

GENERAL ASSEMBLY

AGENDA

The agenda for the General Assembly, which had been published in the *Agenda and Draft Reports* and distributed to all Members, read as follows:

1. Official opening of the General Assembly, by the President.
2. Appointment of official interpreters.
3. Report of the Executive Committee:
 - (a) discussion of the printed Report;
 - (b) report of decisions taken at meetings in Hamburg.
4. Report by the General Secretary.
5. Report by the President of the proposals for membership of the Executive Committee.
6. Announcements of:
 - (a) the names of representatives of Adhering Countries, empowered to vote on their behalf;
 - (b) the names of representatives to serve on the Nominating Committee;
 - (c) the names of Acting Presidents of Commissions.
7. The appointment of the Finance Committee.
8. The appointment of the Resolutions Committee.
9. Revisions of the Statutes and By-laws.
 - (a) Statute nos. 4 and 11(a): revision of the categories of membership.
 - (b) By-law no. 10: revision of the method of appointment of the Union's representatives to the International Council of Scientific Unions.
 - (c) By-law nos. 12 and 13: to provide for the appointment to membership of the Executive Committee of an Assistant General Secretary.
 - (d) By-law no. 24: to provide discretion to limit free distribution, to Members and others, to one volume of the *Transactions*.
10. Consideration of resolutions submitted by Adhering Organizations or National Committees of Astronomy.
11. Consideration of resolutions submitted by Commissions, or by Inter-Union Commissions.
(No resolution has been submitted under either item 10 or 11.)
12. Report of the Finance Committee:
 - (a) the accounts for the previous period;
 - (b) the budget for the ensuing period.

13. Consideration of the unit of contribution for the ensuing period.
The Executive Committee will propose to the Finance Committee that the unit of contribution be maintained at 600 gold francs.
14. Consideration of resolutions submitted by the Executive Committee.
15. Consideration of resolutions submitted by Commissions, subject to the recommendation of the Resolutions Committee.
16. The appointment of the Special Nominating Committee.
17. The nomination of new Members of the Union.
18. Commissions:
 - (a) Dissolution and the creation of new Commissions.
 - (b) The election of Presidents and Vice-Presidents.
 - (c) The membership of Organizing Committees.
19. The place and date of the thirteenth General Assembly.
20. The election of a President, six Vice-Presidents, a General Secretary and, if the revised By-laws are adopted, of an Assistant General Secretary.
21. The appointment of representatives to the International Council of Scientific Unions.
(This will be unnecessary if the revised By-laws are adopted.)
22. Addresses by the retiring and the newly-elected Presidents.
23. Closing ceremonies.

The items of agenda were taken, as far as practicable, in the order in which they were given; but items 3(b) and 12 onwards were deferred until the second session. The same item numbers are used throughout this report, for both the first and second sessions of the General Assembly.

FIRST SESSION

Held on Tuesday 25 August 1964 at 14^h 15^m, in the Auditorium Maximum on the Campus of the University of Hamburg

Academician V. A. Ambartsumian, President, in the chair

1. *Official opening.* The President spoke a few words of welcome to the Members of the Union, invited participants and their guests, and formally declared open the first session of the twelfth General Assembly of the Union.

2. *Official interpreters.* The General Secretary asked the General Assembly to approve of the appointment of the following five official interpreters:

from English to French: L. Houziaux and J. -C. Pecker

from French to English: D. S. Evans and P. R. Demarque

from and to Russian: E. K. Kharadze

This was unanimously approved.

1. (*cont.*) The President then welcomed the official representatives of other scientific Unions and organizations as follows:

ICSU (International Council of Scientific Unions): H. W. Thompson

UNESCO: E. M. Fournier d'Albe

URSI (Scientific Radio): W. N. Christiansen and R. A. J. Coutrez

IQSY (International Quiet Sun Years): G. Righini

The President reminded the General Assembly of the gracious message of good wishes from the German Government that was read at the Inaugural Ceremony and proposed from the chair that a message expressing the appreciation of the General Assembly be sent to the President of the German Federal Republic. This proposal was approved by acclamation.

At the request of the Chairman, the General Secretary informed the General Assembly that during the last few months he had received information from many Members that they were unable to attend the General Assembly. However, he had hoped that, for the first time that he could discover, all Presidents of Commissions would be present; a month ago Professor Oosterhoff, President of Commission 27, regretfully informed him that illness would prevent him from attending; then, a week ago, through a most welcome recovery, Professor Oosterhoff was able to come after all. However, since arriving in Hamburg, he had heard that Professor Fedynsky, President of Commission 22, was unable to attend, so that the record of a complete attendance of Presidents was still not yet fulfilled.

There were, in addition, many well-known astronomers who were prevented by illness from attending; the General Secretary was sure that all would wish to send them collectively regrets at their absence and good wishes for their speedy recovery. It is not possible to send individual messages, but the General Secretary proposed to make one exception, namely in the case of our former President, Professor André Danjon: this was accorded general approval.

The General Secretary then referred to the loss the Union had suffered during the past three years as a result of death; information about some of these had only been received during the last few days. He asked all present to stand for a few moments while he read the following list of those whose deaths had been reported since the last General Assembly.

H. L. Alden, C. F. Baeschlin, J. Cabannes, L. Carnera, E. F. Carpenter, G. Cassinis, G. Contino, D. Cot, A. K. Das, I. A. Dyukov, W. Dziewulski, M. A. Ellison, E. Finlay-Freundlich, Mme G. C. Flammarion, A. Gennaro, A. Güttler, E. Guyot, D. L. Harris III, C. B. Haselgrove, T. Hatanaka, T. Hattori, M. B. B. Heath, H. S. Jelstrup, E. A. Kreiken, D. K. Kulikov, E. Lange, K. Lassovszky, R. McMath, D. D. Maksutov, P. W. Merrill, S. K. Mitra, V. Nechvile, S. B. Nicholson, N. V. E. Nordenmark, V. Oberguggenberger, J. L. Pawsey, V. F. Proskurin, F. Rigaux, F. H. Seares, C. A. Shain, H. Siedentopf, E. C. Slipher, H. S. Spigl, O. Struve, P. ten Bruggencate, G. Thiessen, O. Thomas, L. Vegard, J. G. E. G. Voûte.

3. (a) *Report of the Executive Committee.* The General Secretary said that the Report of the Executive Committee, as printed in the *Agenda and Draft Reports*, was now open for discussion; and that he would be happy to answer any questions that might be asked. There were no questions, and the Report was approved.

(b) *Report of decisions taken by the Executive Committee.* The Chairman explained that it might be convenient if the General Secretary reported briefly on some of the decisions taken by the Executive Committee at its meeting on the previous day.

The General Secretary reported:

- (i) *New National Members.* The Executive Committee had admitted New Zealand as a National Member, with the Royal Society of New Zealand as Adhering Organization. On behalf of the President, he welcomed the participants from New Zealand at this General Assembly, in which they can now play their full part.
- (ii) *Associate membership.* The International Council of Scientific Unions has recently introduced a new class of Associate National Members designed to permit the smaller developing countries to participate in its work, without accepting financial and other responsibilities beyond their present resources. The Executive Committee has decided, in principle, to propose that the IAU introduce a similar class of Associate Members;

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but the details require further study by the new Executive Committee before a formal proposal can be placed before the thirteenth General Assembly.

