and manifested sufficient interest in astronomy and in the activities of the Union. The Executive Committee then unanimously admitted Cuba and Uruguay to the Union.

7. Appointment of new Members of the Union

The General Secretary presented to the Executive Committee the List of proposed New Members (about 600) of the Union, that of deleted Members, and that of Members deceased. He explained in more detail how these lists had been compiled. The list of new Members, as proposed by National Committees and endorsed by the Nominating Committee was approved. It also included new Members originally proposed by the Presidents of Commissions.

8. Resolutions

The proposals of Resolutions discussed for submission to the General Assembly were as follows:

a) Proposals by the Executive Committee

- i) The General Secretary informed the Executive Committee that he had written to ICSU a letter requesting that UNESCO proclaim 1973 the year of Nicolaus Copernicus.
- ii) The General Secretary then reported on the state of the creation of an Inter-Union Commission on the Moon as resolved at the 32nd meeting of Executive Committee in Frascati. His proposal to ICSU was on the whole accepted by IUGG, URSI, and IUGS. COSPAR had originally certain reservations but resolved in the end to accept the IAU proposal provided the meetings of the Inter-Union Commission on the Moon coincide in place and time with those of COSPAR, and it suggested that COSPAR's Working Group VII (Moon and Planets) might well function as such an Inter-Union Commission. The representatives of the Union, i.e. L. Perek and C. de Jager were authorized by the Executive Committee to defend at the Madrid Meeting of ICSU, the standpoint of the IAU, namely to form an inter-union body comprising only one representative of each participating union or committee which would coordinate information and data on the Moon originating in various disciplines, coordinate international conferences on the Moon and collect from and distribute to the participating Unions and special or scientific committees information concerning the Moon.
- iii) The Executive Committee approved to authorize the Astronomy and Astrophysics Abstracts, the Bulletin Signalétique (Astronomie and the Referativnij Zhurnal (Astronomi)) to use on their publications the words "Published under the auspices of the International Astronomical Union".

- b) Proposals received from Adhering Organizations or National Committees of Astronomy, point 8b of the Agenda:

The words "and thus to create conditions for a reduction of the unit of contribution paid by the Adhering Countries" have been withdrawn from the Soviet proposal calling for a resolution to investigate the possibility of cheaper IAU publications.

- c) Proposals submitted by Commissions, point 8c of the Agenda:

The General Secretary announced that the proposal of Commission 23 to discuss the future of the Helsinki Observatory had formally been withdrawn.

As to the other proposals, those received during the General Assembly included, the Executive Committee resolved to submit them to the appropriate Commissions and eventually to the Resolution Committee. This proposal was accepted.

All proposals for resolutions discussed either by the finance Committee or Resolutions Committee, and endorsed by them, were then re-discussed by the Executive Committee. It was decided to recommend to the General Assembly the acceptance of the following resolutions:

RESOLUTION No. 1

Proposed by the Executive Committee

On Photographic Emulsions

The International Astronomical Union recommends that Adhering Organizations and/or National Committees of Astronomy use their influence to secure removal of all restrictions hindering the supply of photographic emulsions of interest to astronomers.

RESOLUTION No. 2

Proposed by the U.A.R. National Committee of Astronomy

On the creation of a Commission for Exchange of Equipment

The XIVth General Assembly of the International Astronomical Union resolves to create a Joint Working Group of Commissions 9 and 46 for Exchange of Equipment.

RESOLUTION No. 3

Proposed by the USSR National Committee of Astronomy

On the proclamation of 1973 the Year of Copernicus

The International Astronomical Union recommends to proclaim the year 1973 the Year of Copernicus.

RESOLUTION No. 4

Proposed by the USSR National Committee of Astronomy
On cheaper IAU publications

The XIVth General Assembly of the International Astronomical Union instructs the Executive Committee to investigate the possibility of cheaper IAU publications

RESOLUTION No. 5

Proposed by the USSR National Committee of Astronomy
On the creation within one of the IAU Commissions of a Sub-Commission on the Physics of Unstable Stars

The XIVth General Assembly of the International Astronomical Union requests the Executive Committee to encourage Commissions Nos. 27, 35 and 36 to organise special meetings for the discussion of the Physics of Unstable Stars, and to consider the desirability of creating a Working Group on this subject.

