

REPORT OF THE EXECUTIVE COMMITTEE 1948-51

COUNTRIES ADHERING TO THE UNION

Since the last General Assembly of the I.A.U., Germany has adhered to the Union, with the Astronomische Gesellschaft as adhering organization. Japan, with the approval of the Executive Committee, has resumed adherence.

The following is the list of countries adhering to the Union and of the adhering organizations:

<u>Argentine Republic</u>	1927	Government.
<u>Australia</u>	1939	National Research Council.
<u>Belgium</u>	1920	Académie Royale de Belgique.
<u>Canada</u>	1920	National Research Council, Ottawa.
<u>Chile</u>	1947	Observatorio Astronómico de la Universidad de Chile, Santiago de Chile.
<u>China</u>	1935	National Committee of Astronomy, Nanking.
<u>Čzechoslovakia</u>	1922	Conseil National de Recherches, Prague.
<u>Denmark</u>	1922	Kongelige Danske Videnskabernes Selskab, København.
<u>Égypt</u>	1925	Government.
<u>Eire</u>	1947	Dublin Institute for Advanced Studies.
<u>Finland</u>	1948	Académie des Sciences et Lettres, Helsinki.
<u>France</u>	1920	Académie des Sciences, Paris.
<u>Germany</u>	1951	Astronomische Gesellschaft, Göttingen.
<u>Great Britain</u>	1920	Royal Society, London.
<u>Greece</u>	1920	Académie d'Athènes, Athens.
<u>Hungary</u>	1947	Hungarian Academy of Sciences, Budapest.
<u>India</u>	1946	The National Institute of Sciences of India, New Delhi.
<u>Italy</u>	1921	Consiglio Nazionale delle Ricerche, Roma.
<u>Japan</u>	1920	National Research Council, Tokyo.
<u>Mexico</u>	1921	National University of Mexico.
<u>Netherlands</u>	1922	Koninklijke Nederlandsche Akademie van Wetenschappen, Amsterdam.
<u>Norway</u>	1922	Det Norske Videnskaps-Akademi, Oslo.
<u>Poland</u>	1922	Polska Akademia Nauk, Warszawa.
<u>Portugal</u>	1924	Government.
<u>Roumania</u>	1928	Comitetul National Astronomic.
<u>South Africa</u>	1938	The Council for Scientific and Industrial Research, Pretoria.
<u>Spain</u>	1922	Academia de Ciencias Exactas, Madrid.
<u>Sweden</u>	1925	Kungl. Vetenskapsakademien, Stockholm.
<u>Switzerland</u>	1923	Schweizerische Naturforschende Gesellschaft, Bern.
<u>United States</u>	1920	National Research Council, Washington.
<u>U.S.S.R.</u>	1935	Academy of Sciences of the U.S.S.R., Moscow.
<i>Vincenzo</i> <u>Vatican City State</u>	1932	Pontifica Accademia delle Scienze i Nuovi Lincei, Roma.
<u>Yugoslavia</u>	1935	Conseil des Académies de la RFPY, Belgrade.

APPOINTMENTS MADE BY THE EXECUTIVE COMMITTEE

Prof. Lyman Spitzer was appointed Acting President of Commission 3, after Prof. B. Strömgren resigned from this function. In 1951 Prof. Spitzer found it necessary to resign because of other duties.

Prof. H. Dingle was appointed Acting President of Commission 41 after Prof. O. Neugebauer resigned.

The President and the General Secretary represented the I.A.U. at the meetings of the Executive Committee of I.C.S.U.

Prof. J. H. Oort represented the I.A.U. at the meeting of the British Association for the Advancement of Science in 1949, Prof. A. Danjon in 1950.

Dr P Bourgeois and Prof. A. Danjon represented the I.A.U. at a meeting in 1949 on Science Abstracting, organized by U.N.E.S.C.O.

Prof. A. Danjon and Prof. J. H. Oort represented the I.A.U. as observers at a meeting of experts, organized by U.N.E.S.C.O., 1951, on the question of an International Computing Centre.

Prof. M. Waldmeier represented the I.A.U. at the General Assembly of U.R.S.I. in 1950.

Sir Harold Spencer Jones and Prof. P. Swings represented the I.A.U. at the General Assembly of I.U.G.G. in 1951.