- (iii) *Corresponding Members.* The Presidents of several Commissions of the Union have expressed a wish to have as members of their Commissions scientists whose interests in astronomy are limited to a very narrow field—for example, the historians of science in respect of Commission 41. The Executive Committee has accordingly decided, again in principle, to introduce a new class of Corresponding, or Consulting, Members; it is still necessary to work out the precise details of the procedure for their election and their privileges, but these will certainly allow them to participate fully in the work of the Commissions in which they are interested.

4. *Report by the General Secretary.* The General Secretary stated that he did not wish to add anything to the published report of the Executive Committee, but he would like to make some informal remarks. He spoke as follows.

‘The days are long past when a General Secretary even though, impossible as that may be, he be as efficient as A. Fowler or F. J. M. Stratton, can direct and administer the affairs of the Union without even a secretary to help him. However, subsequent General Secretaries—J. H. Oort, B. Strömrgren and P. Th. Oosterhoff (all of whom we are glad to see with us today)—did manage to run the Union with the minimum assistance and to preserve the intimate, personal nature of the relationship between the Secretariat and individual Members of the Union.

‘The International Astronomical Union is one of the very few scientific unions with individual membership—and this is something of which we are all rather proud. However, the Statutes of the Union and our procedures were drawn up when the number of astronomers throughout the world was so small that all knew of each other, even if they did not know each one personally. The rapid growth of astronomy, and of the number of those interested in astronomy, now makes it quite impossible for even the General Secretary to know each Member personally.

‘In many other ways too our procedures are incompatible with the increasing size of our meetings; they throw an undue burden of work on the Secretariat, and also confuse those who are not familiar with our customs and traditions. To give but two examples: our tradition of personal invitations from the President to non-Members to participate in the General Assembly becomes a meaningless and sometimes exasperating procedure when, as this year, we have sent out over 700 such invitations. The second example is this General Assembly itself at which it is clearly impracticable for any but the most formal matters (either administrative or scientific) to be discussed.

‘Yesterday the Executive Committee discussed some of these problems and certain changes in these procedures, which will be proposed to you at the next session of the General Assembly, will be made. For example, one of the innovations will be an informal meeting between members of the Executive Committee and the official voting representatives of our National Members, with the two-fold aim of simplifying the relations with the Adhering Organizations, and keeping them informed of the proposals being considered by the Executive Committee.

‘As you will shortly hear I am retiring from the office of General Secretary after serving for six years in that capacity. I could say a great deal about those six years, but I will only say here that they have meant for me a great deal of work and, although there have been many times of irritation, general satisfaction in serving the Union and astronomers. My successor, whomsoever you may elect, will, however, face a much more difficult task, as I have already indicated; I do most earnestly ask you to give him not only every support that you can, which I am sure you will, but also to ease his burden, and that of the Administrative Office (including our hard-worked Assistant Secretary) by remembering that he will be trying to deal with some 1500 Members, 43 Adhering Organizations, 36 Commissions, and an ever-growing list of Special

Committees of the International Council of Scientific Unions, Inter-Union Commissions etc., as well as organizing some four Symposia each year.

'Please remember also that like all of you, he has many other administrative duties and wants also to do some scientific work. So *please*, above all else, reply to letters from him promptly, briefly and definitely.'

5. *Proposals for membership of the Executive Committee.* In accord with the provisions of the Statutes and By-laws, the President submitted for consideration to the General Assembly the names of those proposed by the present Executive Committee, for membership of the Executive Committee for the period 1964-1967. He reminded Members that there was an agreed procedure by which a Special Nominating Committee, largely appointed by the Nominating Committee and approved by the General Assembly at its previous meeting, makes proposals to the Executive Committee. On this occasion the proposals by the Special Nominating Committee, to fill the positions of President, four Vice-Presidents, General Secretary and (if approved by the General Assembly) Assistant General Secretary, had been unanimously adopted by the Executive Committee and were now before the General Assembly. The President accordingly submitted the name of Professor P. Swings for the office of President, the names of Professor W. N. Christiansen, Professor W. Fricke, Professor M. Schwarzschild and Professor A. B. Severny for the offices of Vice-President, the name of Dr J.-C. Pecker for the office of General Secretary, and the name of Dr L. Perek for the office of Assistant General Secretary. The membership of the new Executive Committee would then be as follows:

PRESIDENT: P. Swings.

VICE-PRESIDENTS: W. N. Christiansen, W. Fricke, Y. Hagihara, G. Haro, M. Schwarzschild, A. B. Severny.

GENERAL SECRETARY: J.-C. Pecker

ASSISTANT GENERAL SECRETARY: L. Perek.

The President reported that the Special Nominating Committee had recommended, and the Executive Committee had agreed, that it would be desirable if one of the four new Vice-Presidents served for one term of three years only, so that three new Vice-Presidents would normally be elected at each General Assembly. The Executive Committee would accordingly propose that W. N. Christiansen (selected by random choice) should serve for three years only.

In accord with the By-laws the formal election would take place at the final session of the General Assembly.

6. *Announcements.* At the request of the Chairman, the General Secretary announced:

- (a) the names of representatives of Adhering Countries, empowered to vote on their behalf;
- (b) the names of representatives of Adhering Countries to serve on the Nominating Committee.

<i>Country</i>	<i>(a) Official Representative</i>	<i>(b) Representative on Nominating Committee</i>
Argentina	J. J. Nissen	J. Sahade
Austria	J. Hopmann	J. Hopmann
Australia	H. W. Wood	W. N. Christiansen
Belgium	H. L. Vanderlinden	S. Arend
Brazil	A. de Moraes	A. de Moraes
Bulgaria	N. Boneff	N. Boneff
Canada	R. M. Petrie	H. B. Sawyer-Hogg

<i>Country</i>	<i>(a) Official Representative</i>	<i>(b) Representative on Nominating Committee</i>
Chile	C. Anguita	C. Anguita
Czechoslovakia	V. Guth	L. Perek
Denmark	A. Reiz	M. Rudkjøbing
Eire	P. Wayman	P. Wayman
Finland	G. J. Järnefelt	G. J. Järnefelt
France	A. Lallemand	P. Couderc
Germany (Democratic Republic of)	C. Hoffmeister	J. Wempe
Germany (Federal Republic of)	W. Fricke	K. H. Böhm
Greece	J. Xanthakis	L. N. Mavridis
Hungary	L. Detre	L. Detre
India	V. Bappu	V. Bappu
Israel	N. Robinson	N. Robinson
Italy	F. Zagar	F. Zagar
Japan	Y. Fujita	Y. Fujita
Korea (Democratic People's Republic of)	no representative	no representative
Lebanese Republic	no representative	no representative
Mexico	G. Haro	P. Pishmish de Recillas
Netherlands	G. B. Van Albada	M. G. J. Minnaert
New Zealand	F. M. Bateson	F. M. Bateson
Norway	A. A. Wyller	G. Gjellestad
Poland	E. Rybka	E. Rybka
Portugal	M. G. de Barros	M. G. de Barros
Rumania	N. Dinulescu	N. Dinulescu
South Africa	J. Hers	J. Hers
Spain	R. Carrasco	E. Gullon
Sweden	B. Lindblad	G. Larsson-Leander
Switzerland	M. Waldmeier	M. Waldmeier
Taiwan (Republic of China)	M. Tsao	M. Tsao
Turkey	N. Gökdoğan	N. Gökdoğan
United Arab Republic (Egypt)	A. H. Samaha	A. H. Samaha
United Kingdom	H. Bondi	H. Bondi
U.S.A.	F. K. Edmondson	O. Mohler
U.S.S.R.	E. R. Mustel	A. A. Mikhailov
Vatican City State	D. J. K. O'Connell	P. J. Treanor
Venezuela	no representative	no representative
Yugoslavia	L. Randić	L. Randić

(c) *Acting Presidents.* The General Secretary announced that the Executive Committee had, at very short notice, invited P. M. Millman to serve as Acting President of Commission 22. P. Ledoux, as previously announced, was already Acting President of Commission 35.