RESOLUTION No. 6

Proposed by IAU Commission No. 4
On Universal Time

The International Astronomical Union,

having noted the various proposals to modify the present basis of Co-ordinated Universal Time (UTC) and

wishing to emphasize that visual observers in astronomical and related fields require a knowledge of Universal Time (UT1) to a precision of the same order, namely 0.1^s , as that of human time discrimination,

formally requests that the appropriate authorities ensure that adequate means have been provided of making UT1, or the difference UT1-UTC, available to such observers, and to such precision, before they permit UTC to depart from UT1 by more than about 0.1^s .

RESOLUTION No. 7

Proposed by the Working Group on Numerical Data
On the establishment of a Permanent Working Group on Numerical Data

The XIVth General Assembly of the International Astronomical Union resolves to establish a Permanent Working Group on Numerical Data.

RESOLUTION No. 8

Proposed by IAU Commission No. 17

On the names of craters on the far side of the Moon

The International Astronomical Union accepts the approximately 500 names proposed by IAU Commission No. 17 on the Moon for designating the craters on the far side of the Moon.

RESOLUTION No. 9

Proposed by IAU Commission No. 33

On the Superscript of the new Galactic Co-ordinates

The XIVth General Assembly of the International Astronomical Union resolves that the superscript II be omitted from the new galactic co-ordinates: henceforth it will simply be 1,b; the old co-ordinates retain the superscript I. It is desirable that authors indicate in their papers that 1,b refer to the new galactic co-ordinates.

RESOLUTION No. 10

Proposed by IAU Commission No. 40

On the uses of space for scientific and other purposes

Having regard to the continued and increased uses of space for scientific and other purposes the International Astronomical Union wishes to draw attention to the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies" of 1968, in particular to the Articles IV and IX of that Treaty, and to re-affirm its own Resolution No. 1 of the XI General Assembly, 1961, the final paragraph of which reads:

"The International Astronomical Union appeals to all Governments concerned with launching space experiments which could possibly affect astronomical research to consult with the International Astronomical Union before undertaking such experiments and to refrain from launching until it is established beyond doubt that no damage will be done to astronomical research."

RESOLUTION No. 11

Proposed by IAU Commission No. 40

On Radio Transmission

The International Astronomical Union considering that

- a) Radio Astronomy observations are made with receivers having great sensitivity,
- b) under normal earth surface conditions some protection from neighbouring transmitters is effected by earth curvature and terrain effects

- c) transmitters in space vehicles are exposed to radio astronomy antennae under line of sight conditions
- d) due to the high sensitivity of radio astronomy receivers interfering signals are received from transmitters operating outside the assigned radio astronomy bands due to modulation spillover and to harmonics of the carrier frequency
- e) there is to be a World Administrative Radio Conference (WARC), under the International Telecommunication Union (ITU), in the year 1971, whose agenda includes matters dealing with "Space and Radio Astronomy"
- f) the International Council of Scientific Unions (ICSU) established the Inter-Union Committee on the Allocation of Frequencies (IUCAF) to speak for it in matters pertaining to the use of the radio frequency spectrum

resolves that

- 1) The IUCAF take urgent steps to ask the WARC to impose stringent regulations on transmitters located in space vehicles to insure that emissions from the space vehicles outside the assigned space frequency bands will be reduced to an extent greatly in excess of that presently required by ITU regulations for ground based transmitters;
- 2) The IUCAF determine the limits on out of band transmissions by space transmitters to be recommended to the WARC;
- 3) The IUCAF urge that a continuing program be undertaken by the I.T.U. to further reduce out of band transmissions of all transmitters both earth and space bound;
- 4) The IUCAF urge that transmissions from satellites in those bands allocated to Radio-Astronomy on shared basis be discouraged.

RESOLUTION No. 12

Proposed by the Resolutions Committee

On the resolutions adopted by Commissions

Considering the impracticability of giving individual attention to every resolution adopted by each of its 39 Commissions, and having full confidence in its Commissions, this General Assembly wishes to give its endorsement to the Resolutions adopted by its individual Commissions, and recommends that astronomers give effect to these Resolutions in so far as they are able.

As to the remaining proposals it was recommended to refer them to the appropriate Commissions in the form of Resolutions of Commissions that would be covered by the "Blanket Resolution".

9. Commissions

- a) In agreement with an earlier decision of the Executive Committee it was resolved to propose to the General Assembly the creation of Commissions Nos. 47 on Cosmology and 48 on High Energy Astrophysics, and the
- b) merger of Commissions Nos. 23 and 24 into one Commission No. 24 under the name Photographic Astronomy.

