UNION ASTRONOMIQUE INTERNATIONALE

INTERNATIONAL ASTRONOMICAL UNION

41st Meeting of the Executive Committee

Grenoble, France

Monday, 23 and Tuesday 31 August 1976

PROCEEDINGS

The 41st Meeting of the Executive Committee of the International Astronomical Union was held during the XVIth General Assembly of the IAU in the rooms of the Physics Building, University of Medicine and Science of Grenoble, on 23 and 31 August 1976. The session on Monday started at 9.00 and ended at 17.30, with a break for lunch, and the session on Tuesday started at 14.15 and ended at 17.30.

Present at the meeting of the Executive Committee were:

President:

L. Goldberg

Vice-Presidents:

J.G. Bolton

CH. Fehrenbach W. Iwanowska P.O. Lindblad

Lovell В.

E.R. Mustel

Former President:

Strömgren В.

Former General Secretary:

C.de Jager

General Secretary:

G. Contopoulos

Assistant General Secretary: E.A. Müller

Executive Secretary:

Jappel Α.

Administrative Secretary:

J. Dankova

- B.J. Bok, former Vice-President, A. Blaauw, President elect, and P.A. Wayman, Assistant General Secretary elect, attended the meeting on presidential invitation.
 - E.R. Mustel, Vice-President, was excused for the session on 23 August.

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 meeting, have not been included in the present report. They will be kept in the archives of the Union for further reference.

AGENDA

- I. OPENING BY THE PRESIDENT
- II. INTERNAL MATTERS OF ADMINISTRATIVE NATURE
 - 1. Approval of the report of the 40th meeting of the Executive Committee
 - 2. Approval of the Agenda
 - 3. Future IAU Officers
 Report of the President
 - 4. Report of the General Secretary
 - (a) Administration
 - (b) Finances
 - (c) Arrangements for the General Assembly
 - 5. First session of the General Assembly- consideration of agenda
 - 6. Special meetings during the General Assembly
 - (a) Brief for the meeting of Presidents of Commissions
 - (b) Brief for the meeting of representatives of Adhering Countries
 - 7. New Adhering Countries, Report of the General Secretary
 - 8. New Members of the IAU
 A list of proposed new Members is given separately, to be brought before the Nominating Committee for comment prior to final approval by the Executive Committee
 - 9. Resolutions
 - (a) Proposals by the Executive Committee:
 - (i) to reword the second sentence of article 12 (a) of the By-laws as follows: "This (Special Nominating Committee) consists of the President and past President of the Union, a member proposed by the retiring Executive Committee, and four members elected by the Nominating Committee from among twelve Members proposed by Presidents of Commissions. Other than the President and immediate past President, present and former members of the Executive Committee shall not serve on the Special Nominating Committee."
 - (ii) to increase the unit of contribution payable by Adhering Countries by 10,16% from 1,329.93 to 1,465,00 Swiss francs
 - (iii) to continue grants to Commissions as follows:

Commission	$\mathbb{N} \circ$	4.	Ephemerides (Information Bulletin)	Sw.frs 2,487.76
Commission	No	6	Telegram Bureau	5,597.46
Commission	No	16	Planetary Documentation, Meudon	5,286.49
Commission	No	17	Lunar Documentation, Meudon	5,286.49
Commission	No	20	Minor Planet Center	6,219.40
Commission	No	27	Variable Stars Catalogue	9,329.10
Commission	No	38	Exchange of Astronomers	60,000.00

- (b) Proposal by the French National Committee of Astronomy to increase the unit of contribution by Adhering Countries by 20%
- (c) Proposals by Commission
 - (i) Commission No. 5:

"L'Assemblée Générale de l'UAI

Compte tenu du travail excellent et complet, accompli par le Groupe de Travail désigné pour procéder à la révision de la ClasseAstronomique de la Classification Décimale Universelle (UDC), en coopération avec la Fédération Internationale de Documentation (FID);

recommande l'adoption par tous les astronomes des propositions de ce Groupe de Travail concernant UDC 52, telles qu'elles sont décrites dans le document PC 75-7 de la FID en date du 31 mars 1975, recommandela publication de ce document et sa diffusion de façon appropriée par l'UAI,

et recommande à tous les éditeurs de journaux primaires ou secondaires et à toutes les bibliothèques astronomiques d'adopter ce texte, de le divulger et de l'appliquer aussi vite et aussi largement que possible, ainsi que les révisions du manuel de rédaction de l'UAI, établies par la Commission 5 et son Groupe de Travail sur la Politique d'Edition.

(ii) Commission No 8

I.

- 1. Noting the great improvements of accuracy and efficiency of night-time observations by means of photographic and photoelectric techniques obtained during the recent decade, recognizing that even greater improvements must be expected in the coming decade, both for night and daytime absolute observations by photoelectric techniques, recognizing the importance of continued first class visual absolute observations for a period of overlap, it is recommended that meridian departments review their long-term
- plans and make these known to the commission.
- 2. <u>Noting</u> the expected, revolutionary progress of astrometry through space techniques.

it is <u>recommended</u> that space astrometry should be developed and performed as soon as possible,

and it is <u>recommended</u> that this should not affect planning of ground based techniques before the accuracy, reliability and long-term planning of space astrometry have been certified.

II.

