

GENERAL ASSEMBLY

AGENDA

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 (1964–66);
 - (b) Report on the period January–August 1967;
 - (c) Report of decisions taken at meetings in Prague, August 1967, in particular of the admission of new National Adhering Organizations.
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. Consideration of resolutions submitted by Adhering Organizations or National Committees of Astronomy (points 6 and 7 of the By-laws).

Three such resolutions were formally submitted before the statutory deadline. They are shortly described, as follows:

 - (a) (Germany–D.D.R.) to create a new IAU Commission for Relativistic Astrophysics and Cosmology;
 - (b) (Belgium) to provide astronomical publications with abstracts of a standard type;
 - (c) (Belgium) on the determination of short-period terms of nutation.

The resolutions should be submitted for advice to the competent Commissions prior to the General Assembly.
10. Consideration of resolutions submitted by Commissions or by Inter-Union Commissions. Three such resolutions have been formally submitted. Their list follows. Other resolutions, not included in this list, have only been presented in a draft form, with the implication they will be discussed first by the Commissions.
 - (a) (Commission 42) On a subvention to the Bibliography and Programme Notes for Eclipsing Binaries;
 - (b) (Commission 42) On a grant for the third Colloquium on Variable Stars;
 - (c) (Commission 42) On a grant for the publication of Eclipsing Binaries Circulars.

These resolutions, having financial implications, should be submitted for advice to the Executive Committee and to the Finance Committee, and discussed under items 11 (b) or (c).
11. Report of the Finance Committee.
 - (a) The accounts for 1964–66;
 - (b) The additional budget for 1967;
 - (c) The budget for the ensuing period.
12. Consideration of the unit of subscription for the ensuing period.

The Executive Committee will propose to the Finance Committee that the unit of subscription be increased to its maximum value of 900 gold francs.

13. Consideration of resolutions submitted by the Executive Committee.
14. Consideration of resolutions submitted by the Commissions (subject to the recommendation of the Resolutions Committee).
15. The appointment of the Special Nominating Committee.
16. The nomination of new Members of the Union.
17. Commissions:
 - (a) The dissolution and the creation of Commissions;
 - (b) The election of Presidents and Vice-Presidents;
 - (c) The membership of Organizing Committees.
18. The place and date of the fourteenth General Assembly.
19. The election of a President, six Vice-Presidents, a General Secretary, and an Assistant General Secretary.
20. Addresses by the retiring and newly-elected Presidents.
21. Closing Ceremonies.

At the first session of the General Assembly, held on 22 August 1967 from 14^h00^m to 16^h00^m, items 1 to 10 of the above agenda have been considered. The remaining items, and those which have been adjourned from the first session, have been considered at the second session, held on 31 August 1967 from 9^h00^m to 12^h00^m.

FIRST SESSION

*Held on Tuesday 22 August at 14^h00^m, in the Congress Hall in
J. Fučík Park of Culture in Prague*

Professor Pol Swings, 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 thirteenth General Assembly of the Union.

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

from English to French: L. Houziaux and P.R. Demarque

from French to English: R. Kandel and H. Reeves

This was unanimously approved.

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

UNESCO: Mr E. M. Fournier d'Albe

IUGS (International Union of Geological Sciences): Dr G. Fielder

IGU (International Geographical Union): Prof. Korčák

IUCr (International Union of Crystallography): Dr A. Líněk

IUGG (International Union of Geodesy and Geophysics): Prof. P. Tardi

URSI (Union Radio Scientifique Internationale): Dr J.-L. Steinberg

The President then welcomed the representatives of various inter-union bodies and of other organizations represented in Prague, as well as representatives of several Academies of Sciences.

The President suggested that a message be sent to the President of the Socialist Republic of Czechoslovakia. This proposal was approved by acclamation.

The President then referred to the loss the Union had suffered during the past three years as a result of death; unable to pay individual tribute to all deceased Members, he however expressed the indebtedness of the Union to three of its past officers recently deceased, André Danjon, Bertil Lindblad, and Robert Methven Petrie.

The President then asked Members to stand while the General Secretary read the following list of Members who had died since the last meeting, or whose death was not known at the time of that meeting:

H.L. Alden, J.M. Aller, Sir Edward Appleton, F. Baldet, D. Barbier, A. Bečvář, D. Brouwer, L. Cadarso, L. Carnera, G. Cassinis, A. Danjon, A. Dermul, M.S. Eigenson, F. Fernandez de la Puente, E. Finlay-Freundlich, J. Génard, J. Gadomski, A. Güttler, C.B. Haselgrove, T. Hanaka, M.B.B. Heath, W.W. Heinrich, D. Hendrix, A.R. Hogg, G. Horn d'Arturo, I.G. Izsak, H.S. Jelstrup, F. Kepinski, E.A. Kreiken, D.K. Kulikov, G. Lemaître, B. Lindblad, J.C. Lindsay, D.B. McLaughlin, J.E. Mack, D.D. Maksutov, E.L. Martin, W.F. Meggers, S.K. Mitra, K. Moder, J.J. Nassau, N. Nechvile, B.A. Orlov, B.M. Peek, G. Pels, J.G. Perel, R.M. Petrie, V.F. Proskurin, G. Racah, F. Rigaux, N. Robinson, G.W. Rougoor, A.M. Rozis-Saulgeot, H. Schneller, E. Schoenberg, F.H. Seares, V.V. Sharonov, H. Siedentopf, E.C. Slipher, J. Stebbins, M.F. Subbotin, P.Y. Tsiang, Y. Tsukamoto, L. Vegard, J.H. Waddell, A.A. Weiss, F. Wünschmann.

At the request of the President, the General Secretary expressed the satisfaction of the Union to see in Prague so many astronomers, but also its regret of the absence, due to illness, of some eminent colleagues, in particular Professor Melnikov, President of Commission 9. As it was not possible to send individual messages, the sympathy of the Assembly to the absent colleagues was expressed through its unanimous applause.

The President then welcomed in particular those who have played an important role in the past life of the Union, Professor Ambarcumjan, Professor Oort, Professor Oosterhoff, Dr Sadler. He also welcomed Lady Spencer Jones and Mrs Lindblad, widows of the former Presidents of the Union, Sir Harold Spencer Jones and Professor Bertil Lindblad.

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) The General Secretary then read the following addendum to the Report of the Executive Committee, concerning the period January–August 1967.

RAPPORT COMPLÉMENTAIRE DU COMITÉ EXÉCUTIF SUR LA PÉRIODE JANVIER–AOÛT 1967

Introduction. Ce rapport complémentaire couvre la période qui s'étend du 1 janvier 1967 au 31 Juillet 1967. Il est rédigé d'un façon succincte, le volume qui sera publié à l'occasion de la quatorzième Assemblée Générale de l'Union Astronomique Internationale devant normalement contenir la période qui débute au 1 Juillet 1967.

Décisions prises par correspondance par le Comité Exécutif. Depuis le 1 janvier 1967, le Secrétaire Général a adressé aux membres du Comité Exécutif sept lettres circulaires, relatives à divers problèmes. Le Secrétaire Général Adjoint a également correspondu avec le Comité Exécutif sur des détails d'organisation des réunions et manifestations diverses liées à l'Assemblée Générale.

Les principales décisions concernent les points suivants:

(a) Préparation d'une liste de noms devant être proposés aux suffrages de l'Assemblée Générale comme Président, Vice-Présidents, Secrétaire Général, Secrétaire Général Adjoint de l'Union pour la période 1967–1970 (voir ci-après points 5 et 19 de l'Ordre du Jour).

(b) (Voir rapport financier, in *IAU Trans.*, 13A, page xxxvii et page lii).

Le Comité Exécutif a approuvé la décision de demander à l'Assemblée Générale l'augmentation de 600 à 900 francs-or de l'unité annuelle de contribution des Organisations Adhérentes. Cette décision a été aussitôt portée à la connaissance des Comités Nationaux afin de leur permettre de prendre position à ce sujet avant l'Assemblée Générale où elle sera discutée sous le point 12 de l'Ordre du Jour. Elle correspond à l'augmentation maximum permise par les Statuts (article 11(b)),

et il sera donc nécessaire de prévoir une nouvelle modification des Statuts, qui sera peut-être assez importante.

(c) Par ailleurs, le Comité Exécutif a approuvé une action conjointe du Président et du Secrétaire Général en vue de rassembler un fonds de réserve, grâce à des appels à des fondations publiques et privées. Un petit nombre d'organismes ont répondu; cette campagne est encore trop récente pour qu'elle ait pu porter tous ses fruits. Mais la décision du Comité Exécutif s'explique par la situation financière grave de l'UAI. Cette situation, après l'action en question, reste grave. Il en sera de nouveau question sous d'autres points (point 11) de l'Ordre du Jour.