The Executive Committee expressed its recognition to Dr. Sykes, President of Commission 5, for the successful publication of the Bibliography of Astronomy 1881 - 1898 in the form of microfilms. The future General Secretary should write to Dr. Sykes a letter of appreciation.

- c) No proposal was submitted as regards dissolution of Commissions.
- d) The General Secretary presented to the meeting a list of preliminary nominations of Presidents and Vice-Presidents of Commissions to be discussed with the future Presidents and endorsed by the E.C. for submission to the General Assembly. The definite list of Presidents and Vice-Presidents of Commissions, as approved by the General Assembly, would be published in the Transactions. It was noted and approved that Prof. E.M. Muller and Dr. J.B. Sykes would exceptionally serve for another term as Presidents of Commissions 46 and 5 respectively.
- e) The General Secretary presented a list giving the preliminary composition of the Organizing Committees of Commissions. This list, with minor changes, was approved. It was resolved that the names of Presidents and Vice-Presidents of Commission and of their Organizing Committees should be put on slides and projected during the General Assembly prior to voting.

Emphasis was placed on more democracy in Commissions especially as regards the election of Presidents, Vice-Presidents and members of the Organizing Committees. The General Secretary reported that this problem would be discussed at the meeting of Presidents and that the Presidents would be asked to outline the rules governing the procedure of their respective Commissions.

10. IAU Finances

- a) The Executive Committee confirmed its approval of the Financial Report as printed and distributed to the Adhering Organizations.

The General Secretary and Assistant General Secretary then jointly submitted to the Executive Committee the following estimates of the supplementary budget for 1970 and of the comprehensive budget for 1971 - 1973, the latter in 2 alternatives according to whether the XV General Assembly of the Union would be held in Australia or in Poland.

Budgetary Estimates for 1970 (UNESCO contracts not included):

Receipts in \$		Payments in \$	
1. National subscriptions	52 000	1. Administrative office	21,309.50
2. Sales of publications	4 200	2. Subscription to ICSU	1 040.00
4. Interest on reserves in savings banks	2 300	3. Expenses of Commissions	500.00
5. UNESCO subvention through ICSU	18 000	4. Specific projects of Commissions	19 151.59
	<u>18 000</u>	5. XIVth General Assembly	21 000.00
Total	76 500	6. IAU publications	17 000.00
		8. Organization of symposia	14 500.00
		10. Inter-Union commissions	2 200.00
		11. Representation expenses	500.00
		14. Reimbursement of ICSU loan	1 000.00
Excess of payments over receipts	21 801.09	16. Bank losses	100.00
	<u>21 801.09</u>		<u>100.00</u>
Total	98 301.09	Total	98 301.09

Financial Estimates of the Budget for 1971 - 1973:

COMPREHENSIVE BUDGET for 1971 - 1973 (without UNESCO contracts)

Receipts in \$		Payments in \$		
		A		B
		XVth G.A. in Australia		XVth G.A. in Poland
1. Contributions from Adhering Countries (provided the unit of contri- bution is not changed)	161.000	1. Administrative Office	70.000	70.000
2. Sales of Publications	15.000	2. Contribution to ICSU	3.000	3.000
3. Interest on reserve in Savings Banks	7.000	3. Specific Projects	32.000	32.000
4. UNESCO subvention through ICSU	42.000	4. General Assembly	41.000	20.000
		5. Publications	20.000	20.000
		6. Meetings of Executi- ve Committee	14.000	14.000
		7. Meetings of Officers	5.000	5.000
		8. Symposia and Colloquia	25.000	30.000
		9. Inter-Union Commis- sions	8.000	8.000
		10. Projects of the Exe- cutive Committee	2.000	2.000
		11. Reimbursement of ICSU loan	5.000	5.000
		12. Summer Schools	---	16.000
Total income	225.000	Total expenditure	225.000	225.000
	=====		=====	=====

These two estimates were unanimously approved and it was resolved to pass them to the Finance Committee with the recommendation to propose their approval to the General Assembly.

The following table shows the specific projects as suggested by individual Commissions, the grants requested and the allocations endorsed by the Executive Committee.