The General Secretary at a meeting of the Executive Committee in September, 1950, stated that he wished to resign because his work at Yerkes and McDonald Observatories would not leave sufficient time for the duties of General Secretary, but agreed to function until the end of the next General Assembly. At a meeting of the Executive Committee in September, 1951, the General Secretary repeated his wish to resign. At the proposal of the President it was decided that the General Secretary would continue until the end of the General Assembly, and that an Assistant General Secretary be appointed. Prof. P. Th. Oosterhoff was appointed to this post.

MEETINGS OF THE EXECUTIVE COMMITTEE

The Executive Committee met in Stockholm, September 25–27, 1950. The following took part in the meetings: B. Lindblad (President), V. A. Ambartsumian (Vice-President), G. Batrousejvitsj (Astronomical Council, Academy of U.S.S.R.), A. Danjon (Vice-President), R. Fraser (Liaison Officer, I.C.S.U.-U.N.E.S.C.O.), D. H. Menzel (for O. Struve, Vice-President), A. A. Nemiro (Astronomical Council, Academy of U.S.S.R.), J. H. Oort (late General Secretary), Sir Harold Spencer Jones (late President), F. J. M. Stratton (General Secretary, I.C.S.U.), B. Strömgren (General Secretary), G. Tiercy (Vice-President). The agenda of the meeting included the following items: President's report, General Assembly 1951; proposed Symposia in 1951; financial status of the I.A.U.; applications for grants-in-aid from U.N.E.S.C.O., budget of the I.A.U. 1951–54, the President's proposed plan for a change of the organization of committees and meetings; discussion of procedure for nominating members of standing commissions; questions concerning Joint Commissions.

A meeting of the Executive Committee was held in Paris, September 4–6, 1951. The following took part in the meetings: B. Lindblad (President), G. Abetti (Vice-President), V. A. Ambartsumian (Vice-President), A. Danjon (Vice-President), R. Fraser (Liaison Officer, I.C.S.U.-U.N.E.S.C.O.), A. A. Nemiro (Astronomical Council, Academy of U.S.S.R.), Sir Harold Spencer Jones (late President), J. H. Oort (late General Secretary), M. Orjewski (Astronomical Council, Academy of U.S.S.R.), F. J. M. Stratton (General Secretary, I.C.S.U.), B. Strömgren (General Secretary), O. Struve (Vice-President), G. Tiercy (Vice-President). The agenda of the meeting included the following items: President's report; question of next General Assembly; Symposia in 1952, question of Draft Report; question of Assistant General Secretary; financial report; question of budget 1952; U.N.E.S.C.O. grants 1951, 1952, 1953; activity of Nominating Committee; co-option of German astronomers; question of Joint Commissions.

With regard to the question of the General Assembly, and questions concerning the U.N.E.S.C.O. grants, discussed at the meetings of the Executive Committee, further information is given below in this report.

DECEASED MEMBERS*

The Executive Committee regret to record the loss by death of the following members of the Union:

Dr R. G. Aitken, Member of Commission 26. Died 29 October 1951.

V. A. Albitzky, Member of Commissions 14, 30. Died 15 June 1952.

I. V. Belkovich, Member of Commission 17. Died 30 May 1949.

* During the period elapsed between the 7th and 8th General Assemblies.

Prof. Ö. Bergstrand, Member of Commission 25, Former Vice-President of the Union. Died 27 September 1948.

Prof. I. Bonsdorff, Member of Commission 13. Died 17 October 1950.

L. Campbell, Member of Commission 27.

Dr L. J. Comrie, Member of Commissions 17, 20, 39. Died 11 December 1950.

G. S. Da Costa Lobo, Member of Commission 11.

G. Delmotte, Member of Commission 16. Died 10 March 1950.

Dr H. O. Grönstrand, Member of Commission 13. Died 28 July 1950.

Prof. K. A. W. Gyllenberg, Member of Commissions 8, 33. Died 26 July 1952.

Prof. C. H. Hins, Member of Commissions 8, 24. Died 21 October 1951.

Dr F. S. Hogg, Member of Commissions 29, 30, 32. Died 1 January 1951.

Prof. N. I. Idelson, Member of Commissions 8, 41. Died 14 July 1951.

R. Jouaust, Member of Commissions 18, 31. Died 28 November 1949.

Dr C. O. Lampland, Member of Commission 16.