(d) Le Comité Exécutif a accepté, par ailleurs,—avec gratitude—, le prêt sur 5 ans (sans intérêt) d'une somme de \$10000 de la part du Conseil International des Unions Scientifiques.

(e) Un groupe de travail (Professeurs Swings, Président, Goldberg, et Gratton) a été constitué pour l'étude des effets, peut-être dangereux pour l'astronomie, du Projet 'Able', envisagé par des autorités spatiales et militaires des U.S.A.

(f) Enfin, le Comité Exécutif a décidé la modification du contrat passé avec nos éditeurs, ce qui impliquera sans doute le changement d'éditeur, et peut-être d'imprimeur.

Colloques et Symposiums. Depuis le 1 Janvier 1967, les réunions suivantes ont été organisées par l'UAI:

—Symposium no. 32, Continental Drift, the Motion of the Pole, and the Rotation of the Earth, Stresa, mars 1967.

—Colloquium on Spectroscopy, Bombay, janvier 1967.

—Colloquium on the Zodiacal Light and the Interplanetary Medium, Honolulu, janvier 1967.

Divers. Un grand nombre de discussions ont eu lieu, et des correspondances nombreuses ont été échangées notamment sur les importants problèmes suivants:

—Eventuelle création d'un 'solar-terrestrial service';

—Eventuelle création d'une Commission Interunion sur la Chimie Extra-terrestre;

—Organisation de la Commission Interunion sur la Physique des Relations Soleil-Terre.

Ces discussions sont encore en cours et aboutiront éventuellement au cours des mois à venir.

3. (c) *Report on decisions taken by the Executive Committee.*

(i) The General Secretary reported that the Executive Committee had admitted Columbia as a National Member, with the Academia Colombiana de Ciencias Exactas, Fisico Quimicas y Naturales as Adhering Organization. On behalf of the President, he welcomed Professor J. Arias de Greiff, national representative of Columbia, at this General Assembly.

(ii) On behalf of the Executive Committee the President then much regretted to inform of the resignation of the Lebanese Republic from adherence to the Union.

(iii) The President expressed the wishes of the Union to welcome in a near future new Adhering Countries, with many of which correspondence has been exchanged to this purpose, and from which astronomers have been able to attend this meeting.

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 that he would like to make some informal remarks, expressing his personal views on the present and future situation of the Union. He spoke as follows:

'Le rapport du Secrétaire Général qui figure au point 4 de l'Ordre du Jour est bien souvent tout d'abord l'expression de sa modestie, vraie ou fausse! Il se compare aux grands Anciens, tellement plus efficaces qu'il ne put jamais l'être; et il évoque avec complaisance la généreuse tradition de notre Union. Son caractère d'affectueuse intimité, hélas, diminue d'Assemblée Générale en Assemblée Générale, mais la cohérence en reste permanente. Dans une atmosphère certes difficile, elle est rendue toujours plus profonde par la solidarité désintéressée de tous ses Membres. Et la tradition se perpétue ainsi depuis un demi-siècle!

'Je ne faillirai certes pas à cette tradition. J'ai conscience d'arriver devant vous, en ce mois d'août 1967, avec le sentiment de n'avoir pas utilisé mon temps de Secrétariat Général, réduit maintenant,—et comme c'est justifié!—à trois années, aussi bien qu'il l'aurait fallu. Si le budget

que je vous présente est équilibré, ce n'est pas comme celui de mes prédécesseurs, en raison d'une saine gestion, c'est par la vertu d'une arithmétique artificielle inspirée du budget célèbre d'un certain Procuste, fabricant de meubles dans la haute Antiquité.

'J'ai conscience aussi de devoir à l'Union plus qu'un budget équilibré. Je vous dois aujourd'hui une analyse brève, mais claire, de la situation actuelle; cette analyse, je l'ai présentée au Comité Exécutif en plus de détails; et le Comité Exécutif a eu la bonté d'approuver mon action, et d'approuver certaines de mes suggestions. Excusez-moi aujourd'hui si je me limite à l'essentiel.

'Les ressources de l'UAI, en augmentation limitée, sont essentiellement les cotisations des Etats membres; le plus cotisant des États verse actuellement pendant trois ans une somme qui serait insuffisante pour rembourser le voyage à Prague des Présidents de Commissions qui sont originaires de ce pays! En revanche, les dépenses de l'Union,—et je ne le regrette pas!—augmentent d'une façon exponentielle et rapide. Permettez-moi quelques exemples:

'Au temps des idylles, avant la Seconde Guerre Mondiale, le nombre des Membres de l'UAI était passé de 207 (en 1922) à 554 (en 1938) et le nombre de pages des *Transactions* de l'Union augmentait dans les mêmes proportions. Un budget assez large permettait une activité normale, un Secrétaire Général sans assistance aucune pouvait assurer normalement une administration simple.

'Après la Seconde Guerre Mondiale, le budget restait assez large, et les recettes suffisamment excédentaires, pour que des entreprises nouvelles soient favorisées, et notamment pour qu'un secrétariat plus étoffé puisse s'occuper entre les Assemblées Générales, et non plus seulement à l'occasion de celles-ci, des nouveaux problèmes de l'Union. De très nombreux projets étaient financés; mentionnons seulement certains d'entre eux: l'échange des astronomes, les Bulletins d'Information de l'Hémisphère Sud, les symposiums de toute nature (le premier symposium organisé en dehors d'une Assemblée Générale date, sauf erreur de ma part, de 1949; il s'agissait d'un colloque organisé en coopération avec l'Union Internationale de Mécanique Théorique et Appliquée; le suivant date de 1953) et bien sûr leur publication...

'Mais je vous l'ai dit, la courbe ascensionnelle lente des recettes était rattrapée, et je fixe ce rattrapage à la période qui vient de s'écouler, et très vite dépassée, par la courbe ascensionnelle rapide des dépenses.

'Ceci, c'est le premier problème: je vois en face de moi, les regards furieux de mes plus vieux amis, et j'en souffre comme eux: n'ai-je pas été contraint de demander au Professeur Minnaert de limiter l'aide à l'échange des astronomes, une des entreprises les plus utiles pourtant de l'UAI? N'aperçois-je pas le regard aigu de Dick Thomas qui me reproche le prix élevé de nos publications, et de n'en pas distribuer gratuitement un plus grand nombre? Le Dr Sahade ne s'attriste-t-il pas à juste titre de mes réticences devant les besoins financiers de l'excellent bulletin de liaison des astronomes de l'hémisphère austral? Les Présidents de Commissions,—et ils sont une quarantaine,—ne m'en veulent-ils pas un peu d'avoir été obligé de leur demander de trouver dans leur propre pays les ressources nécessaires à leur voyage à Prague, contrairement aux traditions les mieux établies?

'Il est donc clair que certaines traditions doivent disparaître; et je crains que la générosité excessive n'en soit une. Sur ma proposition, au cours de ces trois années, le Comité Exécutif a été obligé de prendre des décisions impopulaires à cet égard. Soyez assurés qu'il sera impossible au Comité Exécutif qui va entrer en fonctions de ne pas continuer une politique d'austérité, et je vous demande, instamment, de l'y aider, avec autant de continuité que de sincérité.

'Il est clair aussi que nos ressources doivent augmenter. Certes, les mesures que nous vous proposons sont de nature à résoudre momentanément le problème budgétaire; elles ne permettent pas de modifier le déséquilibre des croissances respectives des recettes et dépenses; mais seulement de retarder un peu—de l'espace entre deux Assemblées Générales,—le point critique. Les espoirs que nous avons de la vente des symposiums sont, je dois le dire, vains: si le nombre de Membres de l'UAI augmente, le nombre d'acheteurs n'augmente guère; il s'agit toujours des bibliothèques d'instituts; et malgré mes exhortations, publiées dans le *Bulletin d'Information* de l'UAI, et que je considère aujourd'hui comme du domaine du rêve éveillé, les Membres de l'UAI n'achètent pas les symposiums. Je ne vois pas clairement, compte tenu des efforts demandés aujourd'hui aux

organisations nationales adhérentes, compte tenu de l'aide, certes estimable, mais encore très insuffisante, des organisations internationales, comment nous pourrions donner à nos ressources un taux de croissance égal à celui de nos dépenses.

'Le temps d'une grande mutation me semble donc venu. Je ne veux pas, à cette tribune, entrer dans le détail de la révolution qui peut aujourd'hui sembler nécessaire. Une discussion ouverte serait d'ailleurs inopportune avant un examen très approfondi de la situation par le Comité Exécutif.