7. *Finance Committee.* In accord with the Statutes the following Finance Committee, consisting of one representative of each Adhering Country, was appointed by the General Assembly:

Argentina	J. Landi Dessy	Lebanese Republic	no representative
Australia	B. Y. Mills	Mexico	B. Iriarte
Austria	J. Hopmann	Netherlands	C. A. Muller
Belgium	P. Bourgeois	New Zealand	F. M. Bateson
Brazil	A. de Moraes	Norway	A. A. Wyller
Bulgaria	N. Boneff	Poland	S. Piotrowski
Canada	K. O. Wright	Portugal	M. G. de Barros
Chile	C. Anguita	Romania	N. Dinulescu
Czechoslovakia	E. Buchar	South Africa	J. Hers
Denmark	M. Rudkjøbing	Spain	R. Carrasco
Eire	P. Wayman	Sweden	T. Elvius
Finland	G. J. Järnefelt	Switzerland	M. Schürer
France	Ch. Fehrenbach	Taiwan (Republic of China)	M. Tsao
Germany (Democratic Republic of)	H.-U. Sandig	Turkey	N. Gökdoğan
Germany (Federal Republic of)	W. Gleissberg	United Arab Republic (Egypt)	A. H. Samaha
Greece	G. Contopoulos	United Kingdom	D. W. N. Stibbs
Hungary	L. Dezsó	U.S.A.	C. D. Shane
India	S. D. Sinvhal	U.S.S.R.	E. K. Kharadze
Israel	N. Robinson	Vatican City State	F. C. Bertiau
Italy	G. Righini	Venezuela	no representative
Japan	Y. Fujita	Yugoslavia	I. Atanasijević
Korea (Democratic People's Republic of)	no representative		

8. *Resolutions Committee.* At the request of the Chairman, the General Secretary explained that the duties of the Resolutions Committee were to advise the Executive Committee in respect of resolutions submitted by Commissions, with a view to recommending to the General Assembly which resolutions should be formally submitted for consideration by the General Assembly. The General Assembly appointed J. H. Oort and B. Strömngren to serve on the Resolutions Committee, together with the General Secretary and the Assistant General Secretary.

9. *Statutes and By-laws.* The General Secretary formally proposed that the revised Statutes and By-laws, for which the proposed texts in French and English were printed in the *Agenda and Draft Reports*, should be adopted. He referred Members to the section of the Report of the Executive Committee dealing with the Statutes and By-laws, where full details of the reasons for the changes were given; he thought that adequate publicity had been given to these changes, and that it was not necessary to add any further explanation. This proposal was seconded by the Assistant General Secretary.

The Chairman, after asking for discussion, formally put each group of changes to the vote as follows:

- (a) Statute nos. 4 and 11 (a): revision of the categories of membership.
- (b) By-law no. 10: revision of the method of appointment of the Union's representatives to the International Council of Scientific Unions.
- (c) By-law nos. 12 and 13: to provide for the appointment to membership of the Executive Committee of an Assistant General Secretary.

(d) By-law no. 24: to provide discretion to limit free distribution, to Members and others, to one volume of the *Transactions*.

The revised Statutes and By-laws were all unanimously adopted; they are incorporated in the Statutes and By-laws as printed in Volume XIIC of the *Transactions*.

The President announced that the revisions, particularly in regard to the addition to the Executive Committee of an Assistant General Secretary and the method of appointment of the Union's representative on the Executive Committee of the International Council of Scientific Unions, would apply forthwith; the revised categories of membership would apply as from the year 1965.

10, 11. *Resolutions by Adhering Countries and by Commissions*. The General Secretary announced that no formal resolutions, for which five months' notice was necessary, had been received.

The General Secretary then announced that all other items of agenda would be deferred until the next session, pending reports from the various Commissions and Committees.

The Chairman formally thanked the interpreters and adjourned the meeting at 15^h 45^m.

FINAL SESSION

Held on Thursday 3 September 1964 at 9^h 15^m, in the Auditorium Maximum on the Campus of the University of Hamburg

Academician V. A. Ambartsumian, President, in the chair

3. (b) *Report of decisions taken by the Executive Committee*. In opening the second, and final, session of the General Assembly the President said that this was the usual opportunity of informing the General Assembly of various decisions taken by the Executive Committee during its meetings.

In response to the Chairman's request the General Secretary stated that, apart from the decisions already reported at the first session and those that would be later formally submitted to the General Assembly in the form of resolutions, it would probably be preferable to defer a detailed report until it could be included, for circulation to all Members, in an *Information Bulletin*.

12. *Report of the Finance Committee*. At the first session of the General Assembly a Finance Committee had been appointed to examine the accounts of the preceding three years and the budget for the coming three years, as submitted to it by the Executive Committee. The Chairman now called upon the President of the Finance Committee, Professor D. W. N. Stibbs, who had been elected by the Committee itself, to present his report to the General Assembly.

'1. The Finance Committee, as appointed at the first session, appointed a Sub-Committee composed of: Professor D. W. N. Stibbs (chairman), Professor G. Contopoulos, Professor Ch. Fehrenbach, Dr S. Piotrowski, and Dr C. D. Shane.

'2. The Sub-Committee examined the accounts for the years 1961-1963 as given in the Report of the Executive Committee, in the light of explanations provided by the General Secretary and the Assistant Secretary, and expressed its approval of them.

'The Finance Committee recommends to the General Assembly that these accounts be approved.'

The Chairman put this recommendation to the meeting and it was accepted.

'3. The Sub-Committee considered the supplementary budget for 1964 as proposed by the Executive Committee, taking into account the variations arising since these proposals were

made. The Finance Committee, on the advice of the Sub-Committee, recommends that the General Assembly approve a supplementary budget for the year 1964 of \$6500.'

The Chairman put this recommendation to the meeting and it was accepted.

'4. The Sub-Committee considered the budget for the three years 1965-1967 and prepared provisional figures for consideration by the full Committee. In doing so, it recommended:

- (a) that the unit of contribution should be retained at its present figure of 600 gold francs;
- (b) that no attempt should be made to pay the travel expenses of Young Astronomers to future General Assemblies, but that a small sum should be allowed in the budget for assistance in necessitous cases;
- (c) that not all volumes of the *Transactions* should be distributed free to all Members.

It also noted that the Executive Committee had decided to print future Symposia Volumes at the expense of the Union and to sell them through a professional publisher; this will lead to a large increase, which is very difficult to estimate, in both printing costs and in receipts from sales.