Dr B. Lyot, Member of Commissions 9, 11, 12, 13, 39. President of Commission 16. Died 2 April 1952.

L. L. Matkevich, Member of Commission 8. Died 24 December 1949.

Prof. T. Matukuma. Died 14 January 1950.

Prof. E. A. Milne, Member of Commission 35. Died 21 September 1950.

Prof. H. Nagaoka. Died 10 December 1950.

Prof. J. S. Paraskevopoulos, Member of Commissions 28, 39.

Dr Newton L. Pierce, Member of Commissions 27, 42.

F. Quénesset, Member of Commissions 15, 16. Died 8 April 1951.

J. H. Reynolds, Member of Commission 28. Died 22 November 1949.

H. Roure, Member of Commission 20.

Prof. R. Sekiguti. Died 10 August 1951.

Dr J. W. J. A. Stein, S.J., Member of Commissions 23, 27. Died 27 December 1951.

Prof. K. F. Sundman, Member of Commissions 7, 17. Died 28 December 1949.

Prof. A. Tanakadate. Died 21 May 1952.

Prof. Freiherr E. von der Pahlen, Member of Commission 33. Died 18 July 1952.

NEW MEMBERS

After the meeting in Zürich the following were co-opted by the various Commissions under By-Law IV, 15:

H. J. M. Abraham (18, 31), L. Aller (34), A. Armitage (41), K. F. Baeschlin (31), J. G. Baker (39), Mrs K. A. Barkhatova (37), D. R. Bates (22, 22a), Fr. Becker (29, 32, 39), W. Becker (25, 29, 36, 37), A. Beer (42), D. Belorizky (7), M. Beyer (15), L. Biermann (14, 29, 35, 36b), J. Bobone (23), A. Bohrmann (8), N. Boneff (17), P. Bourgeois (23), J. Bouska (5), L. Boyer (20), H. Brown (22), H. Bucerius (7), Miss E. J. Bugoslavskaya (13), L. Cadarso (18), Mrs M. S. Carpenter (40), G. A. Chebotarev (7, 20), Mrs N. A. Chudovicheva (19), J. Delhaye (33), E. Delporte (16), J. Dick (26), O. V. Dobrovolsk (15), A. Dollfus (16), G. N. Duboshin (7), J. A. Duerksen (19), T. Dunham (16), F. K. Edmondson (20), U. J. Efremov (27), O. J. Eggen (42), T. Elvius (33), H. Fabre (7), E. P. Fedorov (19), H. C. Freiesleben (31), W. Fricke (33), Y. Fujita (29), Miss V. F. Gaze (29), A. N. Gigizkij (4), J. E. Gordön (8), P. M. Gorshkov (18), W. Grotrian (10, 13), G. Guigay (22), B. L. Gulatee (19), S. Günther (37), G. A. Gurzadian (34), J. Haas (24), H. Haffner (25), Y. Hagihara (4, 29), J. S. Hall (34), G. Haro (34), J. F. Heard (30), O. Heckmann (23, 25, 33), K. Heinemann (5), H. W. Hemple (18), S. Herrick (7), W. A. Hiltner (34), C. Hoffmeister (22, 27), C. M. Huffer (42), J. J. Ikaunieks (33), I. M. Istchenko (27), H. S. Jelstrup (18, 31), A. Kahrstedt (4, 20), S. A. Kaplan (35), M. G. Karimov (22), L. A. Katasev (22), P. N. Kholopov (27, 37), H. Kienle (9, 36), K. O. Kiepenheuer (10, 11, 13), A. Kohlschütter (24), A. Kopf (4, 5, 8, 20), K. V. Kostylev (25), V. A. Krat (11), B. V. Kukarkin (33, 41), D. K. Kulikov (4), K. A. Kulikov (4, 4a, 19), P. G. Kulikovskiy (5, 26, 41),