'Mais plusieurs solutions paraissent évidentes. Tout d'abord une refonte complète de nos Statuts et de nos Règlements, donc de notre administration, devrait pouvoir nous rendre capables d'affronter l'explosion scientifique à laquelle nous participons, en 1967, en astronomie comme ailleurs. Les ressources devraient d'une façon ou d'une autre être rendues proportionnelles au nombre de Membres. Certaines libéralités d'un autre âge doivent cesser, par exemple la trop large distribution des *Draft Reports*. Les Assemblées Générales devraient, peut-être, se limiter à des réunions administratives de quelques centaines de personnes au plus,—tous les quatre ans peut-être, et non plus tous les trois ans. En revanche, de grands symposiums spécialisés, mais sans activité administrative, pourraient grouper, de temps à autre, plusieurs commissions. Plusieurs écueils sont à éviter, et je ne voudrais pas que ces suggestions soient prises de façon trop littérale. Il faut éviter l'éclatement de l'astronomie, happée par tant de forces centrifuges, et pour cela, il vaut mieux éviter la création de larges associations permanentes et choisir plutôt la formule de larges symposiums *ad hoc*. Il faut aussi, je crois, éviter la suppression des Membres individuels de l'Union: c'est grâce à cette originalité, me semble-t-il, qu'au lieu d'être un cénacle de notables, nous apparaissions vraiment comme la jeune astronomie vivante,—et l'âge moyen de cette assistance me donne clairement raison.

'De toutes façons, il faudra, ensemble, travailler à mieux coopérer au développement de l'astronomie, et au fonctionnement de notre Union.

'Le nouveau Président, mon successeur le nouveau Secrétaire Général, et le Comité Exécutif qui s'installera la semaine prochaine à cette tribune, auront, cela est certain, une tâche redoutable, et décisive. J'ai essayé, de mon mieux, de prévoir leurs difficultés et de ne pas leur laisser trop de problèmes mal résolus. Mais j'y ai incomplètement réussi, et mes efforts sont en vérité loin d'être suffisants. L'aide dont mon successeur aura besoin, c'est, avant tout, la vôtre. Pensez que le bureau administratif devra s'occuper de plus de 2000 Membres de l'UAI, de 38 Commissions, de 43 Organisations Adhérentes, et d'un réseau toujours plus compliqué d'organismes extérieurs, de commissions inter-unions, de problèmes délicats, de difficultés techniques graves. Aidez-le, d'abord en répondant à ses lettres, sans délai, et clairement; en l'informant sans délai de vos changements d'adresse, temporaires ou définitifs; en lisant avec soin le *Bulletin d'Information* de l'UAI... N'oubliez jamais certes que votre appartenance à l'UAI, si elle vous donne des droits, vous impose des devoirs. Nous appartenons à une collectivité solidaire, et les égoïsmes de chacun doivent s'effacer devant l'intérêt de tous. C'est l'astronomie toute entière que vous aiderez en aidant votre Secrétaire Général. Je vous en remercie à l'avance, comme je vous remercie de l'aide que depuis trois ans vous avez eu l'amitié de m'apporter'.

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 the period 1967–1970. He reminded the 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 Assistant General Secretary had been unanimously adopted by the Executive Committee; and were those now before the General Assembly. The President accordingly submitted the name of Professor O. Heckmann for the office of President; the names of Dr V. Bappu, Professor L. Gratton, and Dr J. Sahade for the offices of Vice-Presidents. Professor W. Fricke, who was to serve till 1970, expressed the wish to retire after his first three-term as Vice-President; it is suggested that Professor W. N. Christiansen who was elected in Hamburg only to serve for three

years could replace Professor Fricke as Vice-President till 1970. The President then submitted the name of Dr Perek for the office of General Secretary; and the name of Professor C. de Jager for the office of Assistant General Secretary. The membership of the new Executive Committee would then be as follows:

PRESIDENT: O. Heckmann

VICE-PRESIDENTS: V. Bappu, W.N. Christiansen, L. Gratton, J. Sahade, M. Schwarzschild, A. B. Severny

GENERAL SECRETARY: L. Perek

ASSISTANT GENERAL SECRETARY: C. de Jager

ADVISORS: The departing President and General Secretary

According to 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 made the following statement:

‘Je dois tout d’abord rappeler que, conformément à l’article 6 du Règlement, l’Ordre du Jour doit être distribué aux Organisations Adhérentes et Comités Nationaux quatre mois au moins avant l’ouverture de la session. Il est clair que, dans la pratique, il a seulement été possible d’informer les Organisations Adhérentes et les Comités Nationaux des points les plus importants, ceux concernant les finances. Selon les Statuts, je suis donc obligé de demander l’approbation par l’Assemblée Générale de l’Ordre du Jour publié dans les *Agenda and Draft Reports*. De plus, je tiens à préciser que toute question additionnelle ne pourra être prise en considération que si cette prise en considération recueille l’approbation de la moitié au moins des voix des pays représentés à l’Assemblée Générale.’

Then 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. Sahade	C. M. Varsavsky
Australia	H. W. Wood	W. N. Christiansen
Austria	J. Hopmann	J. Hopmann
Belgium	H. L. Vanderlinden	S. Arend
Brazil	A. de Moraes	A. de Moraes
Bulgaria	N. Boneff	N. Boneff
Canada	K. O. Wright	D. A. MacRae
Chile	C. Anguita	J. Stock
Czechoslovakia	V. Guth	J. M. Mohr
Denmark	A. Reiz	K. Gyldenkerne
Finland	G. Järnefelt	G. Järnefelt
France	J.-F. Denisse	J. Delhaye
Germany (DDR)	H. Lambrecht	H. Lambrecht
Germany (DBR)	L. Biermann	R. Kippenhahn
Greece	J. Xanthakis	G. Contopoulos
Hungary	L. Detre	L. Detre
India	V. Bappu	V. Bappu
Ireland	P. A. Wayman	P. A. Wayman
Israel	R. Steinitz	G. Alter
Italy	F. Zagar	G. Righini
Japan	H. Hirose	Y. Fujita

<i>Country</i>	<i>(a) Official Representative</i>	<i>(b) Representative on Nominating Committee</i>
Korea (DPR)	no representative	no representative
Mexico	G. Haro	A. Poveda
Netherlands	C. de Jager	A. Blaauw
New Zealand	no representative	no representative
Norway	E. Jensen	P. Maltby
Poland	E. Rybka	J. Witkowski
Portugal	M.G.P. de Barros	M.G.P. de Barros
Rumania	C. Drâmbă	C. Drâmbă
South Africa	J. Hers	J. Hers
Spain	R. Carrasco	A. Orte Lledo
Sweden	Y. Öhman	T. Elvius
Switzerland	M. Waldmeier	M. Golay
Taiwan	M. Tsao	M. Tsao
Turkey	N. Gökdoğan	E. Balli
United Arab Republic	no representative	no representative
United Kingdom	H. Bondi	H. Bondi
U.S.A.	C.D. Shane	G. M. Clemence
U.S.S.R.	E.R. Mustel	A. G. Masevič
Vatican City State	P.J. Treanor S.J.	M. F. McCarthy S.J.
Venezuela	no representative	no representative
Yugoslavia	L. Randić	L. Randić

Note: In some cases, or in case of absolute necessity, National Committees have designated substitute delegates. In order to simplify the lists, the General Secretary has omitted the names of these substitute delegates from the above lists.

After the reading of these lists, the General Assembly, at the request of the General Secretary as earlier expressed, approved the Agenda through the votes of the National Representatives.

(c) Acting Presidents. The General Secretary announced that the Executive Committee had invited:

Dr F.L. Whipple, Vice-President of Commission 6, to take over the responsibility of this Commission after the unfortunate death of Dr A. R. Hogg. He has also been designated as Acting President of this Commission during the meetings.

Dr D.S. Evans, Vice-President of Commission 30, to take over the responsibility of this Commission after the unfortunate death of Dr R. M. Petrie. He has also been designated as Acting President of this Commission during the meetings.

Dr J. Rösch to serve as Acting President of Commission 9, Professor O. A. Melnikov being unable to attend the General Assembly.