Commission No.	Requested	Proposed for allocation in \$
6. IAU Telegram Bureau	1.600	1.600
16. Centre de documentation sur les planetes	1.500	1.500
17. Special Working Groups of Commission No. 17	2.000	1.000
20. Minor Planet Center	1.300	1.500
27. Catalogue of Variable Stars	3.000	3.000
29. Information Bulletin for the Southern Hemisphere	1.500	1.500
38. Exchange of Astronomers	22.000	22.000
TOTAL	32.900	31.900

The Executive Committee expressed its appreciation to the General Secretary for having succeeded in repaying to the Savings Account the amount of \$ 38.763,89, and \$ 4.000,-- on the ICSU loan, as foreseen in the budget for 1967 - 1969.

The Executive Committee also expressed its thanks to the Utrecht Astronomical Institute for placing the IAU Secretariat at its premises free of charge.

The Executive Committee authorized the President to write a letter of thanks to the President of the Czechoslovak Academy of Sciences for the material help the Union received from this Academy during the past 3 years when the Secretariat was in Prague.

The Executive Committee resolved unanimously that it should be recommended to the new Executive Committee formally to approve the financial authority to the New General Secretary as set forth in the document kept in the archives of the Union and, especially, to transfer on him the responsibility for the banking accounts of the Union.

- b) It was agreed to recommend to the Finance Committee to propose to the General Assembly to maintain the unit of contribution paid by Adhering Organizations at 900 gold francs.

In the discussion which followed, Prof. Scharzschild suggested that if the new Statutes are accepted a provision should be made for an automatic rise in the annual contributions of the Adhering Countries per triennium. This proposal was unanimously accepted and it was recommended to put it on the Agenda for the next General Assembly.

11. The Transfer of the Administrative Office to Utrecht

The Assistant General Secretary reported that the future address of the IAU Secretariat would be: 21, Beneluxlaan, Utrecht, The Netherlands. The staff of the Office will consist of the Executive Secretary, the Secretary and a typist. The contracts with these staff members will have to be adapted to the ICSU Guide to Finances.

12. Publication Policy

The Executive Committee discussed the proposal of printing the Transactions of the Union in the form of a Journal. This proposal was found impracticable. On the other hand, it was resolved to have Transactions A henceforward printed and distributed at the cost and risk of Reidel Publishing Company and to divide Transactions B in two parts, one administrative (Alphabetical List of Members, List of Commissions etc.), to be published in the Information Bulletin, the other scientific (meetings of Commission, etc.) to be prepared by the Secretariat and published in an inexpensive form for libraries and other interested organizations.

The Symposium volumes will continue to be published at the costs and risk of D. Reidel Publishing Company and distributed through normal commercial channels.

The list of institutions of developing countries to receive IAU publications free of charge will be maintained, and the IAU will purchase these publications from D. Reidel.

The General Secretary expressed his satisfaction with the work of the new publisher, D. Reidel Publishing Company: Transactions XIV A were published in time and shipped to Brighton prior to the strike. The average time of publishing the 11 IAU Symposia, which appeared in the period under report, was 7 months.

13. Working Rules

The Executive Committee resolved to recommend to the incoming Executive Committee to approve the Working Rules, as drawn up at the 32nd meeting of the Executive Committee at Frascati in 1969.

14. XV General Assembly

The representatives of the Soviet and Polish National Committees of Astronomy, Prof. Ambartsumian and Prof. Iwanowska, attended, upon invitation by the President, the meeting of the Executive Committee and presented their views. The President read to the meeting two letters he received, one from Prof. Wood advocating the XV General Assembly in Australia, and the other from Prof. Iwanowska explaining the reasons why the XV General Assembly should be held in Poland.

The Executive Committee eventually resolved to submit to the General Assembly the following proposal:

"The Executive Committee, in its meeting of 25 August 1970, has resolved to recommend to the XIVth General Assembly:

(I) To hold the XVth General Assembly in Sydney, Australia in the second half of August 1973 with the normal Agenda. A number of Symposia and Colloquia in conjunction with this General Assembly may be foreseen in Australia.

(II) To hold an Extraordinary General Assembly in commemoration of the 500th anniversary of the birth of N. Copernicus in the first half of September 1973 in Poland. This General Assembly will consist of the following three groups of Symposia:

A 1. Historical Symposium "Colloquia Copernicana" in Torun
(Commission 41 of the IAU and the IUNPS Comité Copernic)

2. Planetary and Galactic Dynamics (IAU Commissions 7 and 33)

B 1. Symposium on Cosmology and Related Problems (IAU Commissions 25 and 47)

2. A topic from the field of Relativistic Astrophysics (IAU Commissions 47, 48 and the IUPAP)

C 1. Explorations of the Planetary System (IAU Commissions 15, 16 and 44)

2. A topic from the field of Stellar Evolution (IAU Commission 35),

of 3 Invited Discourses on the three above fields and of excursions "On the Footsteps of Copernicus"."