'5. The Finance Committee as a whole considered the proposals of the Sub-Committee, accepted its recommendations, and formally proposes the following budget for adoption by the General Assembly:

BUDGET OF INCOME AND EXPENDITURE, 1 JANUARY 1965 - 31 DECEMBER 1967

Estimated Income, 1965-1967

<i>Heading</i>	<i>Origin</i>	<i>U.S. dollars</i>
1. National subscriptions (assuming that the unit of contribution remains unchanged)		\$96 000
2. Sales of publications		42 000
3. Subscriptions from Institutions on the Distribution List		10 000
4. Interest on reserves in Savings Banks		8 000
5. UNESCO subvention through the ICSU		42 000
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	Total estimated income	\$198 000

Estimated Expenditure, 1965-1967

<i>Heading</i>	<i>Purpose</i>	<i>U.S. dollars</i>
1. Administrative Office		\$30 000
2. Subscriptions to the ICSU		2 000
3. Expenses of Commissions		2 000
4. Specific projects (details are given below)		35 276
5. Expenses of the General Assembly		14 000
6. Printing of the <i>Transactions</i>		30 000
7. Meetings of the Executive Committee		5 000
8. Expenses of about 10 Symposia and some Colloquia		17 000
9. Publication of about 10 volumes of the proceedings of Symposia		50 000
10. Inter-Union Commissions, and subscriptions to Special Committees of the ICSU		6 500
11. Representation		1 000
12. Projects authorized by the Executive Committee		5 000
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	Total estimated expenditure	\$197 776

'6. Details of the individual items under Item 4 (Specific Projects) are given below.

Comm. no.	Purpose	Sum requested	Sum proposed by the Finance Committee U.S. dollars
5	Bibliography of Astronomy	about \$250	\$250
6	IAU Telegram Bureau	\$2000	2 000
10	<i>Cartes héliographiques de la Photosphère</i>	3 × 1000 gold frs.	980
10	<i>Cartes synoptiques de la Chromosphère</i>	3 × 3000 gold frs.	2 646
*16	Centre de documentation sur les planètes (Meudon)	3 × \$1000	2 000
*20	Minor Planet Center (Cincinnati)	3 × \$750	1 500
23	<i>Carte du Ciel</i>	\$2000	2 000
27	Southern Variable Star Charts	\$1000	1 000
27	English Version of remarks to the second supplement of GCVS	\$700	700
27	English version of remarks to the second catalogue of stars suspected of variability	\$700	700
*37	Card catalogue of Clusters and Associations	\$3000	1 500
*38	Exchange of Astronomers	3 × \$7500	20 000
Total		\$41 026	\$35 276

* Indicates items for which reductions are proposed.

'Three proposals for small sums (\$100 for Commission 41, and two sums of \$100 and \$500 for Commission 42) can be provided for under other items of the Budget. One proposal, from Commission 15, was received too late for consideration, and will be referred to the Executive Committee.'

D. W. N. STIBBS

President of the Finance Committee

In amplification of the Report, Professor Stibbs emphasized that, although there was less uncertainty in the difference between item 9 of expenditure and item 2 of income than in either taken by itself, there must still be considerable uncertainty due to the unknown time-lag in recovering from sales expenditure on printing. There would be an opportunity for a re-assessment of the position when the thirteenth General Assembly considered the supplementary budget for the year 1967.

After these explanations, the Chairman formally requested the General Assembly to give its approval to the Budget as proposed by the Finance Committee; it was adopted unanimously.

The Chairman then expressed the thanks of the Union to Professor Stibbs, to members of the Finance Committee, and to the General Secretary, for their valuable work.

13. *Unit of contribution.* The General Secretary reported that the Executive Committee, on the advice of the Finance Committee, proposed to the General Assembly that the unit of contribution for the years 1965, 1966 and 1967 be maintained at 600 gold francs.

In explanation, he added that the Adhering Organization of each member country will be formally requested to state the new category of membership in which it desires to adhere.

The Chairman formally put this proposal to the General Assembly, and it was approved.

14. *Resolutions submitted by the Executive Committee.* The President called upon the General Secretary to present to the General Assembly the texts of three resolutions drawn up by the Executive Committee during its recent meetings.

Resolution no. 1, arising from the previously-reported decision to introduce a new class of Corresponding Members, requests the General Assembly to approve of a new class of Con-

sulting Members. After discussion, and agreement to omit the final sentence from the text submitted by the Executive Committee, the resolution was adopted.

Resolution no. 2 calls attention to the register of astronomical meetings maintained by the Union, and requests the General Assembly to urge all Members to keep the administrative office fully informed of all plans for such meetings. It was adopted without discussion.

Resolution no. 3, concerning the activities of the Inter-Union Commission on Frequency Allocation for Radio Astronomy and Space Science, was originally submitted by Commission 40; the Executive Committee, in supporting this, has modified and strengthened the wording of the resolution. It was also adopted without discussion.

The full texts of these resolutions, in French and English, as adopted, are given on pages 93 to 97.

15. *Resolutions submitted by Commissions.* At the request of the Chairman, the General Secretary presented the report of the Resolutions Committee as follows:

'1. 38 resolutions have been received from Commissions.

'2. Of these, 16 are financial and have been considered by the Finance Committee as follows:

(a) 8 were recommended to the General Assembly for inclusion in the Budget as proposed.

(b) 4 were recommended to the General Assembly for inclusion in the Budget, with a reduction of the amount proposed.

(c) 3 were referred to the Executive Committee for favourable consideration under other items of the Budget.

(d) 1 was not received until after the Finance Committee had completed the proposals for the Budget and could not therefore be considered; it will be referred to the Executive Committee.

'3. The Resolutions Committee considered the remaining 22 resolutions with a view to recommending which should be formally submitted for consideration by the General Assembly.

'As a result, the Resolutions Committee recommends to the General Assembly that the following four resolutions should be considered:

(i) By Commission 4 and others: relating to the adoption of the new IAU system of fundamental constants of astronomy.

(ii) By Commission 12: relating to the regulation of aircraft flights near the path, and at the time, of solar eclipses.

(iii) By Commission 31: relating to the regulation and emission of time signals and frequency transmissions.

(iv) By Commission 41: relating to the conservation of old astronomical instruments.

'Of the 18 resolutions still remaining, the Resolutions Committee considered that: 11 concerned administrative matters (changes in Commissions, arrangements for symposia etc.) which should be referred to the Executive Committee; 6 others concerned matters that were not of such wide general interest as to warrant individual consideration by the General Assembly; 1 resolution, by Commission 40, of wide interest and importance, was referred to the Executive Committee for incorporation with any resolution that it might wish to make.

'4. A "blanket" resolution, to cover the resolutions by Commissions not formally considered by the General Assembly, in the following terms was recommended to the Executive Committee:

' "Considering the impracticability of giving individual attention to every resolution adopted by each of its 36 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."

The Chairman formally requested the General Assembly to approve this Report, and, in particular, to agree to consider the four resolutions named; the General Assembly gave its approval, and the General Secretary then formally proposed, in turn, the four resolutions (no. 4, by Commission 4 and the Joint Discussion on Astronomical Constants; no. 5, by Commission 12; no. 6, by Commission 31; and no. 7, by Commission 41) of which the full texts, in French and English, are given on pages 94 to 97. The General Assembly adopted each of the resolutions as proposed.

The General Secretary then reported that the Executive Committee had adopted the recommendation of the Resolutions Committee, and wished formally to propose Resolution no. 8, identical with that given in the Report of the Resolutions Committee, for consideration by the General Assembly. This resolution, of which the French and English texts are given on pages 96 and 97, was then adopted.