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. Sahade	Finland	G. Järnefelt
Australia	B. Y. Mills	France	Ch. Fehrenbach
Austria	J. Hopmann	Germany (DDR)	J. Wempe
Belgium	A. G. Velghe	Germany (DBR)	H.H. Voigt
Brazil	A. de Moraes	Greece	L. N. Mavridis
Bulgaria	N. Boneff	Hungary	L. Dezsö
Canada	J. Halliday	India	G. Swarup
Chile	C. Anguita	Ireland	P. A. Wayman
Czechoslovakia	E. Buchar	Israel	R. Steinitz
Denmark	M. Rudkjøbing	Italy	M. Cimino

Japan	H. Hirose	Sweden	A. Wallenquist
Korea	no representative	Switzerland	J. Bonanomi
Mexico	P. Pishmish de Recillas	Taiwan	M. Tsao
Netherlands	P. T. Oosterhoff	Turkey	T. Gökmen
New Zealand	no representative	United Arab Republic	no representative
Norway	R. Brahde	United Kingdom	W.A. McCrea
Poland	W. Iwanowska	U.S.A.	J.S. Hall
Portugal	M.G.P. de Barros	U.S.S.R.	A.G. Haradze
Rumania	C. Drâmbă	Vatican City State	F.C. Bertiau
South Africa	J. Hers	Venezuela	no representative
Spain	J.O. Cardus	Yugoslavia	P. M. Djurković

Note: In some cases, or in case of absolute necessity, National Committees have designated substitute delegates. In order to simplify the list, the General Secretary has omitted the names of these substitute delegates from the above list.

8. *Resolutions Committee.* At the request of the President, 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 B.J. Bok, J.H. Oort, D.H. Sadler and A.B. Severny to serve on the Resolutions Committee. The General Secretary and the Assistant General Secretary will attend the Resolutions Committee in an advisory capacity.

9. *Consideration of resolutions submitted by Adhering Organizations or National Committees of Astronomy.* The General Secretary read the following three resolutions, as presented by the responsible National Committees.

(a) The National Committee of Astronomy of the German Democratic Republic at the German Academy of Sciences, Berlin, recommends to the International Astronomical Union, by reason of the facts that the theoretical and empirical (observing) researches on the structure of the Universe and on structural classification of astrophysical objects, for which the general relativity is a necessity to the theoretical interpretation, have been permanently growing in the last years, where the number of relevant publications and of international colloquia on relativistic astrophysics is a mirror of this growing, as well as by reason of the fact that it seems in the highest degree desirable, especially nowadays, to coordinate all the astronomers and physicists working on theoretical and experimental researches on cosmology and relativistic astrophysics, the foundation of a *Commission of the International Astronomical Union on Relativistic Astrophysics and Cosmology.*

(b) Le Comité National Belge d'Astronomie propose que soit examinée la possibilité, pour les éditeurs des publications astronomiques, de joindre à celles-ci des fiches de format normalisé, donnant pour chaque article, en plus de la référence bibliographique, un très court résumé du sujet traité.

(c) Etant donné certains résultats obtenus en Belgique dans le domaine des marées terrestres, le Comité National Belge d'Astronomie propose l'examen du problème soulevé par la détermination des termes de nutation à courte période.

On behalf of the Executive Committee, the General Secretary suggested that resolution (a) be rejected as such and studied by the interested Commissions, notably by Commission 28. He then suggested to submit for advice resolution (b) to Commission 5 and resolution (c) to Commission 19.

According to the By-laws, the formal vote will have to take place at the final session of the General Assembly.

10. *Consideration of resolutions submitted by Commissions or by Inter-Union Commissions.* Three resolutions submitted by Commission 42 were read by the General Secretary. They have financial

and administrative implications and will therefore be submitted to the Executive Committee and to the Finance Committee.

The General Secretary then reminded the General Assembly of one resolution on the universal use of the metric system, already brought to knowledge of Members through the *IAU Information Bulletin*, and which will be submitted to the vote of the General Assembly at its last session.

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 thanked the interpreters and formally adjourned the meeting at 16^h00^m.

FINAL SESSION

Held on Thursday 31 August 1967 at 9^h15^m, in Lucerna Hall, in Prague

Professor P. Swings, President, in the chair

11 and 12. *Report of the Finance Committee and consideration of the unit of subscription.* 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 W. H. McCrea, to present his report to the General Assembly, which was read as follows:

REPORT OF THE FINANCE COMMITTEE TO THE GENERAL ASSEMBLY

1. The Finance Committee, as appointed at the first session of the General Assembly, appointed a Sub-Committee composed of Professor W. H. McCrea (Chairman), Professor E. Buchar, Professor Ch. Fehrenbach, Dr. J. S. Hall and Professor E. K. Haradze.

2. The Sub-Committee examined the accounts for the years 1964–1966 as given in the report of the Executive Committee in the light of the explanations given by the General Secretary, the Assistant General Secretary and the Assistant Secretary, and expressed its approval of them.

The Finance Committee took note of the fact that a very significant contribution to the administrative costs of the Union has been borne by the institutions and countries to which its administrative officers belong and considers that the General Assembly would wish to express its cordial thanks to all the authorities concerned.

The Finance Committee recommends to the General Assembly that the accounts for the years 1964–1966 be approved.

3. The Sub-Committee considered the supplementary budget for the calendar year 1967 as proposed by the Executive Committee. Clearly, the proposals adopted in 1964 were inadequate owing mainly to publication costs which amount to more than half the budget. The deficiency resulted mainly from difficulties and delays in printing and publishing and to a contract for this work that proved to be highly unfavorable in the resulting circumstances. The Sub-Committee is convinced that the revised budget is as accurate as possible and that the expenditure is the minimum required for commitments already incurred by the Executive Committee in carrying out the policy approved by the 1964 General Assembly. The Finance Committee, on the advice of the Sub-Committee, accordingly recommends that the General Assembly approve the supplementary budget for the year 1967 of \$50000. In doing this, the Finance Committee implies its approval of a loan of \$10000 from the International Council of Scientific Unions and of a diminution of the IAU funds in its savings accounts.

4. The Sub-Committee considered the budget for the three years 1968–1970 and prepared provisional figures for consideration by the full Committee. In doing so it recommended:

- (a) that the unit of contribution should be raised to the figure of 900 gold francs for 1968, 1969, 1970;
- (b) that the Executive Committee be authorized, as a matter of the utmost urgency, to prepare a revision of the Statutes to be adopted by the fourteenth General Assembly in such a way as to allow in the future the possibility of an adjustment of the contributions from Adhering Countries to the growth in the membership of the Union;
- (c) that all measures compatible with the administrative and statutory possibilities be taken by the Executive Committee to limit the distribution of *Draft Reports* and to organize this distribution in the best possible way;
- (d) that a new contract be entered into with a publisher for the publications of the Union implying the minimum financial risk for the Union, and that the acceptance of the present estimates be made conditional upon the conclusion of such a contract;
- (e) that the General Secretary be urged to make payments by the IAU according only to the progress of the receipts and to the balance of the current accounts;
- (f) that the Union refrain from subsidizing special projects resulting in free distribution of publications at a time when the IAU publications have to be subjected to severe restrictions;
- (g) that in the term 1968–1970 the savings accounts be reimbursed as completely as possible, of the diminution they suffered in 1967, in order to build up a sufficient reserve for the further growth of the Union.

5. The Finance Committee as a whole considered the proposal 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 1968–31 DECEMBER 1970

Estimated Income, 1968–1970

<i>Heading</i>	<i>Origin</i>	<i>U.S. dollars</i>
1.	National subscriptions	\$157 000
2.	Sales of publications	22 300
3.	Subscriptions to IAU publications	0
4.	Interest on reserves in savings banks	4 000
5.	Unesco subvention through the ICSU	42 000
6.	Unesco contracts	x
Total estimated income		\$225 300

Estimated Expenditure, 1968–1970

<i>Heading</i>	<i>Purpose</i>	<i>U.S. dollars</i>
1.	Administrative Office	\$42 000
2.	Subscription to ICSU	2 000
3.	Expenses of Commissions	500
4.	Specific projects of Commissions	31 500
5.	Expenses of the General Assembly	16 300
6.	IAU publications	40 000
7.	Meetings of the Executive Committee	10 000
8.	Organization of Symposia	25 000
9.	Publication of Symposia not by IAU	0
10.	Interunion Commissions	7 500
11.	Representation expenses	
12.	Projects authorized by the Executive Committee	2 000
13.	Unesco contracts	x
14.	Reimbursement of loan from ICSU	10 000
15.	Reimbursement to savings accounts	38 500
Total estimated expenditure		\$225 300

6. Details of individual items under Item 4 (Specific projects of Commissions) are given below:

<i>Commission No.</i>	<i>Project</i>	<i>Sum requested (\$ U.S.)</i>	<i>Sum proposed by Finance Committee</i>
* 6	IAU Telegram Bureau	\$ 2000	\$ 1600
*10	Cartes héliographiques de la photosphère (3 × 1000 gold frs)	980	0
*10	Cartes synoptiques de la chromosphère (3 × 2700 gold frs)	1500	0
*16	Centre de documentation sur les planètes	2000	1400
*20	Minor Planets Center	1500	1300
*27	Catalogue of Variable Stars	6500	3500
*29	Information Bulletin for the Southern Hemisphere	3000	1500
*38	Exchange of Astronomers	24000	22000
*42	Bibliography and program notes for eclipsing binaries	225	200
		<u>\$41 705</u>	<u>\$31 500</u>

* Indicates items for which reductions are proposed.