Noting the great improvements of accuracy and efficiency of meridian observations obtained during the recent decade and expected during the next,

noting the expected progress through space astrometry and radio astrometry, noting the relatively large estimated errors (10%) of the proposed changes of the precessional values, and reminding that the error of such unique quantities often prove to be greater than estimated,

noting that a change of the values will cause numerous trivial but annoying mistakes in computing during many coming decades, noting that the improved values given by Fricke can be easily introduced in proper motions when it is of importance, it is anticipated that a change now would be regretted and probably changed again in only 20 years,

it is <u>recommended</u> to make no change now, and it is <u>recommended</u> to print in all catalogues explicitly the formulae and constants which were used to transfer between different equinoxes.

(iii) Commission No.10

I.

Reflecting upon the continuing contribution from research at ground-based observatories, plasma laboratories and theoretical institutes,

recognizing the large gaps in solar observations that inevitably will occur between individual space missions, and being deeply concerned about the many recent abandonments of ground-based programs due to lack of funding,

recommend that the various national funding agencies take care to support a balanced program of solar research with appropriate recognition of the vital role played by ground-based observatories, theoretical institutes and plasma laboratories.

II.

IAU Commission No.10 recommends

- 1. That the solar community, during the next IAU Assembly, state the present scientific utility of the flare patrol with regard to solar research and observations and endorse a program of flare patrol devoted to the next solar cycle.
- 2. That on a regional basis, the solar astronomers reach an agreement of the solar institutes, which, in fact, will carry out this "quasi-permanent" program.
- 3. That in addition of this permanent program there be plans for a few months each year for some kind of temporary "subflare campaign" in which more of the observatories would participate, and for which there would be an increase in the complementary observations for the benefit of those who need a very complete survey of small subflares.

10. Commissions

- (a) Merger of Commissions Nos. 21 and 22
- (b) Nomination of Presidents and Vice-Presidents of Commissions (W.G.)
- (c) Composition of Organizing Committees of Commissions
- (d) Commission 38 (e) Commission 46

- 11. Future Special Nominating Committee- election of one member
- 12. IAU Finances
 - (a) Financial accounts and budget
 - (b) Unit of contribution
 - (c) Financial authority to the new General Secretary- recommendation to the new Executive Committee
- 13. Transfer of Administrative Office to Lausanne- removal, equipment, bank accounts, etc.
- 14. Publication policy
 - (a) production of IAU publications
 - (b) new contract with publisher

III. SCIENTIFIC ACTIVITY OF THE IAU

- 15. Symposia
 - (a) Past Symposia
 - (b) Future Symposia
- 16. Colloquia
 - (a) Past Colloquia
 - (b) Future Colloquia
- 17. Cosponsored scientific meetings
- 18. Regional meetings
- 19. Other scientific meetings

IV. RELATIONS WITH OTHER ORGANIZATIONS

- 20.1. ICSU
 - (a) ICSU meeting and developments in ICSU (the ISSP problem)report by the General Secretary
 - (b) Appointment of IAU representative on ICSU General Committee
- 20.2. Other Organizations
- 21. Representation report by the General Secretary

V. FINAL MEETING OF THE EXECUTIVE COMMITTEE

- 22. Re-discussion of problems dealt with at previous meetings
- 23. Resolutions adopted by Commissions not, however, by the Resolutions Committee
- 24. Report on meeting of the Finance and Nominating Committees

- 25. Any other matter
- VI. 26. CLOSING BY THE PRESIDENT

I. OPENING BY THE PRESIDENT

The President opened the meeting on Monday, 23 August, at 9.00 o'clock with a word of welcome to the members of the Executive Committee and, especially, to Professors B.J. Bok, A. Blaauw and P.A. Wayman who attended the meeting at his invitation. He regretted the absence at this meeting, of E.R. Mustel, who had been delayed by travel difficulties. The President's proposal to send telegrams of good wishes from the General Assembly to former Presidents and General Secretaries of the Union not present at the Congress was unanimously approved.

II. ADMINISTRATIVE MATTERS

1. Approval of the report of the 40th meeting of the Executive Committee

The report had been circulated to the members of the Executive Committee in September 1975 for comments. A few typing errors have been corrected. The meeting approved unanimously the report in its corrected form.

2. Approval of the Agenda

The President then announced that the Agenda for the 41st meeting of the Executive Committee had been distributed to the members well before the General Assembly, and asked for its approval. The meeting did so unanimously.

3. Future IAU Officers

The President reported that the Special Nominating Committee had agreed on the names of the President, 3 Vice-Presidents, the General Secretary and the Assistant General Secretary to be proposed to the General Assembly for approval for the next term of office. This report was acknowledged.

4. Report of the General Secretary

- (a) AdministrationThe General Secretary referred to the printed and circulated report of the Executive Committee and to his supplementary narrative report distributed to the members. These reports were approved. The office of the Union had already moved from Athens to Lausanne for about \$1.400. Additional cost for transportation in Switzerland must be expected. The question of the Union's permanent seat in Paris will be reopened by the future General Secretary for the term of office following the 1979 General Assembly.
- (b) Finances: The accounts of the IAU in the U.S.A. and in Holland will be maintained. An amount of 150.000 Swiss francs had been transferred from the current account at the Amsterdam-Rotterdam Bank in Utrecht to a new working account at the Union de Banques Suisses in Lausanne.