16. *Special Nominating Committee.* The President reminded the General Assembly of the agreed procedure by which a Special Nominating Committee—to consist of the President of the Union, the immediate past President, one retiring member of the Executive Committee (to be appointed by the Executive Committee) and four other members (to be appointed by the General Assembly)—is appointed within one year following each General Assembly to advise the Executive Committee on nominations for the new Executive Committee.

On this occasion there would be four members of the new Executive Committee who might retire in 1967, and the General Assembly had therefore to consider four alternative appointments of the four members.

The President then suggested, for the consideration of the General Assembly, the following alternative committees, the final composition being dependent on which of the retiring members of the new Executive Committee (W. N. Christiansen, Y. Hagihara, G. Haro or J.-C. Pecker) would be selected by the new Executive Committee:

‘There are four alternative compositions according to the choice, by the new Executive Committee, of the one of its members due to retire in 1967. The following suggestions correspond to these four possibilities.

President: P. Swings (Belgium)

Former President: V. A. Ambartsumian (U.S.S.R.)

Members elected by the General Assembly: C. S. Beals (Canada), I. S. Bowen (U.S.A.), B. Lindblad (Sweden)

together with:

EITHER Y. Fujita (Japan), if one of W. N. Christiansen (Australia), G. Haro (Mexico) or J.-C. Pecker (France) represents the Executive Committee,

OR L. Gratton (Italy), if Y. Hagihara represents the Executive Committee.’

These were approved by the General Assembly.

17. *New Members of the Union.* The General Secretary announced that, according to the Statutes, the Union is composed of Members approved, on the proposals of the Adhering Organizations or National Committees, by the Executive Committee on the basis of their achievement in some branch of Astronomy; and that, according to the By-laws, proposed changes in the list of Members are submitted by the Executive Committee to the Nominating Committee. He went on to say that the Executive Committee had acted according to these procedures and, on the advice of the Nominating Committee, had approved of the addition of 352 new Members and the deletion of 12 Members.

The complete lists of new Members had been prominently displayed and he did not propose to read the lists; they would, however, be published in the next *Information Bulletin* and would be incorporated in the list of Members to be printed in Volume XIIC of the *Transactions*.

At this point, the General Secretary asked the General Assembly to correct an error of omission on his part, for which he expressed his apologies to all concerned. By accident the name of Dr O. J. Gingerich (U.S.A.) had been omitted from the lists, although his candidature had been approved by the President of at least one Commission, and by his Adhering Organization. The General Assembly ruled that Dr Gingerich should become a Member of the Union.

18. *Commissions*

(a) The President announced that, sometimes as a result of proposals by the Commissions themselves, the Executive Committee formally proposed to the General Assembly that the following changes be made in the Commissions of the Union:

(i) The creation of the two following new Commissions:

No. 45: Classifications spectrales et indices de couleur à plusieurs bandes.

(Spectral Classifications and Multi-band Colour Indices.)

No. 46: L'Enseignement de l'Astronomie. (The Teaching of Astronomy.)

(ii) The following changes in the names and functions of the Commissions:

No. 17: To be re-named 'La Lune' (The Moon) and to treat all studies of the Moon (including those previously considered by Commission 16) with the exception of the theory of the orbital motion of the Moon, for which Commission 7 will accept responsibility.

No. 19: To be re-named 'La Rotation de la Terre' (Rotation of the Earth) and to treat all matters concerning the astronomical determination of both universal time and latitude; Commission 31, which will retain its name of l'Heure (Time), will treat the questions of the dissemination of time signals and the determination of Ephemeris Time.

No. 30: To be re-named 'Vitesses Radiales' (Radial Velocities).

These proposals were adopted by the General Assembly.

(b) The General Secretary, on behalf of the Executive Committee, submitted the following list of Presidents and Vice-Presidents of Commissions for election by the General Assembly, subject to their willingness to serve:

No.	President	Vice-President	No.	President	Vice-President
4	G. M. Clemence	G. A. Wilkins	26	K. Aa. Strand	P. Couteau
5	J. Kleczek	J. B. Sykes	27	G. H. Herbig	L. Detre
6	A. R. Hogg	F. L. Whipple	28	R. L. Minkowski	G. C. McVittie
7	Y. Hagihara	W. J. Eckert	29	J. Sahade	M. W. Feast
8	R. H. Stoy	A. A. Nemiro	30	R. M. Petrie	D. S. Evans
9	O. A. Melnikov	J. Rösch	31	H. M. Smith	N. N. Pavlov
10	Z. Svestka	J. T. Jefferies	33	B. J. Bok	G. Contopoulos
12	R. Michard	M. N. Gnevyshev	34	S. B. Pikelner	D. E. Osterbrock
14	Ch. Moore Sitterly	G. Herzberg	35	P. Ledoux	C. Hayashi
15	F. L. Whipple	L. Biermann	36	K. H. Böhm	A. B. Underhill
16	R. Wildt	G. Herzberg	37	M. F. Walker	G. Alter
17	D. H. Menzel	{A. Dollfus	38	M. G. J. Minnaert	M. Migeotte
		{K. Koziel	40	M. Ryle	J. P. Wild
19	B. Guinot	P. Melchior	41	E. Rybka	B. Sticker
20	P. Herget	S. G. Makover	42	J. E. Merrill	V. P. Tsesevich
21	F. E. Roach	M. Huruhata	43	T. G. Cowling	L. Davis
22	P. M. Millman	Z. Cepelcha	44	L. Goldberg	A. G. Masevitch
23	P. Sémirot	G. J. Järnefelt	45	W. P. Bidelman	Ch. Fehrenbach
24	A. N. Deutsch	W. J. Luyten	46	E. Schatzman	No appointment
25	V. B. Nikonov	A. W. J. Cousins			

(c) The General Secretary explained that, according to the By-laws, the members of the Organizing Committee of the Commissions are appointed by the Commissions themselves, subject to the approval of the Executive Committee and the General Assembly. He accordingly submitted for general approval the list of Organizing Committees, which had been approved by the Executive Committee. The Organizing Committees as approved by the General Assembly will be given in the list of Commissions in the next *Information Bulletin* and in Volume XIIC of the *Transactions*.

19. *The place and date of the thirteenth General Assembly.* The Chairman called upon Professor Dr Vladimír Guth to address the Assembly. Professor Guth spoke as follows:

‘Mr President, Officers, Members of the IAU, Ladies and Gentlemen:

‘It is a great honour for me, as Head of the Czechoslovak delegation to the Hamburg Assembly of the IAU, to have been authorized by the President of the Czechoslovak Academy of Sciences, Academician František Šorm, formally to invite the International Astronomical Union to hold its next—the thirteenth—General Assembly in 1967, in Prague. I am very pleased to stress that the Ministry of Foreign Affairs of the Czechoslovak Socialist Republic assures the Union that all participants qualified to attend the General Assembly under the Statutes will be welcomed as individuals to our country.

‘Astronomy has been cultivated in Bohemia as a scientific discipline since the foundation of Charles University, more than 600 years ago. Nowadays it is developed as a part of the activities of the Czechoslovak Academy of Sciences. The observatory at Ondřejov grows rapidly under its auspices, and the same is true of the high-altitude observatories at Skalnaté Pleso and Lomnický Peak of the Slovak Academy of Sciences. Our universities in Praha, Brno and Bratislava are responsible for the education of our new generation of scientists. Many popular observatories together with the Czechoslovak Astronomical Society, which unites hundreds of amateur astronomers, propagate astronomical knowledge among Czechoslovak peoples.