N. F. Kuprevich (36), D. Labs (36b), H. Lambrecht (34), J. Larink (8), V V Lavdovski (24), B. U. Levin (15), E. M. Lindsay (39), V P Linnik (9), B. E. Markarian (26, 37), A. G. Masevich (35), Mrs M. Walton Mayall (27), A. B. Meinel (22, 22a), G. Miczaika (29), G. A. Monin (9), G. Münch (36b), W H. Munk (19), E. R. Mustel (36), A. A. Nefediev (17), S. B. Nicholson (16), A. A. Orlov (20), P. P. Parenago (34), N. N. Parijsky (13), J. Cl. Pecker (36), J. G. Phillips (29c), S. B. Pikelner (11), S. Piotrowski (42), J. Platzeck (9), L. Plaut (42), V V Podobed (24), S. M. Poloskov (15), J. G. Porter (20), W. Rabe (26), H. Rakshit (40), K. R. Ramanathan (22), K. Reinmuth (20), D. A. Rice (18, 19), N. Richter (15), W. G. Rijves (15), L. Rošino (37), O. Rydbeck (40), Kh. U. Sadykov (41), H. Schneller (27), G. A. Shajn (34), Mrs M. B. Shapley (42), V V Sharonov (25), I. S. Shklovsky (40), H. Siedentopf (9), P. V Slavenas (7), V V Sobolev (36b), L. A. Soukharev (9), K. Strand (24), H. Strassl (36), W. Strobel (20), W Strohmeier (18), O. Struve (26), K. Stumpff (7), P. Tardi (19), P. ten Bruggencate (12, 36), G. Thiessen (12), O. Thomas (22), R. Thomas (13), Miss A. B. Underhill (29, 36b), A. Unsöld (11, 29, 36, 36b, 38), P van de Kamp (26), A. J. J. van Woerkom (7), H. von Klüber (13), G. F. von Weizsäcker (35), B. A. Vorontsov-Velyaminov (34), A. A. Wachmann (27), Th. Walraven (42), P. Wellmann (29), J. Wempe (36), A. G. Wilson (23), F. B. Wood (42), K. Wurm (15, 29), E. Zinner (41), J. Zubieta (23).

THE EIGHTH GENERAL ASSEMBLY

At the General Assembly of the I.A.U. in Zürich, August 1948, the President, Sir Harold Spencer Jones stated that an invitation had been received from the Academy of Sciences of the U.S.S.R. to hold the next General Assembly in Leningrad, while another invitation had been received from Dr T. S. Bowen for a meeting in Pasadena. A provisional invitation had already been extended by Prof. A. A. Mikhailov in 1946. Prof. A. A. Mikhailov addressed the Assembly and transmitted an invitation by the Academy of Sciences of the U.S.S.R. to hold the next General Assembly of the I.A.U. in Leningrad and Pulkovo (cf. *Trans. I.A.U.* 7, 22). The President, Sir Harold Spencer Jones, explained that the Executive Committee had not yet found it possible to take a definite decision in this matter.

Questions in connection with the invitation from the Academy of Sciences of the U.S.S.R. were the subject of correspondence during the first half of 1949 between the President, Prof. B. Lindblad, and Prof. A. A. Mikhailov. Prof. Mikhailov informed the President of the I.A.U. that he had been authorized to state that the invitation of the Academy of Sciences of the U.S.S.R. to attend the next General Assembly, to be held in Leningrad in 1951, concerned all organizations included in the I.A.U.

In September, 1949, the Executive Committee of the I.A.U. decided to accept the invitation of the Academy of Sciences of the U.S.S.R., and the Academy was informed of the decision.

At the meeting of the Executive Committee in Stockholm, September 25-27, 1950, Prof. V A. Ambartsumian gave an account of the plans of the Astronomical Council of the Academy of U.S.S.R. in connection with the General Assembly of the I.A.U., planned to take place in Leningrad and Pulkovo, August 1-8, 1951. He indicated that the Academy of U.S.S.R. will take over all the expenses in the Soviet Union of the members of the I.A.U. taking part in the meeting. Travel within the Soviet Union, expenses in connection with a planned excursion to Moscow, and the expenses of the Bureau of the I.A.U. at the Leningrad meeting would be paid by the Academy of U.S.S.R. Expenses in connection with the travel from abroad to Leningrad, or to Moscow airport, would have to be paid by the members themselves. The offer did not include wives and relatives of members, who might wish to come, but arrangements might here be made through the regular Intourist Bureaus.

After the President had asked Prof. V A. Ambartsumian to convey the thanks of the I.A.U. for this very generous offer to the Academy of U.S.S.R., the Executive Committee agreed to accept the offer.