Proposals for small sums and the grants for colloquia (\$100 for Commission 42 and \$500 for each colloquium accepted by the Executive Committee) can be provided for under other items of the budget.

W. H. MCCREA
Chairman, Finance Committee
August 1967

Points 2 and 3 of this report were adopted unanimously. Point 4 was adopted at the unanimity minus one abstention.

The President then formally requested the General Assembly to give its approval to the whole report of the Finance Committee. One voting country abstained, all others voted in favour. The report was therefore adopted by the General Assembly.

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

13. *Resolutions by the Executive Committee.* The General Secretary explained the procedure: before passing to the vote of the resolutions submitted to the General Assembly by the Executive Committee and by the National Committees, Professor Oort will present to the General Assembly the report of the Resolutions Committee concerning the various resolutions submitted by the Commissions, some of which being to be adopted by the Executive Committee itself.

Thus, the President called upon Professor Oort to read the report of the Resolutions Committee.

REPORT BY THE PRESIDENT OF THE RESOLUTIONS COMMITTEE

1. 39 resolutions have been received from the Commissions during the General Assembly, which make a total of 42 taking into account the 3 formally included in the Agenda, page v of the *Agenda and Draft Reports*; 3 resolutions also included in this Agenda came from National Committees or Adhering Organizations. The advice of a Commission has given place to an alternative resolution.

2. Out of these 42, 10 have been considered by the Finance Committee. In view of the difficult financial situation of the Union, stressed elsewhere, the Finance Committee has been obliged to recommend to the General Assembly a reduction, in some cases to zero, of the amount proposed for 8 of the specific projects of the Commissions so proposed. Two other requests have been recommended for inclusion in the budget under other items of the budget, and subject to the approval of the Executive Committee in the case of the organization of a colloquium.

The reasons for the reductions proposed by the Finance Committee are included in the report of this Committee.

3. The Resolutions Committee considered the remaining 32 resolutions with a view to recommending which should be formally submitted for consideration by the General Assembly.

As a result, the Resolutions Committee recommend to the General Assembly that the following 5 resolutions should be considered by the Executive Committee:

- (1) (by Commission 41) relating to the conservation of old astronomical instruments and documents;
- (2) (by Commission 41) relating to the preparation of an international history of astronomy;
- (3) (by the Working Group on Photographic Materials) relating to the sizes of photographic plates;
- (4) (by Commissions 4 and 31) relating to the definition of the second;
- (5) (by Commissions 4 and 31) relating to the use of natural observational phenomena in determining the Ephemeris Time and the Universal Time.

4. On the 24 still remaining, the Resolutions Committee considers that 2 concerned administrative matters (arrangements of symposia, new structure of the Union...) which should be deferred to the Executive Committee for further consideration; 22 others concerned matters that were not of such a wide interest as to warrant individual consideration by the General Assembly. A resolution by Commission 37, of wide importance, was referred to the Executive Committee for incorporation within any statement or recommendation that it might wish to make.

A "blanket" resolution, to cover the resolutions 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 38 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 President expressed the thanks of the Union to Professor Oort and to members of the Resolutions Committee for their valuable work.

13 (a). *Resolutions submitted by the Adhering Organizations and National Committees.* See point 9 above, page 21.

Resolution (a) proposed by the German Democratic Republic has been withdrawn by the National Committee of this country, and has not been therefore submitted to the vote of the General Assembly.

Resolution (b) (hereafter designated by A 2) has been discussed by Commission 5 and approved. Commission 5 will incorporate in its report remarks related to this resolution. The General Assembly then formally expressed its unanimous approval to this resolution.

Resolution (c) (hereafter designated by A 3) has been discussed by Commission 19, approved in its principle and was submitted to the vote of the General Assembly in a slightly modified version (see hereafter resolution A 3, page 38 and page 39). The General Assembly formally approved unanimously.

13 (b). *Resolutions submitted by the Executive Committee.* The Executive Committee has decided to propose two resolutions to the General Assembly; to adopt, as suggested by the Resolutions Committee, five resolutions of general interest, submitted by the Commissions themselves; and to adopt a sixth resolution submitted by Commission 17, which was also considered by the Executive Committee as of a general interest.

The texts of these eight resolutions, as adopted, are given, in French and in English, on pages 38 to 43.

All of them have been adopted unanimously, except resolution no. 7 on the photographic materials, which was adopted by all voting delegates except by the delegate of the Vatican City State, Dr Treanor, who expressed his opposition. Although adopted, the implementation of this resolution will be studied by the Working Group on Photographic Materials.

14. *Resolutions submitted by the Commissions.* The General Secretary reminded that the General Assembly had earlier expressed its approval on the report of the Resolutions Committee. According this report, a 'blanket' resolution, to cover the resolutions by Commissions not formally considered

by the General Assembly, was recommended and adopted unanimously by the General Assembly (see above page 25 and hereafter resolution no. 9, pages 42 and 43).

A resolution submitted by Commission 37 and deferred to the Executive Committee by the Resolutions Committee concerned the revision of the structure of the Union. The President expressed at this stage the intention of the Executive Committee to request from the incoming Executive Committee the careful study of the needs for changes and of the ways to meet these needs.

15. *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 1970, 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, L. Perek, M. Schwarzschild, A.B. Severny) would be selected by the new Executive Committee:

PRESIDENT: O. Heckmann (German Federal Republic)

FORMER PRESIDENT: P. Swings (Belgium)

Members elected by the General Assembly, on the proposal of the Nominating Committee:

1. E.R. Mustel, L. Goldberg, M. Golay, D.H. Sadler, if W.N. Christiansen is appointed by the new Executive Committee.
2. L. Goldberg, B.Y. Mills, E.R. Mustel, D.H. Sadler, if L. Perek is appointed by the new Executive Committee.
3. H. Hirose, B.Y. Mills, E.R. Mustel, D.H. Sadler, if M. Schwarzschild is appointed by the new Executive Committee.
4. L. Goldberg, H. Hirose, B.Y. Mills, D.H. Sadler, if A.B. Severny is appointed by the new Executive Committee.

Note: During the General Assembly, through an error in the reading made by the General Secretary, a slightly different list has been approved by the General Assembly. A correspondence exchanged between the retiring General Secretary, Dr Pecker, and the delegates empowered to vote, led to an unanimous agreement on the above list, proposed by the Nominating Committee.

16. *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 482 new Members and the deletion of 10 Members.

The names of the new Members had been prominently displayed and the General Secretary did not propose to read them. He informed the General Assembly that these names would be incorporated in the list of Members to be printed in Volume XIII B of the *Transactions*.

17. *Commissions.*

(a) The General Secretary announced that, as a result of proposal by Commission 43, the Executive Committee formally proposed to the General Assembly that:

Commission 43 be re-named 'Commission des Plasmas et de la Magnéto-Hydrodynamique en Astrophysique' (Commission on Astrophysical Plasmas and Magneto-Hydrodynamics).

This proposal was 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:

<i>No.</i>	<i>President</i>	<i>Vice-President</i>	<i>No.</i>	<i>President</i>	<i>Vice-President</i>
4	G. A. Wilkins	J. Kovalevsky	26	P. Couteau	J. Dommanget
5	J. B. Sykes	K. F. Ogorodnikov	27	L. Detre	O. J. Eggen
6	F. L. Whipple	P. Simon	28	G. C. McVittie	E. M. Burbidge
7	W. J. Eckert	G. N. Dubošin	29	M. W. Feast	Y. Fujita
8	A. A. Nemiro	W. Fricke	30	D. S. Evans	H. A. Abt
9	J. Rösch	V. B. Nikonov	31	F. Zagar	G. M. R. Winkler
10	Z. Švestka	J. T. Jefferies	33	G. Contopoulos	S. W. McCuskey
12	M. N. Gnevyšev	R. G. Athay	34	D. E. Osterbrock	F. D. Kahn
14	M. Migeotte	A. H. Cook	35	A. G. Masevič	E. Schatzman
15	L. Biermann	V. Vanýsek	36	A. B. Underhill	R. Cayrel
16	J. S. Hall	B. J. Levin	37	M. Golay	G. Larsson-Leander
17	A. Dollfus	{A. I. Lebedinskij † G. H. Pettengill	38	M. G. J. Minnaert	A. Reiz
19	P. J. Melchior	H. M. Smith	40	J. P. Wild	D. S. Heeschen
20	G. A. Čebotarev	F. K. Edmondson	41	E. Rybka	O. Gingerich
21	M. Huruahata	H. Elsässer	42	F. B. Wood	M. Plavec
22	Z. Ceplecha	R. E. McCrosky	43	L. Davis	R. Lüst
23	W. Dieckvoss	P. Lacroute	44	R. Wilson	V. K. Prokof'ev
24	W. J. Luyten	S. Vasilevskis	45	Ch. Fehrenbach	B. Westerlund
25	A. W. J. Cousins	D. Crawford	46	E. A. Müller	J. Kleczek

This list was agreed by the General Assembly.