If this proposal were accepted, it would not be necessary to vote on point 19 of the Agenda for the General Assembly. If declined, the General Assembly would be asked to decide in one vote whether to accept the Soviet proposal to hold the XV General Assembly in Poland, or the Australian invitation to hold this Assembly in Australia in 1973.

15. Consideration of the future Special Nominating Committee

The Nominating Committee suggested the following names for the future Special Nominating Committee:

D.S. Heeschen
G.A. Chebotarev
J. Delhaye
A. Poveda

The Executive Committee resolved unanimously to propose these names to the General Assembly for election.

SCIENTIFIC ACTIVITY of the IAU

16. Scientific Meetings

a), b) The Assistant General Secretary reported on the IAU Symposia and Colloquia held in 1970. His report was approved. He suggested to reduce, if the XV General Assembly were to be held in Australia, the contribution to each Symposium to \$ 1.600, taking into account the fact that the IAU contributions to Symposia only have an catalytic effect. This proposal was approved by the Executive Committee. It was then resolved to refer decisions regarding Symposia and Colloquia in 1971, and later years, to the new Executive Committee.

17. Specific Projects

This subject has been dealt with under point 10 of this report. It should be added that the project of Visiting Professors, as proposed by Professor Minnaert, had a positive response from India, Indonesia and Uruguay. This project would not result in additional expenses to the IAU. It was agreed to express to Prof. Minnaert the appreciation of the Executive Committee for his efforts.

RELATIONS WITH OTHER ORGANIZATIONS

18. a) The General Secretary gave a brief review of the situation in ICSU at the close of his term of office. His report was approved. The Executive Committee resolved that in the case of the dissolution of URSI, the future General Secretary should invite radio astronomers to join the IAU. The General Secretary and the Assistant General Secretary were authorized by the Executive Committee strongly to advocate the Union's attitude towards the existence of IUCSTP: the research of Solar Terrestrial Physics is inter-disciplinary in its substance and IUCSTP should therefore be maintained and not dissolved as recommended by the IUGG.
- b) The creation of an Inter-Union Commission on the Moon has been dealt with under point 8 Ab of this Report.
- c) The Executive Committee resolved unanimously to recommend the future General Secretary, C. de Jager, as representative of the Union on the Executive Committee of ICSU. The ICSU General Assembly in Madrid, to be held in September 1970, will be attended by both Dr. L. Perek and Dr. C. de Jager.

19. Representation

It was decided to defer this point to the 34th meeting of the Executive Committee, as it concerns the term 1970 - 1973.

20. Re-discussion of problems dealt with at previous meetings

The results of this re-discussion have been incorporated under the appropriate points of this report.

21. Resolutions adopted by Commissions, not, however, by the Resolution Committee

Reference is made to point 8 of this report.

22. Any other business

The problem of Young Astronomers was discussed. The General Secretary reported of the reaction drawn by his two letters to Young Astronomers, published in the Information Bulletin. He said that from the few answers he received, it appeared that Young Astronomers are mostly interested in the scientific activity of the Union, in particular in Symposia and Colloquia, that they are less interested, if at all, in the organizational problems, and that they desire to play a greater role in the National Committees of Astronomy. This report was approved. The Executive Committee resolved to leave the organization of the brain-storming session to the initiative of Young Astronomers.

The General Secretary reported to the Executive Committee that UNESCO would have no funds for Young Astronomers' Summer Schools from 1971 onwards. It would, however, be desirable to continue this project, as it proved a great success, especially in 1969, when the lecturers were brought to the students in India. If the XV General Assembly is held in Australia the Union could spare no funds for Summer Schools from its own budget. Efforts should be made to find subsidies from other sources. This report of the General Secretary was approved by the Executive Committee.

The General Secretary proposed to limit future General Assemblies to 7 days with not more than 6 sessions of Commissions, and the first session only open to National Representatives. The Colloquia and Symposia to be held in conjunction with the General Assembly should be organized in the same country. This proposal was discussed at length by the Executive Committee. It was recommended to the consideration of the incoming Executive Committee.

23. Closing by the President

The President closed the 33rd Meeting of the Executive Committee on 25 August 1970 at 21.30.

L Perek
General Secretary