The accounts of the IAU showed the following balances as at 30 June 1976:

				Total	\$245.108,49 U.S.
		w. 0	0110	· ·	
				Amro Bank, Utrecht, Holland	\$ 35.072,62
Savings	account	at	the	Provident Institution, Boston, U.S.A.	\$ 21.246.09
Savings	account	at	the	Bowery Savings Bank, New York, U.S.A.	\$ 21.109,37
				Union de Banques Suisses	\$ 61.224,49
				Amro Bank, Utrecht, Holland	\$ 20.597,31
				Amro Bank, Utrecht, Holland	\$ 60.569,43
				Chemical Bank, New York, U.S.A.	\$ 25.289,18

This shows that the financial situation of the IAU is sound. Savings were made possible by the generosity of the Greek Ministry of Sciences and Education and the financial contribution of the Universities of Thessaloniki and Athens towards the operation of the IAU Secretariat in Greece. These contributions amounted to an average of \$9.000 a year. The Executive Committee approved the suggestion of the General Secretary to send a letter of thanks to the Greek Minister of Science and Education.

(c) <u>Arrangements for the General Assembly</u>: The arrangements made by the Local Organizing Committee had been inspected by the General Secretary, and were found satisfactory.

5. First session of the General Assembly- consideration of agenda

The General Secretary suggested that the following should be proposed to take over various functions at the General Assembly:

Official interpreters: B. J. E. Pagel from French to English,

L. N. Houziaux and J. P. Swings from

English to French.

Chairman of Nominating Committee: A. G. Massevich

Chairman of, Finance Committee: D. W. N. Stibbs

Chairman of Resolutions Committee: M. K. V. Bappu, with L. Dezsö as member,

and G. Contopoulos and Edith A. Müller

to attend ex officio.

Tellers: Claude Fröschle and A. Hayli.

The General Secretary said that according to a telegram by Prof. Mustel, Prof. Shklovsky would not attend the General Assembly so that his Invited Discourse would have to be cancelled.

6. Consideration of special meetings during the General Assembly

Presidents of Commissions will have to consider the following points at their 2 meetings:

- Election of candidates for the Special Nominating Committee
- Establishment of lists of Commission members, Presidents, Vice-Presidents and Organizing Committees
- Working Rules of Commissions
- Reports on Astronomy 1976
- Transactions XVIB and their production
- Reports on Astronomy 1979
- Items proposed by Presidents of Commissions.

The Executive Committee appointed Dr van der Laan as Acting President of Commission 40 for the absent President (Dr Parijskij).

The Nominating Committee will have to make recommendations to the Executive Committee as to the admission of new and deletion of inactive IAU Members. It also will have to elect 4 members to the Special Nominating Committee.

The Finance Committee, to meet twice, will have the following agenda:

- Election of Chairman and members of the Finance Sub-committee
- Chairman's remarks
- Accounts for 1973-1975
- Budget for 1976
- Unit of contribution
- Comprehensive Budget for 1977-1979
- Investments

For the meeting of the representatives of Member Countries the following agenda was approved:

- Opening by the President of the Union
- Report on the meeting of the Nominating Committee
- Report on the meeting of the Finance Committee
- Discussion of Budget for 1976 and of the comprehensive Budget fcr 1977-1979
- Prediscussion of matters to be voted on by the national representatives at the second session of the General Assembly, such as, resolutions, members of the Executive Committee, Presidents and Vice-Presidents of Commissions.

7. Admission of new Member Countries

The Executive Committee resolved to recommend to the General Assembly the admission of Iraq as new Member Country with the category of adherence I.

The General Secretary reported of his correspondence with representatives of Algeria and Indonesia regarding the membership of these countries. He regretted that no formal applications had been sent in.

8. Admission of new IAU Members

A list of new IAU Members (about 720) together with a list of deceased Members and Members proposed for deletion and a list of new Members proposed by

Presidents of Commissions were presented to the meeting with details of how they had been prepared. These lists were submitted to the Nominating Committee for discussion and then accepted, with due regard to the recommendations of this Committee, in the form as displayed on the official board of the Executive Committee.

In the discussion that followed, B. Lovell wondered how the exponential growth of membership would influence the future of the IAU, and recommended that this problem should be studied. L. Goldberg said that it cannot be foreseen when steady state would be reached, and that a projection of the development would be indicated. B. J. Bok suggested that each National Committee should work out an estimate of new Members likely to join the IAU in 1979, 1982, 1985, and so on, and that steps should be taken to encourage inactive Members to leave the Union. It was agreed that uniform criteria for admission of new Members should be compulsory for all Member Countries.

This discussion led to the establishment of a Sub-committee of the Nominating Committee whose task it would be to set up such criteria. For details see report of the 42nd meeting of the Executive Committee.

9. Resolutions

The proposals for resolutions presented by the Executive Committee, the French National Committee of Astronomy and by IAU Commissions, were first discussed by the Resolutions Committee (or by the Finance Committee if they implied the budget of the IAU). Those endorsed by one or the other of these Committees were rediscussed by the Executive Committee and it was decided to recommend them to the consideration of the General Assembly as follows:

RESOLUTION NO 1

Proposed by IAU Commissions 4, 8 and 31

The International Astronomical Union endorses the recommendations given in the Joint Report of the Working Groups of Commission 4 on :

the IAU (1976) System of Astronomical Constants,

the new standard epoch and equinox,

the fundamental reference frame,

the procedures for the computation of apparent places and the reduction of observations,

time scales for dynamical theories and ephemerides, and other quantities for use in the preparation of ephemerides;

and recommends that they shall be used in the preparation of the fundamental catalogue FK5 and of the national and international ephemerides for the years 1984 onwards, and in all other relevant astronomical work.