(c) The General Secretary explained that, according to the revised By-laws, the members of the Organizing Committees 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 on the advice of the Nominating Committee. The Organizing Committees as approved by the General Assembly are given in the list of Commissions on pages 240–250.

18. *The place and date of the fourteenth General Assembly.* The Chairman called upon Professor H. Bondi to address the Assembly. Professor Bondi spoke as follows:

'I am speaking to you today as Chairman of the United Kingdom's National Committee for Astronomy. It is my pleasant duty to convey to you a joint invitation from the Royal Society and the University of Sussex to hold the fourteenth General Assembly of the Union in England at the University of Sussex. We would, indeed, be most happy if you were willing to accept the invitation to return to England after well over forty years. In these forty years there have been great advances in England in optical astronomy; the Isaac Newton telescope about to start work symbolizes our advances in optical astronomy; our work in radio astronomy from two great schools is well known to you all, and equally you know how much work in theoretical astronomy has been done in the United Kingdom. We therefore feel that we would be worthy hosts and it gives us particular pleasure to invite you to one of the most pleasant parts of the Country, to one of our new Universities, not far from the Royal Greenwich Observatory and within easy reach of London. I am sure you will find it a very good occasion and I can assure you of a very warm welcome, indeed. We shall all be delighted to see you in England.'

On the proposal of the President, the General Assembly unanimously agreed to accept this gracious invitation to meet in Sussex, near the city of Brighton, United Kingdom, in 1970, the precise dates being left for later decision by the Executive Committee. The President expressed the thanks of the Union to Professor Bondi.

19. *Election of the new Executive Committee.* The Chairman formally proposed that Professor Otto Heckmann be elected the new President of the Union. This was approved by acclamation.

The President reminded the Assembly of the names submitted for consideration at the first session, and formally proposed that Dr V. Bappu, Professor L. Gratton, and Dr J. Sahade be elected Vice-Presidents, in place of Professor W. Fricke, Professor Y. Hagihara, and Dr G. Haro, and that Professor W. N. Christiansen remain in office for a further term of three years. This was unanimously approved. He then formally proposed that Dr. L. Perek should be elected General Secretary in place of Professor J.-C. Pecker who now retired; this also was approved unanimously. He finally proposed that Professor C. de Jager be elected Assistant General Secretary in place of Dr L. Perek. The General Assembly expressed its approval of this appointment.

The Chairman then invited Professor Heckmann, Dr Bappu, Professor Gratton, Dr Sahade, and Professor de Jager to take seats on the platform.

20. *Addresses by the retiring and the newly-elected Presidents.* The retiring President, Professor P. Swings, addressed the Assembly as follows:

‘Nous approchons de la fin de la partie administrative de cette treizième Assemblée Générale. Mais, avant d’inviter mon successeur, le Professeur Heckmann, à s’adresser à vous, je me permets de prendre une dernière fois la parole pour remplir quelques tâches agréables.

‘L’entente au sein du Comité Exécutif que j’ai eu l’honneur et le privilège de présider a toujours été parfaite. Tous les Vice-Présidents et Conseillers ont rempli leur tâche avec un dévouement auquel je tiens à rendre hommage. Many valuable suggestions have been made by them in the interest of our Science. If our Union is one of the most active and flourishing it is due to a great extent to the harmony which has characterized our Executive Committee since 1920. I have belonged to three Executive Committees, for a total of about 20% of the life of the IAU, and I have always been impressed by the spirit of courtesy, devotion and concord which prevailed, even when we did not agree on specific points, which was very rare indeed. I have absolute confidence in the new Executive Committee, and especially in our newly elected President and General Secretary. Actually both have already been in close touch with the problems of the IAU. Professor Heckmann as Vice-President, Dr Perek as Assistant General Secretary. I also express the sincere thanks of the Union to the members of the Executive Committee who reach the end of their term: Professor Hagihara, Professor Haro and Professor Fricke.

‘I also wish to express to the Special Nominating Committee my cordial thanks for their efficient help. We have faced together a few delicate problems, but have always found ways to solve them satisfactorily; at least we hope to have reached this goal.

‘Dans un de ses discours, notre regretté ancien Président André Danjon avait défini le rôle du président comme suit: “Le rôle du président est celui du pilote vigilant qui cherche à éviter les écueils”. J’ai essayé de remplir cette tâche. Mais si les problèmes journaliers de l’Union ont pu être résolus, nous le devons avant tout au Secrétaire Général, Dr J.-C. Pecker, au Secrétaire Général Adjoint, Dr L. Perek, et à leurs associés, particulièrement Mlle Dorothy Bell et Mr. Jappel à Nice, et Mlle Geneviève Drouin à Meudon. Vous avez sûrement tous conscience des lourdes tâches remplies par MM. Pecker et Perek. Mais je crois être autorisé à déclarer que c’est moi qui ai pu le mieux apprécier le travail énorme fourni par nos deux collègues, car ils ont bien voulu m’envoyer, régulièrement, copie de toute leur correspondance. Pour préciser les sommes de travail, je vous signale que la numérotation des lettres du Secrétaire Général a dépassé 3300, c’est-à-dire une moyenne de près de 100 par mois. De nombreuses lettres exigeaient beaucoup de réflexion, d’étude ou même de recherches. Beaucoup comprenaient plusieurs pages. Quant au Dr Perek, la numérotation de ses lettres a atteint le millier. Ce fut un grand privilège pour l’Union que ses affaires soient, pendant ce triennat, entre les mains de deux éminents astronomes, ayant, en même temps, un sens inné de l’organisation et de l’administration. Dr Pecker a été un parfait premier ministre et Dr Perek, un excellent vice-premier ministre de l’Union. En cela ils ont parfaitement suivi la tradition de tous leurs prédécesseurs, Fowler, Stratton, Oort, Strömgren, Oosterhoff et Sadler. Among these Mr. Sadler has continued to render us very great services as an experienced and devoted advisor, and I

wish to thank him wholeheartedly. I ask all our colleagues in the audience to express their gratitude and friendship to Drs Pecker and Perek by their applause.

'This thirteenth General Assembly has been a tremendous success. The excellency of the scientific organization is essentially due to Drs Pecker and Perek. But the success of the practical arrangements is due to a considerable extent to our hosts, and especially to the Local Organizing Committee. Our thanks go especially to the President, our dear Colleague, Professor Šternberk, and to the Secretary our excellent friend, Dipl. Ing. Rajský. Drs Bumba, Kohoutek, Plavec and Vanýsek have collaborated greatly to the organizational work. But nobody will, I hope, criticize me if I express very special thanks to Mr. Rajský, who for three years has laboured strenuously for the success of the thirteenth General Assembly, neglecting no detail and accepting a lot of duties.

'I ask everybody in this audience to express their thanks by their applause.

'In a few minutes our colleague David S. Evans will give a comprehensive vote of thanks. I leave it to him to continue to express our gratitude to the numerous personalities who have contributed to the success of our Congress.

'Au moment de quitter la présidence de notre chère Union, j'ai plutôt le coeur gros. Je vous remercie une fois encore de l'honneur et de la confiance que vous m'avez témoigné. J'ai éprouvé de grandes satisfactions, en servant l'Union de mon mieux pendant ces trois années, au cours desquelles j'ai, d'ailleurs, appris maintes choses intéressantes. Je devrai m'habituer à ne plus recevoir, chaque mois, les copies de plus de cent lettres venant de Nice ou de Prague, dont une proportion considérable concernait des problèmes importants ou utiles.

'I wish to thank all my colleagues to have given me this opportunity to serve, for three years, the Science to which we are all so strongly bound.'