‘An understanding for international co-operation in astronomy is traditional in our country. One of the most famous observers of all ages, the Danish astronomer Tycho Brahe, and his assistant, one of the greatest theoreticians who have ever lived, the German astronomer Johannes Kepler, found in their time a refuge in Prague; they both were invited at the instigation of the Czech scientist Tadeáš Hájek z Hájku. Christian Doppler during his stay in Prague postulated and published in the papers of the Czech Royal Society of Sciences his well-known principle, by means of which we now measure not only the radial velocities of the most distant galaxies but also control the motions of artificial spaceships. And Albert Einstein, who lived in Prague for two years, discovered there the idea of the light-deflection in the gravitational field of large masses.

‘No wonder then, that this tradition of international collaboration without national discrimination led Czechoslovakia to join the IAU soon after its foundation. Since its first General Assembly in Rome in 1922, no Congress has been held without the participation of Czechoslovak delegates. Many Czechoslovak astronomers have taken part in the work of the Commissions, and two of them have had the honour of serving on the Executive Committee as Vice-Presidents. These circumstances, I hope, offer sufficient promise and guarantee that the next meeting in Prague will not fail to be a success. This event will be a great encouragement for our astronomers, especially as the year 1967 will be one of two-fold celebration for Czechoslovak astronomy. We shall remember there the centenary of the birth of Professor Nušl, former Vice-President of the IAU, and the first director of Ondřejov Observatory, which will celebrate in 1967 its seventieth anniversary together with that of its present Director. Also, we hope that the large two-metre telescope now being built for our observatory can be dedicated on this occasion.

‘The river Elbe, on the shores of which we have concluded our successful meetings and

discussions in Hamburg, has its sources in our country and connects the East with the West. Having now got acquainted with the diligent people living near its mouth, let us get acquainted with those who work hard at its source. I am convinced that it will be successful not only for the scientific collaboration, but also for the sake of peaceful coexistence among all peoples on our planet.

'Let me extend once more my cordial invitation to Czechoslovakia—to Prague—for the next General Assembly of the IAU in 1967.'

On the proposal of the President, the General Assembly unanimously agreed to accept the gracious invitation to meet in the city of Prague, Czechoslovakia, in 1967, the precise dates being left to the Executive Committee. The President expressed the thanks of the Union to Professor Guth.

20. *The Election of the new Officers.* The Chairman formally proposed that Professor P. Swings be elected the new President of the Union. This was approved by acclamation.

The Chairman reminded the Assembly of the names submitted for consideration at the first session and formally proposed that Professor W. N. Christiansen, Professor W. Fricke, Professor M. Schwarzschild and Professor A. B. Severny be elected Vice-Presidents, in place of Professor L. Goldberg, Dr R. M. Petrie, Dr B. Sternberk and Dr R. H. Stoy who were due to retire; this was unanimously approved.

He pointed out that Professor Y. Hagihara and Dr G. Haro would continue to serve as Vice-Presidents for a further term of three years.

The Chairman then proposed that Dr J.-C. Pecker should be elected General Secretary in place of Mr D. H. Sadler who now retired; this also was approved unanimously. He announced that the Statutes and By-laws now provided for the Assistant General Secretary to be a Member of the Executive Committee, and accordingly proposed that Dr L. Perek be elected Assistant General Secretary, and a member of the Executive Committee. The General Assembly expressed its approval of this, and of all the other appointments.

(Item 21 of the Agenda, the appointment of representatives to ICSU, did not arise owing to the adopted changes in the By-laws.)

22. *Addresses by the retiring and newly-elected Presidents.* The President addressed the Assembly as follows:

'Before asking the newly-elected President to take the chair, I should like, with your kind permission, to take some more of your time.

'I was greatly honoured when our Union, despite the great number of outstanding astronomers on the list of its membership, elected me President at the meeting in Berkeley. I have tried to do my best in serving the Union, but I realize that, with the tremendous growth of our Union, more effort and energy were needed.

'I have been much satisfied in working as President, for I have ever been conscious not only of the overriding importance of the IAU but also of the fact that the entire atmosphere of our mutual relations, at the numerous Commissions, Symposia and at the Executive Committee itself, has been one of complete harmony. Scientific objectives have united us in our efforts and continue to be the guiding motive of our deeds.

'However, I should have been involved in a great many difficulties in this post, had it not been for the wonderful efficiency and organizational talent of our General Secretary, Mr Sadler. In addition to such exceptional discharge of his duties I have been greatly impressed by Mr Sadler's tactfulness, thanks to which the solution of any problem suggested by him has seemed to me not only my own view but also to have been my own suggestion.

'But to take up the matter seriously, we have in fact never been at variance. At the same time, I should like to point out that Professor Pecker, the new General Secretary, has been of

invaluable service to the Union for the past three years in the capacity of Assistant General Secretary.

'I am most grateful to the Vice-Presidents who have co-operated with me: Professors Goldberg, Hagihara, Haro, Petrie, Sternberg and Stoy. Evidently we have been quick on the uptake since the sittings of the Executive Committee often concluded ahead of time owing to the brevity of the discussions.

'My thanks are especially due to the former President, Professor Oort, whose friendly advice the Executive Committee has continuously been accepting.

'Therefore I propose to express our word of gratitude to the General Secretary whose term of office expires today, and also our thanks to the Assistant Secretary, Miss D. A. Bell.

'Now it is a great honour for me that Professor Pol Swings, whose scientific achievements in astrophysics and especially in astro-spectroscopy are well known to all Members of Union, will succeed me as President of the Union.

'On your behalf, I invite Professor Swings to take the chair and the newly-elected Members of the Executive Committee to take their seats on the platform.'

The newly-elected President, having taken his seat in the chair, addressed the retiring President, and other Members and guests, as follows:

'To be your successor, my dear Ambartsumian, is indeed a very great honour, and I am most grateful to the Union for such a mark of confidence and friendship, the highest mark indeed for which an astronomer may wish. But it is at the same time a source of embarrassing worries and serious responsibility. When I was asked some time ago whether I would accept the presidency I could not fail to compare my modest scientific or organizational achievements to yours, and to those of your distinguished predecessors, and the results of such a comparison were only too obvious to me. Indeed I hesitated, and tried to understand how it was that my name happened to be considered. I knew that the colleagues who selected my name were friends with whom I have had long associations and who certainly were aware of my shortcomings. I thought that, maybe, the IAU wanted to express its sympathy towards my small and unassuming country where the IAU happened to come into existence 45 years ago.

'Ou, peut-être, l'UAI désirait-elle simplement récompenser la fidélité, car, depuis le Congrès de Paris de juillet 1935, j'ai eu la chance et le bonheur de pouvoir participer à tous nos congrès et à leur exprimer mon attachement en servant comme traducteur, secrétaire de séance, Président de diverses commissions, Vice-Président du Comité Exécutif. J'en ai conclu que je devais accepter, afin d'encourager mes jeunes collègues à être également fidèles aux Congrès de l'UAI et à manifester, en toute occasion, leur attachement au caractère international de notre Union et de notre Science.