Prof. Ambartsumian asked that a list of those intending to come to the General Assembly be sent to the Academy of U.S.S.R. through the General Secretary, preferably before December 1, 1950. This was necessary in connection with the preparations for the meeting. Only minor additions to the list should be made at a later date. With regard to visas, applications should be made by those wishing to attend the General Assembly in the customary way. Assistance would be rendered by the Academy of U.S.S.R. and also in this connection it was essential that the list of those intending to come to the General Assembly was received by the Academy of U.S.S.R. in time.

The Executive Committee decided to ask the Secretary of the I.A.U. to inform all adhering bodies of countries adhering to the I.A.U. that a list of those intending to attend the Leningrad meeting would be sent to the Academy of U.S.S.R. on December 1, 1950, asking each adhering body to prepare a list for the country it represents and to send it to the Secretary of the I.A.U. before the date mentioned.

A circular letter was sent by the General Secretary to the adhering bodies of the I.A.U. on October 11, 1950, regarding the planned General Assembly, Leningrad, August 1-8, 1951.

In December, 1950, the President, Prof. B. Lindblad, came to the conclusion that on account of the tense international situation it was doubtful, with a view to actual participation, whether a meeting could be held as planned (cf. the statement made by President Lindblad at the meeting of the Executive Committee, September, 1951, given below, pp. 33-34). The President communicated his doubts to the General Secretary early in December at Copenhagen and consulted members of the Executive Committee who represented the big Western countries. The opinions expressed entirely confirmed the President's doubts. The President then sent out a general inquiry to all members of the Executive Committee, and after receiving replies from an overwhelming majority wrote to the Astronomical Council of the Academy of Sciences of the U.S.S.R. a proposition in the matter. The two letters from President Lindblad to the Astronomical Council of the Academy of Sciences of the U.S.S.R., given below, are dated January 30, 1951

TO THE ASTRONOMICAL COUNCIL OF THE
ACADEMY OF SCIENCES OF THE U.S.S.R.
Physhewskij Per. 3
Moskva 17.

DEAR SIRS,

On behalf of the Executive Committee of the International Astronomical Union I have the honour to submit to you the enclosed letter concerning the General Assembly and symposia scheduled for 1951.

All votes received on this question have been unanimously in favour of a postponement of the conference to a more suitable moment with regard to the general world situation. The answers have not yet reached me from two members of the Executive Committee, one of them Dr Ambartsumian, but in view of the unanimous opinion expressed by the other members I feel obliged to send you this letter without further delay.

Personally I have only with the greatest hesitation considered the question if it would be of advantage for all concerned to postpone the General Assembly. When I have come to the conclusion that it would be preferable to postpone the meetings, I have had in mind the obvious disappointment to our hosts, in the first place the Academy of Sciences of the U.S.S.R., if the meeting should not become sufficiently effective and representative for the present state of Science on account of conditions and difficulties which have nothing to do with the scientific work. I have also become convinced that there is a very wide opinion among astronomers in various countries that the meeting should preferably be postponed and that it would be best for the work of the Union not to insist on the holding of the meeting now.

I regret very much the inconvenience caused by the proposed change of plans. It seems, however, necessary to face the difficulties now, as a decision at a later time would no doubt cause still greater inconveniences.

On behalf of the International Astronomical Union I beg to express to the Academy of Sciences the deep gratitude which the Union feels towards the Academy for the great generosity with which it has planned for the Assembly.

Yours very sincerely,

BERTIL LINDBLAD

TO THE ASTRONOMICAL COUNCIL OF THE
ACADEMY OF SCIENCES OF THE U.S.S.R.

In answer to our circular letter of October 11 to National Committees and adhering bodies of the International Astronomical Union concerning the General Assembly of the International Astronomical Union in Leningrad in August 1951 replies have arrived from most of the adhering countries, with lists of astronomers intending to take part in the General Assembly.

It must be noticed, however, that most of these lists were sent before the recent increase in the political unrest of the world, and we have strong reasons to assume that the numbers of expected participants given in those lists far exceed the actual number of those who would actually participate. It must also be emphasized that in our opinion it is of paramount importance that the International Astronomical Union be kept intact from any political entanglements and complications.

We regret immensely to recommend a postponement of meetings and conferences which will be of the greatest importance to Astronomy and to collaboration in our science but we have felt it necessary to take this step now concerning the planned General Assembly of the I.A.U. in Leningrad, August 1-8, 1951, as well as the Symposia in Stockholm, sponsored by the I.A.U., before the arrangements for these meetings have advanced very far.