RESOLUTION NO. 2

Proposed by IAU Commission No. 5

The General Assembly of the International Astronomical Union <u>notes</u> with concern the large increases in prices of publications, which, together with the continuous expansion in scientific literature, makes accessibility of astronomical knowledge difficult, to young astronomers and astronomers in the developing countries, and

recognizing that the Executive Committee has already taken action, with success, to reduce the cost of publications,

requests

- (i) the Executive Committee to take whatever further action may be possible to ensure that IAU publications are made available at greatly reduced prices
- (ii) publishers of astronomical literature to make every effort towards the production of less expensive publications and to employ new ways of disseminating information.

RESOLUTION NO. 3

Proposed by IAU Commission No. 5

The General Assembly of the International Astronomical Union considers that Astronomy and Astrophysics Abstracts (AAA) fulfills excellently the specialized needs for an abstracting service in Astronomy and Astrophysics and recommends strongly that AAA continue to be produced by the Astronomisches Rechen-Institut, Heidelberg, Germany, Federal Republic, under the auspices of the IAU.

RESOLUTION NO. 4

Proposed by IAU Commissions 12, 14 and 29

The International Astronomical Union highly values the activities of the United States National Bureau of Standards in the compilation and critical evaluation of atomic and molecular data, and considers these activities essential for the advancement of astronomy.

RESOLUTION NO. 5

Proposed by IAU Commissions 16 and 17

The General Assembly of the International Astronomical Union noting the interest of several of its Commissions in the development of an International Solar System Programme, supports the COSPAR proposal for the establishment of a steering committee, including IAU representatives, to develop this programme.

RESOLUTION NO. 6

Proposed by IAU Commissions 19 and 31

The International Astronomical Union

recognizing

that the activities of the International Polar Motion Service and of the Bureau International de l'Heure are complementary, and that they both make essential contributions towards the determination and understanding of the motion of the pole, and

recognizing

that the new laser and radio techniques will make an important contribution to the study of polar motion but that it is at present too early to determine the form of a new service based on these techniques, and

noting

with satisfaction that the International Polar Motion Service multistation derivation of polar motion has attained the precision needed to resolve long-standing problems,

recommends

that the International Polar Motion Service continue to operate in its present form, and that the Scientific Council of the International Polar Motion Service and the Directing Board of the Bureau International de l'Heure jointly keep under continuous review the possibility of the utilization of modern techniques on a permanent basis, and

urges

that the international and national agencies concerned continue their support of the Central Bureau of the International Polar Motion Service and of each cooperating observatory.

RESOLUTION NO. 7

Proposed by IAU Commissions 19 and 31

The International Astronomical Union having reviewed the functions of the Bureau International de l'Heure, BIH, which were defined in the Transactions of the IAU, Vol XIIIA, 1967, taking account of subsequent developments which have resulted in the BIH being entrusted with additional responsibilities, it now

recommends

that the following terms of reference of the BIH be adopted:

The functions of the BIH shall be

- (a) to establish the scale of the International Atomic Time TAI, in accordance with the decisions of the 14th Conférence Générale des Poids et Mesures and in conjunction with the Bureau International des Poids et Mesures;
- (b) to establish, from all relevant data, and to publish the current values of the Universal Time and of the angular velocity of the Earth's rotation and, in addition, the operational coordinates of the pole used for this purpose;
- (c) to implement the system of the Coordinated Universal Time UTC by the distribution of all necessary information for the coordination of time signal emissions and the synchronization of clocks on the UTC scale;
- (d) to distribute information important for scientific users of time, and to supply on request the available data on the subject of time;
- (e) to perform scientific research as necessary for the improvement of the service.

RESOLUTION No. 8

Proposed by IAU Commission No. 40

The International Astronomical Union

recognizing

- (a) the value to mankind of the scientific results achieved by radio astronomy through the exploration of the universe;
- (b) the increasing use of the radio spectrum, especially by space and air-borne transmitters;

recommends

- that designers of future ground, airborne and space-based transmitting services, ensure that the effects of in-band, adjacent-band and harmonic interference are below the harmful interference limits as specified in CCIR Report 224-3;
- 2. that efforts continue by the entire astronomical community to stress that the active users of the radio spectrum should adhere to these limits.

RESOLUTION NO. 9

Proposed by IAU Commission No. 50

The International Astronomical Union notes with alarm the increasing levels of interference with astronomical observation resulting from artificial illumination of the night sky, radio emission, atmospheric pollution and the operation of aircraft above Observatory sites.

The IAU therefore urgently requests that the responsible civil authorities take action to preserve existing and planned observatories from such interference. To this end, the IAU undertakes to provide through Commission 50 information on acceptable levels of interference and possible means of control.

RESOLUTION NO. 10

Proposed by the Resolutions Committee

The General Assembly of the International Astronomical Union endorses the Resolutions adopted by its individual Commissions and recommends that astronomers give effect to these Resolutions.