'Certes, j'éprouvais de vives appréhensions. Le prestige de savants comme Ambartsumian, Oort, Danjon, Struve, Lindblad, Spencer Jones, Eddington, Esclangon et Schlesinger—je m'arrête à 1935, date de mon premier Congrès—pouvait faciliter leur tâche présidentielle.

'In my case I knew that I had essentially to count on the generous help and loyal advice of my predecessors: on your help, President Ambartsumian and General Secretary Sadler, who will continue to advise the Executive Committee; sur les conseils des Professeurs Oort et Lindblad qui, depuis une trentaine d'années, ont bien voulu me traiter en ami; sur les avis autorisés de Monsieur Danjon, dont nous regrettons l'absence et sur qui je sais que je pourrai toujours compter. Bien sûr, je savais aussi que le nouveau Secrétaire Général, le Professeur Jean-Claude Pecker, dont je connaissais le dynamisme, la compétence et le dévouement, faciliterait grandement la tâche présidentielle et qu'il en serait de même pour le Secrétaire Général Adjoint, Dr Lubos Perek. And we are well aware, Dr Pecker, Dr Perek and I, that

we shall be able to count on our wonderful past General Secretary, Mr Sadler, and on the new Executive Committee.

'La vie de l'UAI a bien changé depuis que, en 1920, mon pays y adhéra en même temps que six autres, le Canada, la France, le Royaume-Uni, la Grèce, le Japon et les Etats-Unis, suivis d'ailleurs en 1921 de l'Italie et du Mexique et en 1922, au moment du Congrès de Rome, de dix autres pays. Sans compter les invités, il y avait 83 membres présents à Rome. Mais que de noms brillants parmi ceux-ci et, notamment, parmi les Présidents des 32 Commissions: Eddington, Baillaud, Andoyer, Abbot, Deslandres, Hale, Newell, Kimura, Brown, Leuschner, Schlesinger, Seares, Aitken, Bigourdan, Adams, Campbell, etc.

'Je me rappelle mon premier Congrès, celui de 1935 à Paris, comme si c'était hier. Schlesinger le présidait et Stratton en était le dévoué Secrétaire Général. Il y eut 317 participants et beaucoup d'entre nous pensaient que le nombre maximum était atteint. Je me souviens de ma fierté lorsque je fus invité à servir de jeune secrétaire aux séances présidées par Henry Norris Russell, à qui je devais succéder, quelques années plus tard, comme Président de la Commission 29 des Spectres Stellaires, après mon si regretté ami, notre ancien Président Otto Struve.

'Actually all the IAU meetings have met with great success. To all the faithful participants they have left unforgettable memories. The present one has followed the tradition, and has been a tremendous success. We have lived these days in Hamburg in a very friendly atmosphere, uniting astronomers from all over the world.

'Je n'ai aucun doute que le prochain Congrès à Prague remportera un succès égal à ses prédécesseurs. Les exemples de nos devanciers ont rendu nos tâches relativement faciles, malgré l'accroissement de population et les problèmes qui en résultent. L'enthousiasme des Membres de l'UAI n'a pas décliné depuis 30 ans et nous pouvons compter sur la jeune génération pour garder intacts les liens amicaux et professionnels étroits entre astronomes du Nord et du Sud, de l'Est et de l'Ouest.

'Le nouveau Comité Exécutif, aidé des conseils du Professeur Ambartsumian, de M. Sadler et des autres anciens Présidents et Secrétaires Généraux, s'attaquera de son mieux aux problèmes que rencontre l'UAI, en particulier à cause de sa croissance rapide. Nous essayerons de veiller au caractère universel de la science à laquelle nous avons consacré notre vie professionnelle. Nous espérons ainsi apporter notre contribution à la paix entre les Nations.

'Members of the IAU, during these three years you have been able to appreciate the work of President Ambartsumian and of General Secretary Sadler. Both deserve our very deep gratitude. I propose a standing vote of thanks to Viktor Ambartsumian and to Donald Sadler.'

23. *Closing ceremonies.* The Chairman called upon Dr A. Reiz to propose a comprehensive vote of thanks, in the course of which he said:

'Very soon this association will break up and we will be in orbit on the way to our different home stations.

'Before we do so, I have the privilege of expressing on behalf of all of you a vote of thanks to all of those who have contributed to make this twelfth General Assembly of the International Astronomical Union such a successful and delightful event.

'It will unfortunately not be possible for me to mention all who have dedicated their interests and efforts to achieve this, and for those omissions, accidentally made, I must apologize. But I can assure you that all of us have on many occasions noted the spirit in which your work has been carried out, and this has impressed us deeply and created bright and lasting memories.

'Zuerst möchten wir dem Präsidenten der Bundesrepublik Deutschland, Dr Heinrich Lübke, danken sowie dem Herrn Bundesminister für Wissenschaftliche Forschung, Hans Lenz, der bei der Eröffnungsfeier von Ministerialdirektor Dr Hans Engelhardt offiziell vertreten wurde.

‘Ganz besonderen Dank schulden wir dem Bürgermeister und dem Senat der Freien und Hansestadt Hamburg für ihren Empfang und für die Gelegenheit eine so herrliche Aufführung in dem grossartigen neuen Opernhaus geniessen zu können.

‘Sehr geholfen hat uns der Rektor der Universität Hamburg, indem er der Union die Universität als Tagungsort zur Verfügung stellte; wir haben uns alle in den schönen Sitzungsräumen, sehr wohle gefühlt.

‘Besonders erwähnt werden soll das “German Fund” das vielen Astronomen, jungen und alten, die sonst nicht hätten kommen können, die Teilnahme an der Tagung in Hamburg ermöglicht hat. Wir danken denen die zu diesem Fonds beigetragen haben und denen die es verwaltet haben.

‘Wir sind ebenfalls Herrn Professor W. Fricke, den Vorsitzender des Rates Westdeutscher Sternwarten und Herrn Professor O. Heckmann, beide Mitglieder des Nationalen Komitees, für ihre grosszügige und freundliche Unterstützung zur Dank verpflichtet.

‘The Secretariat of the Union, in close co-operation with the Local Organizing Committee, has carried out the careful planning of the General Assembly. Let me, however, make special mention of the Chairman of the Local Organizing Committee, Professor H. Haffner, on whose shoulders a substantial part of the preparations has rested, and who certainly deserves our deepest appreciation for the success this meeting has proved to be.

‘The past days have been filled with scientific work, but Professor Haffner has been able to create a very specific atmosphere by arranging musical events of great variety. We were all entranced by the eighteenth-century music of the Inaugural Ceremony; many of us have listened with extreme enjoyment to the concerts in the “Kleine Musikhalle” and some of the participants were so thrilled with the Bach Toccata in the church at Neuenfelde that for them it was the real highlight of this General Assembly.

‘This is also the proper place to mention the most competent assistance given to the Local Organizing Committee by Miss Christine Sachs. She has played an essential part in all aspects of the enormous work of looking after the needs of some 1500 people, from the supervision of the printing of the programme to the organization of the many trips and excursions. She has at all times been the quiet, unhurried and intensely efficient mistress of an enthusiastic team of willing and friendly helpers.

‘In this connection I would like to include the staff at the Hamburger Sternwarte, whose competent and dedicated work contributed so much to the success of the visits to the Observatory.

‘Among so many it is difficult to mention individual persons, but I must refer to the solid work of Dr H. Kox of the Local Organizing Committee, and of Dr W. Dieckvoss, who has edited so admirably our daily newspaper.