We sincerely hope that the existing truly international collaboration in Astronomy, which has contributed in a significant manner to a mutual understanding and appreciation, and for which we have felt extremely thankful, will continue and further develop even without these meetings being held now.

It is evident that the continuance of the present international collaboration in Astronomy is strongly desired by the countries adhering to the Union and we sincerely hope that the important work of Commissions will continue. Of particular importance to the continuous progress in Astronomy are the international projects relating to Variations of Latitude, Ephemerides, Asteroids, Variable Stars, to mention only a few. It is also urgent that the reports of Commissions, many of which are now ready, be published.

It is our sincere hope that it will be possible in the future to have a General Assembly of the International Astronomical Union in the U.S.S.R. according to plans similar to those which you have so generously made.

We have felt it impossible to postpone our proposition, because a change in plans for meetings at a later time, when the preparations would have proceeded further, might cause very serious inconvenience to those who are making the arrangements for the General Assembly. We are thinking here in particular of the generous plans of the Academy of the U.S.S.R.

BERTIL LINDBLAD

President, International Astronomical Union

In reply to these letters the President received the following telegram from Academician I. Bardin, Vice-President, U.S.S.R. Academy of Sciences:

February 17, 1951. Moscow. The Academy of Sciences of the U.S.S.R. acknowledges the receipt of your and Professor Strömberg's replies concerning the postponement of the VIIIth International Astronomical Congress. The Presidium of the Academy of Sciences of the U.S.S.R. does not find it possible to agree with the reason you offered that there were difficulties of travel and planning for participants which prevent holding the Congress in time. We think that the preparations made beforehand to notify members of the I.A.U. about the date of the opening the Congress, and the consent of the U.S.S.R. Academy of Sciences to take care of all the members of the Congress for the whole period of their staying in the U.S.S.R. makes it possible to hold the Congress successfully. Moreover, the fact that more

than a half of the members of the I.A.U. announced their consent in December, 1950, to take part in the activities of the Congress provides no reasons for reconsidering the decisions of the executive committee of the I.A.U. concerning the Congress date. The Presidium of the Academy of Sciences of the U.S.S.R. requests you to inform all the members of the executive committee of the I.A.U. of this letter and let us know your answer as soon as possible. Yours respectfully

I. BARDIN
Vice-President, U.S.S.R. Academy of Sciences

A circular letter was sent by President Lindblad, February 19, 1951, to the members of the Executive Committee, communicating this telegram and asking for comments. With the exception of Vice-President V. A. Ambartsumian the members of the Executive Committee expressed agreement with President Lindblad. On March 6, 1951, President Lindblad wrote as follows to the Astronomical Council of the Academy of Sciences of the U.S.S.R.

TO THE ASTRONOMICAL COUNCIL
OF THE ACADEMY OF SCIENCES OF THE U.S.S.R.
Physhewskij Per. 3
Moskva 17.

DEAR SIRs,

The members of the Executive Committee of the International Astronomical Union have been informed of the terms of the telegram from the U.S.S.R. Academy of Sciences.

The Executive Committee of the I.A.U. deeply regrets the trouble which its decision must cause, but has recognized that the opinion is widely held amongst astronomers in various countries that the present world conditions have made it inadvisable to hold the General Assembly of the I.A.U. and the Symposia in 1951 as scheduled. Many who had announced their intention to participate hold this view. As a non-political international organization, the I.A.U. is concerned solely with the advancement of astronomy, particularly through international co-operation, and the Executive Committee has tried as far as possible to promote this co-operation. The Executive Committee cannot fail to recognize, however, that the present international situation is likely to obstruct a representative international participation in the General Assembly and the Symposia. This consideration has predominated with the Executive Committee, which is responsible for the success of the meetings, in making the decision that the meetings should be postponed.

The Executive Committee is well and gratefully aware of the excellent preparations made by the Academy of the U.S.S.R. for receiving the General Assembly of the I.A.U., and shares fully the disappointment of the Academy that the meeting cannot be held as scheduled.

Yours very sincerely,
For the Executive Committee

B. LINDBLAD
President, I.A.U.

The adhering bodies of the I.A.U. were informed of the postponement of the General Assembly in a circular letter of March 6, 1951.