The newly-elected President, Professor Heckmann, then addressed the Assembly as follows:

'Dear Friends and Colleagues, Ladies and Gentlemen!

'When, some time ago, President Pol Swings told me that the pertinent committees of the IAU wanted to nominate me as his successor, I felt great hesitation to accept. But my reasons were deemed irrelevant.

'All preceding Presidents have expressed their deep gratitude to the Assembly for the great honour you bestowed on them. I want you to know that I have the same feeling of gratitude. I am glad, however, that my gratefulness may rest on two objective reasons: Pol Swings gave two arguments for the choice. First, he said, one wishes to express international esteem for the astronomical work done in my country. I am sure, this is meant and will be understood as a strong encouragement. The second reason Swings brought forward for the choice is my connection with the European Southern Observatory which in itself is an international enterprise, supported by France, Belgium, Holland, Denmark, Sweden and West Germany. I hope that the prestige of the Union will help to strengthen in the minds of our governments their appreciation of the scientific merit of this cooperative undertaking.

'Mon cher ami Pol Swings: Devenir votre successeur est un honneur que je ne pourrais pas exprimer de façon adéquate en quelques mots. Votre oeuvre scientifique, durant tant d'années, est en elle-même un grand monument aux fondations solides. La célèbre série de colloques d'astrophysique de Liège, dont vous êtes le père, est la preuve de votre intérêt universel et de vos efforts constants en faveur de la collaboration scientifique internationale. Vous m'avez promis votre aide et vos conseils, quand j'en aurai besoin; aussi, je me sens tout à fait rassuré contre les erreurs que pourrait commettre un président. Durant les années qui viennent, j'aurai toujours devant les yeux la façon magistrale dont vous avez dirigé l'orchestre de l'Union Astronomique Internationale.

'I feel happy and I feel even blessed having the support of two outstanding General Secretaries. The new Executive Committee will, I am sure, work in the same spirit of courtesy, devotion, and concord, which Pol Swings found in all of the Executive Committees to which he belonged.

'The IAU is growing incessantly. Naturally this growth gives concern to all of us. But such growth

is spontaneous and therefore inescapable. Observatories are being enlarged, new instruments are under construction, new observatories are being founded, new techniques are being developed, and finally, all of us aim at opening up new fields of research year after year. Astronomy, therefore, is growing in all its dimensions—and our IAU grows with it. I shall not venture to delineate the asymptotic development of astronomy during centuries to come.

‘It is my fervent hope, however, that in the foreseeable future the Union will not disintegrate; we must guard against fragmentation. It may be necessary to vest in the separate Commissions of the IAU an ever increasing responsibility to chart their own course. Nevertheless I refuse to believe, that a ship breaking up is the appropriate metaphor. Rather I would think of the Union as a host of sailing boats all flying the pennants of the same club. The club is their safeguard against the manifold dangers of isolation.

‘This picture is intended to convey to you some of the thoughts evoked by the trust you have placed in me. With your support I can face with optimism our joint enterprise of insuring the growth and the health of the International Astronomical Union.’

21. *Closing ceremonies.* The Chairman called upon Dr D.S. Evans to propose a comprehensive vote of thanks, in the course of which he said:

‘Monsieur le Président, Mesdames, Messieurs, Mes Chers Collègues,

‘Partout dans le monde il y a des histoires, des faits, qui sont très bien connus, sauf dans les pays qu’ils concernent. Par exemple, tout le monde, sauf les Africains, sait bien que les autruches cachent la tête dans les sables en pensant qu’ainsi tout le corps est caché aux yeux de leurs ennemis. Tout le monde, sauf les Hollandais, connaît bien cette histoire du petit bonhomme, le gosse qui avait sauvé son pays d’une inondation en insérant le doigt dans la digue crevée.

‘Et, de même, tout le monde, sauf sans doute les habitants de Tchécoslovaquie, connaît bien la vie de Bohême! Très mal dirigée à mon égard: Mimi dans sa mansarde, mourant de tuberculose des poumons, était quand même capable, elle, de remplir sans micro tous les vastes espaces d’une salle aussi énorme que celle-ci!... C’est une blague! et après deux semaines de la vraie vie de Bohême, nous la connaissons. Sans aucun doute, en fait, Mimi a été guérie, s’est mariée, et est partie en vacances dans la montagne avec grand-père, les enfants et les petits-enfants.

‘Nous autres étrangers qui avons vécu la vraie vie de Bohême connaissons la vérité. Pendant deux semaines nous sommes reçus en princes. Chez vous, nous étions chez nous. Nous aussi sommes fiers de vos forêts, de vos montagnes, de vos lacs, de l’ancienneté de vos beaux monuments. Nous partageons avec vous votre satisfaction en regardant vos industries, vos universités, vos instituts de recherche, et, surtout, nous vous adressons nos félicitations pour les grands télescopes nouveau-nés. Nous ressentons avec vous la même amitié non seulement envers vos savants, et académiciens, et grands administrateurs, mais également envers tous les habitants de ce beau pays que nous avons rencontrés—les chauffeurs de taxi, les conducteurs d’autobus, même le flic au coin de la rue et les jolies demoiselles en mini-jupe.

‘Ma tâche est de vous remercier au nom de tous les délégués et hôtes. Il est impossible de rendre en détail cette dette énorme des individus aux individus et organisations, et de notre organisation aux individus et organisations tchèques. En quelques syllabes je dois canaliser une rivière de remerciements plus grande que la Vltava. Le rapport entre la réalité et ce que je peux exprimer par mes pauvres mots est plus grand que le rapport entre l’énergie d’un quasar et la petite tache qui marque sa position sur une plaque photographique.

‘No congress as large as this one, where merely to greet everyone would take two full days’ work, and as successful as this comes to pass without many hours, days and months of devoted and imaginative labour. Long before the first delegate thought of booking his ticket, our hosts were imagining what the General Assembly would look like—how many people to be housed and fed, how many meeting rooms would be needed; what to do about entertainment, postal services, medical services and a thousand other things. This has been a massive labour.

‘I want you to know that we understand what this has implied and that we thank you most warmly

and heartily. We thank especially the Government of the Socialist Republic of Czechoslovakia, the authorities of the Karlova Universita, the Czechoslovak Academy of Sciences, the Local Organizing Committee and all the ladies and gentlemen who have staffed the various bureaux.

'These are all important organizations; but organizations are necessarily composed of human beings who supply imagination, but who also can suffer from fatigue and headaches. We offer our sympathy and thanks to all the individuals in those organizations who must have suffered innumerable headaches in anticipating our every need.

'Let me mention especially the Acting Prime Minister, Mr Krajčír, who graciously spared time in the superhuman schedule of a highly placed statesman to bid us welcome at the Inaugural Ceremony.

'Our scientific hosts are the Czechoslovak Academy of Sciences and on your behalf I thank especially Academician Šorm, President of the Academy, and his staff. I hope the scientific level of our meeting has been sufficiently high to contribute yet a little more lustre to that august body.

'The president of the Local Organizing Committee is Dr Šternberk, already well-known to us for his many personal and scientific qualities. Now our thanks to him are a testimonial to his outstanding abilities as an organizer.

'A powerful influence for the smooth running of our meeting has been the effective personality of the secretary of that Committee, Mr Rajský, and his devoted staff. They all deserve our enthusiastic gratitude.

'If I do not mention by name any of the ladies who have answered our questions and solved our problems, this is because they are rather numerous, but every single one of them perfectly charming and most deserving of our thanks.

'I am here to thank our Czechoslovak hosts on your behalf and not to congratulate our own excellent officers and secretariat, but I make one exception. We are proud to have as our new General Secretary an eminent Czechoslovak astronomer, Dr Luboš Perek. It is an excellent augury that he can still smile after these gruelling days of work, following the tradition of his predecessor who smiled his way through everything. In his character as a citizen of our host nation I thank Dr Perek for his notable services. I could perhaps try to express our thanks in several of the native languages spoken by our delegates—but the excellent simultaneous translation service would spoil my fun and translate it all back again instantaneously.

'In the end what I have to say reduces to a single word spoken with all the sincerity and earnestness I can muster—and I hope the right pronunciation—*Děkuji!*'

On behalf of the ladies, Madame André Couder addressed the Assembly as follows:

'Monsieur le Président, Mesdames, Messieurs,

'C'est un grand honneur, mais aussi pour moi un grand plaisir, que de parler au nom des nombreuses femmes d'astronomes qui sont ici, et d'exprimer la gratitude que nous devons à nos hôtes.