10. Commissions

- (a) The Executive Committee acknowledged the decision of Commissions 21 and 22 that these two Commissions would not be merged.
- (b) The General Secretary presented a list of preliminary nominations of Presidents and Vice-Presidents of IAU Commissions to be endorsed by the Executive Committee prior to its submission to the General Assembly for approval. The final list approved by the General Assembly will be published in Transactions XVIB. It was noted and approved that J. C. Pecker would exceptionally continue for another term as President of Commission No. 5.
- (c) The list giving the composition of Organizing Committees of Commissions, as prepared in consultation with Presidents of Commissions, was approved. For more details see Transactions XVIB.
- (d) Commission No. 38: The General Secretary said that, in view of previous criticism of the activity of Commission 38, he had carefully examined each individual allocation of grants and the reports of the President of the Commission. He found that all cases were well documented. He had also spoken to Dr Routly, the President of the Commission, who had proposed to reserve part of the funds available to the Commission for grants towards living expenses. The General Secretary proposed to abolish the membership of the Commission, but to approve its Organizing Committee.
 - J. G. Bolton and C. de Jager supported this suggestion, while W. Iwanowska was of the opinion that Commission 38 resembles Commission 46, and that a representation of all Member Countries in the former would greatly add to its efficiency, as these representatives would act as liaison officers. The General Secretary said that even a small Organizing Committee can contact the individual countries.
 - B. Loyell proposed that the Commission should be transformed in a Working Group. C. de Jager held that it is enough if the Commission is a Committee of the Executive Committee.

The President summarized the discussion and said that Commission 38 and its activity evidently require more publicity, first of all in the Information Bulletin. The discussion showed that the Commission should be maintained, for the time being, and its Organizing Committee approved. Later on, however, all Committees of the Executive Committee should be transformed in Working Groups. The President proposed that (a) the Organizing Committee of Commission 38 should be asked to set up guidelines for the future activity of the Commission, and to present them to the Executive Committee for approval, (b) to appoint J. Delhaye as Vice-President of the Commission.

This proposal was approved.

Commission No. 46: The Assistant General Secretary reported that Commission No. 46 was preparing guidelines for the organization of Young Astronomers' Schools, and that these guidelines would be submitted to the Executive Committee for approval. This was acknowledged by the Executive Committee.

As regards the Working Group on Planetary System Nomenclature, it was noted that Dr Lipsky would become now member of the Lunar Task Group to replace later on Dr Millman. The President appreciated the work done by Dr Millman and suggested that a letter of thanks should be addressed to him.

11. Election of members into Special Nominating Committee

The Nominating Committee elected the following members into the future Special Nominating Committee: A. Dollfus, France; B. A. Lindblad, Sweden; A. G. Massevich, USSR; and A. Reiz, Denmark. Taking into consideration adequate regional representation the Executive Committee nominated J. P. Wild, Australia, into this Committee. Thus, the future Special Nominating Committee consist of:

- A. Blaauw, President
- L. Goldberg, Past President
- A. Dollfus
- B. A.Lindblad
- A. G.Massevich
- A. Reiz
- J. P.Wild

12. IAU Finances

(a) Financial accounts and budget

The Executive Committee confirmed its approval of the financial report as printed and distributed to Member Countries. The General Secretary and Assistant General Secretary then presented to the Executive Committee the estimates of the budget for the year 1976 and of the comprehensive budget for 1977-1979, as adjusted by the Finance Committee.

Budget 1976

RE(CEIPT IN U.S. DOLLARS		PAYMENTS IN U.S. DOLLARS
1.	Contribution from Adhering Countries	107 500	1. Administrative Office 47 700 2. Contribution to ICSU 2 960
2.	Revenue from IAU Publications	11 600	3. Commissions expenses 400
3.	Interest on accounts	5 400	4. Projects of Commissions 4.1. Exchange of Astronomers 14 191
14.	Grant from UNESCO	30.000	4.2. Other Projects 5 414
	subvention to ICSU	12 000	5. General Assembly 39 000
	Total	136 500	6. IAU Publications 11 000
			7. Free copies to institutions of developing countries 7 000
			8. Executive Committee meeting O
			9. Officers' meetings 3 300
			10. Symposia and Colloquia 12 000
			ll. Contributions to Inter-Union Commissions 2 800
			12. Projects approved by the Executive Committee 800
			13. Representation 1 500
			14. Bank charges 300
			15. Young Astronomers'School 0
			16. Regional meeting 0
	, .		Total 148 365 Receipts 136 500
	,		Excess of payments over receipts 11 865
			Available from 1975 <u>15 263</u>
			Excess of funds available over payments (as reserve) 3 398

Comprehensive Budget for 1977-1979

Unit of Contribution 1465.00 Swiss Francs

(One Swiss Franc equal to 0.2175926 g of fine gold)