‘I would fail grossly to fulfil my task if I did not make special mention of the contributions made by the General Secretary and the Assistant General Secretary, ably assisted by Miss Dorothy Bell, Miss Nel Splinter and Mlle Geneviève Drouin. The planning of this whole undertaking, which apparently was started immediately after the Berkeley meeting, has to a very large extent been in their competent hands and the smooth running of the scientific and administrative activities could not have been achieved without their preparations.

‘In conclusion, I shall ask you to join me in expressing our gratitude to all those who have contributed so much towards achieving this highly successful General Assembly.’

On behalf of the ladies, Mrs Magda Whitrow addressed the Assembly as follows:

‘Herr Präsident, meine Damen und Herren!

‘Es fällt mir heute die grosse Ehre zu, im Namen der Gäste, allen denen zu danken, die uns unseren Aufenthalt in Hamburg so schön und ereignisreich gemacht haben. Vor allem möchten wir Frau Heckmann und Frau Haffner unseren herzlichsten Dank aussprechen. Sie haben das Programm entworfen und sich unendliche Mühe und Arbeit gemacht, um uns zu unterhalten. Während unsere Ehemänner sich mit ihren himmlischen Aufgaben beschäftigten, waren sie die Sterne, die uns den Himmel auf die Erde brachten.

‘Es gibt wohl kaum eine Stadt, die dem Fremden in jeder Beziehung so viel zu bieten hat wie Hamburg. Es gibt viele Städte, die schöne Parkanlagen haben oder am Ufer eines Sees liegen, oder sich eines grossen Hafens rühmen. Aber ich kenne keine andere, die all dies in sich vereint und darüber hinaus noch eine Weltstadt ist, die grosse Kunstschatze besitzt und in der sich eines der grössten und modernsten Opernhäuser der Welt befindet. Die Führungen durch die Stadt, den Hafen und die Umgebung, die Sie für uns veranstalteten, haben es uns ermöglicht, Ihre herrliche Stadt und ihr Umgebung kennen und lieben zu lernen. Ganz besonders danken wir Frau Nevermann, die uns im Namen des Hamburger Senates auf dem Schiff empfing, mit dem wir den Hafen besichtigten und bei Kaffee und Torte eine lustigen Elbfahrt unternahmen. Unser Dank gilt auch all jenen, die uns Ihre Kunstschatze zeigten: dem Kustos des Barlach Museums, dem Direktor des Kunstmuseums, und auch den Damen, besonders Frau Voigt und Frau Wellmann, die als Reiseführer sich grosse Mühe gaben, uns alles zu erklären und in so viele Sprachen zu übersetzen. Auch den Damen und Herrn im Auskunftsbüro, die immer bereit waren uns zu helfen und uns zu beraten, möchten wir Dank sagen. Ganz besonders gilt unser Dank Fräulein Christine Sachs, die im Hintergrunde so sehr zu unserem Vergnügen beigetragen hat.

‘Those of us who come from England you have made particularly welcome by offering us the sort of weather which is so familiar to us: rain and sunshine; a great variety of temperatures; some perfect autumn days; even a heat wave and never a dull moment. The lovely hot weather last week even led to the formation of a new Commission—I believe it would be no. 47 if officially recognized—‘swimming’ in one of your beautifully landscaped open-air baths. But that is not the only amenity which this great city has provided. In particular, you have made us feel very much at home by your expert knowledge of languages and your skill in translating them. All those responsible for the ladies’ programme must have worked terribly hard and in the name of all the ladies I want to say how very much we have appreciated all that you have done.

‘Puisqu’il est vraiment impossible de remercier d’une façon suffisante pour une hospitalité offerte si généreusement, permettez-moi de profiter de ces derniers moments que nous passons ensemble pour exprimer, en un nouveau témoignage, la satisfaction et la gratitude que nous devons à tous ceux qui ont tant oeuvré, non seulement sur le devant de la scène, mais aussi pendant de longues heures dans les coulisses. Je désire particulièrement remercier à nouveau Madame Heckmann et Madame Haffner. Merci mille fois, bolshoya spasibo, thank you very very much, vielen herzlichen Dank!’

The Chairman then called upon the retiring General Secretary, who spoke as follows:

‘I want you to join with me in expressing your special appreciation of the work of our secretaries.

‘As General Secretary I inherited, from my predecessor Professor Oosterhoff, Miss Nel Splinter whom I named “Miss IAU”; it is impossible to imagine anyone more devoted, more hard-working, more efficient or more charming. Many of you will recall her remarkable achievement in running, almost alone, the eleventh General Assembly in Berkeley. Unfortunately for the Union, she returned to her native Netherlands two years ago; but we have been privileged to have

had her help during this General Assembly, and I can find no words of thanks adequate for someone who has given up her annual holiday in order to work long hours on our behalf. The Union can be proud that its former Assistant Secretary holds it in such regard!

'For the past two years the Union has been fortunate in having Miss Dorothy Bell (Miss IAU II) to serve as Assistant Secretary. She has had to face, with the minimum assistance, a great expansion in the activities of the Union; we all owe her a great debt for her intelligent and efficient work, especially in the preparation for this meeting.

'Never could a General Secretary have received such whole-hearted support from two such charming, devoted and efficient secretaries! And I am glad to be able to follow the lead of my predecessor and to hand over to my successor an Assistant Secretary well worthy of the name of Miss IAU!

'On this occasion we have been much helped by Dr Pecker's secretary, Mlle Geneviève Drouin, whose quiet calmness has tended to conceal her great proficiency.

'To all three I now ask you to show your gratitude.'

The General Secretary asked the permission of the Chairman to speak, and said:

'A ce que vient de dire le Secrétaire Général sortant, permettez au Secrétaire Général Adjoint sortant d'ajouter quelques mots.

'A travers ce que vous avez entendu au cours de cette XII^e Assemblée Générale, au moment où elle se termine, et où Donald Sadler quitte le Comité Exécutif après plus de six ans d'administration de l'UAI, vous pouvez vous rendre compte de l'admirable combinaison de travail inlassable, de diplomatie, de ténacité que son activité a représentée pour le plus grand bien de l'Astronomie en général, c'est-à-dire de notre Union, et des astronomes de tous les pays. Au cours des trois années passées, où les affaires de l'Union m'ont fait travailler à ses côtés, j'ai découvert, derrière le Secrétaire Général, un ami nommé Donald Sadler. Let him accept on my part not only the feeling of admiration for his considerable and efficient work as General Secretary (an admiration which fills me with fear, when looking at the coming three years' period) but also my personal gratitude for what I have learned from him, as well as for our friendship—a feeling which I take the pleasure to extend to Flora McBain Sadler as well. Ce fut une expérience extraordinaire que de travailler avec le Professeur Ambartsumian, avec Donald Sadler, avec Miss Bell. Il est bon de penser que leur présence aux réunions à venir du Comité Exécutif nous apportera leur compétence, et leur amitié—et tout particulièrement l'expérience du Secrétaire Général sortant, dans notre travail, aux côtés du Professeur Swings, au service de l'Union Astronomique Internationale.

The President then closed the meeting (around 11^h 00^m) with the following words:

'Nous nous retrouverons à Prague en 1967. I wish you all a happy return to your homes.

'I hereby declare the twelfth General Assembly of the IAU closed.'