'Ce n'est pas le fait que nous venions des quatre coins du monde qui rend la tâche difficile. Au contraire, je crois voir que les femmes des astronomes mènent, sous toutes les longitudes, des vies très analogues, et voici pourquoi, sans doute, nous avons tant de réactions communes, tant de goûts semblables. C'est donc un sentiment très unanime que nous avons éprouvé, et que je souhaite exprimer.

'Les observatoires les plus importants et les plus récents s'installent loin des lumières des villes en des lieux élevés, mal accessibles, de préférence désertiques, souvent enneigés. Bref, on y voit seulement le ciel.

'A l'opposé, vos Assemblées Générales se tiennent en de grandes villes, que la vie sociale, l'art et la science ont illustrées depuis des siècles. Ces prestiges terrestres ont désigné en premier lieu Rome. Nous venons de trouver l'éclat d'une antique culture associée aux formes les plus actives de la vie d'aujourd'hui. Nous avons rêvé de Prague, en feuilletant des images. La réalité est plus riche encore et elle nous a ravies.

‘Dans cette ville magnifique nous étai^{er} réservés par nos amies tchèques un accueil et une hospitalité pleine de chaleur. Le comité d’organisation avait préparé pour nous un programme remarquable. Nous avons vu les palais, les églises, les musées et leurs trésors artistiques. Des excursions nous ont fait découvrir au coeur des forêts les fiers châteaux, témoins d’un passé glorieux. Nous aimions déjà la musique si profondément originale de vos compositeurs; l’avoir entendue ici restera pour nous un souvenir inoubliable. Pas davantage nous n’oublierons les spectacles qui nous ont été présentés. Les tchécoslovaques ont acquis une réputation universelle pour ces fêtes de la vue, de la couleur, du mouvement qu’ils savent offrir, où s’expriment des sentiments à la fois populaires et raffinés. Vous n’avez rien négligé, pas même ce goût très ancien de la tentation, que les femmes vont satisfaire aujourd’hui, non dans un jardin célèbre, mais dans les magasins et les maisons de couture. Là, et dans les rues animées, nous nous sommes mêlées à la foule, ce qui est un grand plaisir des voyages.

‘Notre gratitude et notre admiration vont à tous ceux et à toutes celles qui, par un travail long et difficile, ont organisé les réunions et les excursions si agréables et si intéressantes. Vraiment nous avons été comblées. Je ne puis exprimer nominativement notre gratitude à chacun et à chacune des membres du comité d’organisation; cependant je dois remercier particulièrement les personnalités qui en ont été les animateurs: Monsieur le Président du Comité, Dr Šternberk, le Secrétaire, Monsieur Rajs^{ky}, Madame Perková, présidente du Comité des dames, et toutes les participantes de ce comité.

‘Si les constructeurs de la tour de Babel avaient bénéficié de l’assistance d’interprètes aussi habiles et aussi aimables que celles que nous avons trouvées ici, leur oeuvre aurait connu un succès complet, comme ce congrès! Dans l’expression de notre reconnaissance, il faut leur joindre les dames secrétaires et les remercier de leur complaisance inlassable.

‘Les femmes des astronomes ont parmi d’autres privilèges celui-ci: se connaître des amies sur tous les continents. Les amitiés anciennes retrouvées, les amitiés nouvelles que nous avons nouées ici ajoutent un prix infini au souvenir que nous emportons.

‘Un court séjour à Prague ne permet pas de connaître les finesses de cette langue riche et complexe qu’est le tchèque. Nous en avons appris quelques mots seulement, par l’usage. Nous avons dû constamment employer celui qui signifie: merci.

‘Je veux le dire ici, en tchèque, gauchement peut-être, mais de tout coeur: Děkuji!’

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

‘A ces paroles de remerciements auxquelles rien n’est plus à ajouter, et auxquelles je souscris si complètement et si sincèrement, au milieu une fois encore de cette chaude amitié de nos collègues tchécoslovaques, je voudrais ajouter quelques mots, quelques remerciements, ceux d’un Secrétaire Général qui n’a pas toujours eu le temps de voir fonctionner la fascinante lanterne magique que fut cette Assemblée, mais qui a vu néanmoins derrière l’écran, à l’ombre des praticables, voire à travers l’excellent “Dissertatio cum Nuncio Sidereo”, Seconde Série, de M. B. Bílek, tous ceux qui, au sein de l’Union Astronomique Internationale, ont eux aussi, fait de cette Assemblée le grand succès que nous savons.

‘Comme Secrétaire Général, j’avais hérité de Donald H. Sadler la meilleure des secrétaires adjointes, Dorothy Bell. She has put all my files in order, and you could not imagine what accomplishment it was. Not only that, but her charm, her efficiency were without comparison. But it is difficult to be Miss IAU for life; and now, she has become Mrs Dorothy Brandt, who left the IAU fifteen months ago, but not so far as not to marry within the IAU! To my best congratulations (and note that I speak English not for her sake—her French slang is perfect!—but for that of her husband) to both Mr and Mrs Brandt, let me add my very deep thanks for the help I got from you, Dorothy, a few years ago,—and still quite recently during the meetings.

‘Je me sens incapable de continuer en tchèque, ou en slovaque. Mais en français, seconde langue d’Arnošt Jappel, je peux lui dire que je me trompais tout à l’heure. Certes, il n’a pas apporté dans

mon bureau le charme féminin de Miss IAU! Mais je peux aisément vous convaincre, je pense, que Monsieur UAI a mis à continuer à faire marcher nos affaires une efficacité complète. Sa maîtrise de toutes les langues, son expérience juridique et financière nous sont maintenant irremplaçables. En une période difficile pour l'UAI, cette transition s'est accomplie sans trop de heurts, grâce à la compréhension, à la compétence des uns et des autres, à leur sens de l'humour, indispensable qualité, grâce aussi à la continuité représentée dans le bureau de l'UAI par le sourire, la patience, l'activité de Christiane Caseneuve.

'Au bout du téléphone, en haut d'une tour, était aussi installé, pendant ces trois années, quelqu'un qui, silencieusement, modestement, sans désespérer, a édité plus de 6000 pages de textes et vérifié plusieurs dizaines de milliers de références bibliographiques. Elle a servi de plaque tournante entre les auteurs, les éditeurs, les imprimeurs. Vis-à-vis de Geneviève Drouin, l'Union a aussi une lourde dette, et je la remercie de toute mon amitié.

'Et je ne parle pas de toutes celles qui à Liège, à Paris, à Prague, à Meudon, à Nice, sans consacrer tout leur temps à l'UAI, ont néanmoins donné, chaque fois que c'était nécessaire, le coup de main indispensable.

'A tous mes adjoints, qui sont devenus mes amis, je vous demande maintenant d'exprimer, avec moi, toute notre gratitude.

'Laissez-moi encore ajouter un mot, très bref, puisque, pour la dernière fois, j'ai encore la parole. Ces trois années m'ont appris bien des choses, mais par-dessus tout, elles m'ont apporté des amitiés, dans l'UAI, plus encore peut-être au sein du Comité Exécutif, et tout particulièrement une amitié qui m'a été si précieuse, surtout aux heures de découragement, l'amitié de notre Président sortant. Qu'il me permette, très simplement, de l'en remercier, et d'associer Madame Swings à ces remerciements et à cette amitié.'

The Chairman then invited the new-elected General Secretary, Dr L. Perek, to pronounce a few words, as follows:

'As one to carry on in the fine art of conducting the business of the IAU I ask your permission to add a few words. I discovered behind my friend, Jean-Claude Pecker, a most considerate General Secretary whose decisions were taken with a view to the period to follow his term of office. For instance, when Dorothy Bell, now Mrs. Brandt, left, Jean-Claude Pecker offered the post of the Assistant Secretary to my countryman, Arnošt Jappel, who would be in this post also after the secretariat would have moved to Prague. Jean-Claude spared no effort to initiate me into the routine of the IAU office which certainly will add to the smooth transition from Nice to Prague.

'We had with Jean-Claude Pecker many extremely interesting discussions which raised some, as yet unsolved, theoretical problems. E.g. the problem of forty Commissions wishing to meet at the same time but not simultaneously. Or the problem of finding a system of coordinates where the parabola of the expenses would not catch up with the straight line of the receipts.

'I had a most agreeable time being in frequent contact, at least by correspondence, with so many distinguished Members of the Union, and I am looking forward to the future, fully confident that pleasant aspects will prevail and prepared to work hard towards this end.'

The President then closed the meeting around noon with the following words:

'Let us all plan to attend the fourteenth General Assembly in the United Kingdom.

'Je vous souhaite à tous un bon voyage de retour si vous rentrez immédiatement, une fructueuse participation aux symposiums si vous partez vers les merveilleuses montagnes des Tatry.

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