RECEIPTS IN SWISS FRANCS		PA	YMENTS IN SWISS FRANCS	
1. Contributions from Adher-		l.	Administrative Office	449.900
ing Countries	944.925	2.	Subscription to ICSU	23.625
2. Revenue from publications	60.000	3.	Commission expenses	10.280
3. Interest on accounts	51.925	4.	Projects of Commissions	
4. UNESCO subvention through ICSU	92.520		4.1. Exchange of Astronomers	67.405
Total	1.149.370		4.2. Other projects	34.205
Payments	1.143.585	5.	General Assembly	136.210
		6.	Publications	38.550
Excess of rece over payments	1pts <u>5:785</u>	7.	Publications for developing countries	50.000
		8.	Executive Committee meetings	51.400
List of projects under Paymer	nts. Itom l 2	9.	Officers' meetings	20.560
		10.	Symposia and Colloquia	117.540
Commissions and projects Swi	iss Francs	11.	Inter-Union Commission	41.400
4, Ephemerides	2.485	12.	Executive Committee	
6, IAU Telegram Bureau	5.595		projects	10,000
16, Planetary Documentation,		13.	Representation	20.000
Meudon	5.290		Bank charges	3.660
17, Lunar Documentation, Meudon	5.285	15.	Young Astronomers'schools	38.850
20, Minor Planet Center	6,220	16.	Regional meetings	30.000
27, Variable Star Catalogue	9,330		Total 1	.143.585
Total	34.205			

It was noted that the Finance Committee had changed the budgetary proposal as prepared by the Executive Committee for the years 1977-1979 in the following points:

Item 3. of Receipts "Interest on accounts" had been increased from 33.925 Sw.frs to 51.925 Sw.frs, the difference to be obtained by placing additional \$60,000 U.S. on savings accounts yielding about 6% interest.

Item 1. of Payments "Administrative Office" had been adjusted from 436.900 to 449.900 Sw. frs, the additional 13.000 Sw.frs.to be taken from the increased income on interest.

Item 4.1 of Payments "Exchange of Astronomers" had been increased from 60.000 Sw. frs. to 67.405 Sw. frs.

Item 11. of Payments "Inter-Union Commissions" had been reduced from 51.400 Sw. frs. to 4],400 Sw. frs.

Item 12. of Payments "Executive Committee Projects" had been decreased from 12.850 to 10.000 Sw. frs.

Item 13.of Payments "Representation" had been curtailed from 27,405 to 20.000 Sw.frs.

Item 15. of Payments "Young astronomers' schools" had been raised from 26.000 to 30.000 Sw. frs.

These adjustments had brought the Receipts to 1.149.370 Sw. frs. and the Payments to 1.143.585 Sw. frs. leaving an excess of 5.785 Sw. frs. of receipts over payments.

In the discussion of the proposed Comprehensive Budget two questions were raised:

- l.whether the Finance Committee is authorized to make changes in the budgetary proposals of the Executive Committee
- 2.whether the report on the meeting of the Finance Committee, as prepared by Dr Stibbs, is, a true representation of the proceedings of the Finance Committee.

A consultation of the Statutes showed that Article 18.(a) provides as follows:

For each ordinary General Assembly the Executive Committee prepares an estimate for the budget for the period to the next ordinary General Assembly. It submits this estimate, together with the accounts for the preceding period, to a Finance Committee appointed by the General Assembly. The Finance Committee examines the accounts and the estimate of the budget, on which it presents two separate reports, and submits them to the General Assembly for approval."

L. Goldberg and B. Lovell expressed the view that the Statutes are clear in that they authorize the Finance Committee to examine the budget not, however, to formulalte the financial policy of the Union.

- C. de Jager said that the Finance Committee made adjustments in the budgetary proposal of the Executive Committee in the past, which was considered compatible with the Statutes, since the Finance Committee derives its policy-making authority from the General Assembly. B. Strömgren called the attention of the meeting to the fact that the General Secretary, explicitely mentions in his letter accompanying the Agenda that National Committees instruct National Representatives as regards their attitude to the proposed budget.
- W. Iwanowska was of the opinion that, disregarding legal argumentation, the proposals made by the Finance Committee are reasonable and only represent about 5% of the budget. Hence W. Iwanowska proposed to accept the budget as adjusted by the Finance Committee. E. R. Mustel supported this view, and suggested that new rules should be prepared for the future.

The President emphasized that the Finance Committee had accepted the adjusted Budget subject to the approval by the Executive Committee of the guidelines to be prepared by Commissions 38 and 46, and that this fact is not included in the report of the Finance Committee.

Accordingly, Dr Stibbs, who waited in an adjacent room, was approached with the request to supplement the report of the Finance Committee. Dr Stibbs complied by inserting the following passage in Item 9. of the report:

"The Finance Committee, noting that the recommendation (that the Executive Committee would be expected to make adjustments in the total charges against items should the need arise, without indenting charges against reserves except where specified, provided such adjustments were consistent with the policy embodied in the Budget and were within the overall financial provision) would be particularly relevant to Items 4.1 and 15 in the Budget if the Commission's proposals were not satisfactory to the Executive Committee, unanimously accepted the recommendation on the adjustment of payments, and so recommends to the General Assembly."

The thus supplemented report of the Finance Committee was then approved by the Executive Committee for submission to the General Assembly.

(b) Unit of Contribution

The Executive Committee agreed unanimously that the unit of contribution payable to the IAU by Adhering Countries should henceforward be the Swiss franc, 1 Swiss franc being equal 0.2175926g. of fine gold, and that a proposal to this effect should be made to the General Assembly.

(c) Financial authority

The Executive Committee recommended that the new Executive Committee extend to the incoming General Secretary the financial authority necessary for handling the funds of the IAU (see report of the 38th meetings of the Executive Committee).

(d) On the proposal of Commission 37, the Executive Committee unanimously agreed to allocate from Item 12. "Projects of the Executive Committee" in Payments of the Budget \$1.000 U.S. to Dr. Balázs as grant toward the publication of the catalogue of Star Clusters and Associations.

(e) The General Secretary informed the meeting that the accounts of the funds he had received from the Greek authorities for the IAU Secretariat while in Greece would be audited in the years to come and that he might be asked to refund certain balances, if any. The Executive Committee agreed unanimously that such payments would be reimbursed to G. Contopoulos.

13. Transfer of the Administrative Office to Lausanne

This subject has already been covered under point 4 of the present report. It should be added that the future General Secretary would have its offices in the Observatoire de Genève, Sauverny, while the staff will have at its disposal an office in the Physics building of the University of Lausanne in Dorigny.

14. Publication Policy

- (a) The Assistant General Secretary reported that henceforward all IAU publications would be produced by the offset method from camera-ready copies. All those concerned, that is mainly President of Commissions and prospective authors have already been informed of this new development and instructed as regards the typing of camera-ready copies.
- (b) The contract to cover the new production method of IAU publications was discussed with Reidel's during the General Assembly. The publisher will incorporate in it the requirements put forward by the Assistant General Secretary and prepare a revised version for signature or further discussion.

III SCIENTIFIC ACTIVITY OF THE IAU

15.through 19. Scientific meetings.

The Assistant General Secretary reported on and presented lists of

- 1. Symposia and Colloquia held around the XVIth General Assembly
- 2. Meetings cosponsored by the IAU
- 3. Future IAU Symposia and Colloquia
- 4. Proposed IAU Symposia
- 5. Proposed IAU Colloquia
- 6. Proposed Regional Astronomical Meetings
- 7. Proposed meetings with IAU cosponsorship
- 8. Other scientific meetings
- 9. Publication of IAU Colloquia

It was resolved to defer this subject to the 42nd meeting of the Executive Committe for more detailed discussion.

IV RELATIONS WITH OTHER ORGANIZATIONS

20.1. ICSU

(a) The General Secretary reported that the revised Statutes of ICSU considerably restrict the influence of Unions in conducting the affairs of this organization, as most of the decisions are being taken by the Executive Board where out of 7 members only 2 are Union representatives.

He therefore drafted a proposal to the Secretary General of ICSU suggesting the formation of an ad hoc Committee of Union representatives to investigate the position of ICSU under the changing circumstances and to propose new Statutes that would take into consideration the new developments.

- C. de Jager corroborated the General Secretary's view and said that the suggested Committee might be useful.
- (b) Some times ago, ICSU inquired about the willingness of the Unions to ratify the resolutions passed by ICSU. The IAU responded positively asked, however, for the resolutions that would come into consideration. No reply came to this request.
- (c) The General Secretary read the following IUPAC proposal for a resolution on the free circulation of scientists:

The 15 General Assembly of ICSU:

Having been informed of a number of cases in which bong fide Scientists from National adhering bodies of the International Scientific Unions had recently been prevented from attending symposia organized or sponsored by these Unions through a refusal to grant entry visas and,

Recalling the earlier decisions taken by the ICSU emphasizing the right to free movement of scientists in this connection,

Draws the attention of the individual scientific unions and other ICSU bodies to the following guidelines and recommends their adoption:

- i) Before Symposia or meetings are arranged:
- a) an assurance in writing should be obtained from the organizers in the country concerned that visas will be granted to bona fide scientists if proper applications are made, and
 - b) the unfortunate consequences which may arise through failure to grant visas should be communicated to the organizers of the symposia or meetings involved.
- ii) The procedure recently adopted by the IUPAC is commended for observance by other unions, namely:
 - a) that applications for visas where necessary should be made to the appropriate authorites not less than three months before the date of the symposium or meeting, and if these visas are not granted or promised in writing one month before the date of the event, sponsorship should be withdrawn and,
 - b) Arrangements for future meetings in any country found unable to comply with these principles should be suspended until satisfactory circumstances exist.

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Draws the attention of the individual scientific unions and other ICSU bodies to the following guidelines and recommends their adoption:

- i)Before Symposia or meetings are arranged:
- a) an assurance in writing should be obtained from the organizers in the country concerned that visas will be granted to bona fide scientists of proper applications are made, and
 - b) the unfortunate consequences which may arise through failure to grant visas should be communicated to the organizers of the symposia or meetings involved.
- ii) The procedure recently adopted by the IUPAC is commended for observance by other unions, namely:
 - a) that applications for visas where necessary should be made to the appropriate authorites not less than three months before the date of the symposium or meeting, and if these visas are not granted or promised in writing one month before the date of the event, sponsorship should be withdrawn and,
 - b) Arrangements for future meetings in any country found unable to comply with these principles should be suspended until satisfactory circumstances exist.

- iii) National adhering bodies of the ICSU should urge the authorities in their countries to facilitate attendance and exit visas for scientists to attend such meetings in the same way,
- iV) Each Union or other ICSU body should inform the ICSU and its Committee on the Free Circulation of Scientists of cases in which withdrawal of sponsorship has become necessary so that other Unions may take this into account in making their own arrangements for meetings and symposia,
- V) The Chairman of the Committee for Free Circulation and the Secretary General of ICSU should maintain a record of cases reported, to which scientific unions and other ICSU bodies may refer.

In the discussion that followed, W. Iwanowska remarked that astronomers have no influence on the decisions of their Governments. L. Goldberg thought it advisable to wait and see how the IUPAC resolution works. G. Contopoulos proposed that ICSU should be informed of the IAU's agreement with the spirit of the resolution that, however, it is not prepared formally to adopt it.

- (d) The General Secretary reported that it had been resolved at the COSPAR meeting in Philadelphia to incorporate the International Solar System Programme (ISSP) in the structure of COSPAR. The IAU would be represented on the Panel. No independent body would be entrusted with this programme.
- C. de Jager said that Dr Pickering's proposal had been too far-going. After a discussion in the COSPAR Plenary Meeting the scope of the programme had been greatly reduced. There would be no separate steering committee. The preparatory work would be done by a COSPAR Panel, as a temporary steering committee, but similar panels would also be in IAU and IUGG, which might form a joint panel. Administrative assistance is available. A grant of \$5.000 might become necessary for effective action. This is reasonable.
- (e) As to the IAU representation in ICSU it was recommended that Edith A. Müller should succeed G. Contopoulos for the ensuing period of office.
- (f) On the proposal of Dr Z. Svestka it was agreed that the IAU should support the request for an extension of SCOSTEP until 1980.

20.2 - 21. Other Organizations and representation in them

It was resolved to defer this subject to the 42nd meeting of the Executive Committee calling its attention to the following proposal for IAU representation:

Edith A. Müller COSPAR ICSU AB J. C. Pecker FAGS H. Enslin, Edith A. Müller IUCAF G. Westerhout and R. Wielebinski SCOSTEP Z. Svestka R. Cayrel, J. C. Pecker SCOPE CTS L. N. Houziaux CODATA G. A. Wilkins IUCS B. Edlén, J. G. Philips and M. J. Seaton

Pic-du-Midi no action

CCDS Wm. Markowitz CCDM A. H. Cook

CCIR F. G. Smith and H. M. Smith

EPS P. A. Wayman

Various FAGS Services

BIH H. Enslin and H. M. Smith

QBSA Organizing Committee of Commission 10

IUWDSF. W. JägerSBARMOP. SimonIPMSS. Yumi

22. Re-discussion of problems dealt with earlier

The results of the re-discussion have been mentioned under the appropriate points of the present report.

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

Such resolutions are covered by the blanket resolution No. 10 adopted by the General Assembly. The resolutions of Commissions will be incorporated in the Commissions reports to be published in Transactions XVIB.

24. Report on meetings of the Finance and Nominating Committees

See points 12 and 8 of the present report. Moreover, the Nominating Committee had examined the lists A (new IAU Members), B (new IAU Members proposed by Presidents of Commissions not, however, by National Committees, and C (deletions) and made recommendations to the Executive Committee which were adopted.

25. Any other matter

- (a) In the discussion of the problem of the People's Republic of China, the President emphasized that the Executive Committee had spared no effort to bring that country back to the IAU. A special resolution had been proposed to ICSU, individual contacts had been taken up with Chinese astronomers, both in China and elsewhere, but all to no avail. There is therefore no reason why the IAU should apologize to China, as suggested in the daily bulletin. Clearly, China is not very anxious to rejoint the IAU as it has not much to show in astronomy.
- J. G. Bolton was certain that China would find its way back if it wanted so. Edith A. Müller was of the opinion that the Chinese astronomers should also put pressure on their Government. P. O. Lindblad reported of his visit to China and suggested that it would be useful if the President of the IAU visited China himself. CH. Fehrenbach said that he is in a position to arrange a meeting between the incoming President of the IAU and a member of the diplomatic staff of the Chinese Embassy.

- (b) C. de Jager reported that the so called Standing Finance Committee, formed in 1971 as an advisory body to the General Secretary, had not been very active. The Assistant General Secretary, as incoming General Secretary, was of the opinion that a Standing Finance Committee is redundant in view of the fact that the Executive Committee is fully capable of coping with the finances of the Union.
- (c) The President introduced the resolution of the U.S. Academy of Sciences as regards freedom of scientific investigation, and said that he saw no good way of bringing it on the agenda of the XVIth General Assembly. W. Iwanowska suggested that this resolution should be sent to the Academies of Sciences the world over. B. Lovell said that this resolution is a matter for individuals.
- (d) The resolution on astrclogy, prepared by Dr Dommanget, was discussed. It was felt that though individuals may sign it, it is not a matter to be put before the General Assembly.
- (e) The President suggested that the IAU should also contribute to the travel expenses of the Officers elect and present at General Assemblies. It was suggested to recommend to the next Executive Committee to study the problem.
- (f) B. Lovell's letter on extraterrestrial-life research and P. A. Wayman's letter on Space Astronomy and transfer of astronomical equipment from country to country were recommended to the attention of the next Executive Committee.

VI. 26. CLOSING BY THE PRESIDENT

The President thanked B. J. Bok, A. Blaauw and P. A. Wayman for their contributions to the discussion of the meeting, and expressed his gratitude to the members of the Executive Committee for their work over the past three years. His thanks went in particular to the members leaving the Executive Committee, to the two advisers, and to the General Secretary and Assistant General Secretary. The President then declared the meeting closed.

outgoing General Secretary

6 Conpagnil

Geneva, 29 September 1976