The question of the next General Assembly of the I.A.U. was discussed at the meeting of the Executive Committee in Paris, September 4-6, 1951 (cf. p. 28). In his report to the Executive Committee at the opening of the meeting President Lindblad made the following statement concerning this question:

We have before us a series of important agenda, I may mention those concerning the publication of the Draft reports and the various financial questions.

The most important question, however, concerns the postponed General Assembly. On

account of what has been written about this question I may be allowed to make the following statement.

Up to the first days of last December I believed that it would be possible to carry through our plans for the General Assembly in Leningrad as scheduled. In December the general international atmosphere got so troubled that according to my experience about the opinion in various countries we had to ask ourselves seriously if the participation to be expected would not sink below what is permissible for a successful meeting, in fact below what is worthy of our hosts and of our Union. This is the only point of view that has carried weight with me as president, and which I have expressed in my letters to you and to the Academy of Sciences of the Soviet Union. I communicated my doubts to the General Secretary early in December at Copenhagen and consulted members of the Executive Committee who represented the big Western Countries. I was of course sure that the participation of astronomers in the Soviet Union would be fairly large, and we did not want to alarm our hosts if this was not necessary. The opinions expressed confirmed entirely my own doubts. I then sent out a general inquiry to all members of the Executive Committee, and after receiving replies from an overwhelming majority I wrote at once to the Academy of Sciences a proposition in the matter.

There have appeared two pamphlets in the matter, of which I think that we need to consider only the one issued by the Astronomical Council of the U.S.S.R. The comments on the role played by the General Secretary and myself are entirely false. I think that we both care as much as anybody for co-operation in science between all countries.

Neither the General Secretary nor I have taken orders by anybody and no government has taken action in the matter directly or indirectly.

As I have said before I have asked for necessary information relevant for the question of participation, which was the only matter which really interested me as president of the Union.

If the Executive Committee considers that I have acted unwisely or with undue haste and officiousness in the matter, I shall be happy to lay down the burden which I must confess the presidency has become during the last year.

Vice-President V. A. Ambartsumian then read the following:

A STATEMENT OF THE SOVIET DELEGATION CONCERNING THE REASONS
WHICH BROUGHT TO FAILURE THE CONVOCATION OF THE VIIITH
GENERAL ASSEMBLY OF THE I.A.U. IN LENINGRAD IN 1951

As a member of the Executive Committee of the International Astronomical Union who voted against the postponement of the VIIIth General Assembly of the I.A.U. which was to be held in Leningrad in 1951 I deem it necessary to make the following statement.

The time elapsed since the decision taken by the Executive Committee of the I.A.U. pertinent to the postponement of the Congress has completely confirmed the opinion of those, who regarded such a postponement as inadvisable and the reasons given in support of the postponement as groundless and unsound. Indeed, there were no political events within the period in question which could prevent convening the said General Assembly in Leningrad.

The convocation of the international congresses, conferences and symposia on various subjects which took place at that time in a number of countries were not influenced by 'the tension in the international situation'; just on the contrary it was conducive to the development of mutual collaboration of scientists of different countries.

It is difficult even now, *post-factum*, to find, with the best will in the world, any justification for the postponement which occurred. I am absolutely in the dark about the real motives which brought to such a decision. I can only suppose that some external factors which have nothing to do with science played here their decisive role.

The true reason for the postponement of the Congress is possibly the fact that the governments of some countries and especially that of the United States would not like to give their scientists the permission to visit the Soviet Union. If that is how it is we would like the American astronomers to be placed in such conditions which would enable them in future to

collaborate more closely with scientists of other countries and to have free access to international congresses and conferences. In any case the difficult situation in which the American astronomers may find themselves as a result of such measures cannot but evoke our sympathy.

In witness of the fact that the postponement of the Congress was absolutely groundless, I can refer not only to all the Soviet astronomers' opinions expressed in the recently published communication of the Astronomical Council of the U.S.S.R. Academy of Sciences, which I now have the honour to offer for distribution among all the participants, but also to the letters, received from many astronomers of France, England, Holland, Poland and some other countries.

I hope that we shall be able to fully realize the mistake made and to avoid in future such actions, which can stand in the way of fruitful collaboration between astronomers of different countries.

Taking into account the hope, expressed early this year by our esteemed President, Professor Lindblad, in his letter to the Astronomical Council that it may be possible in future to hold a General Assembly of the International Astronomical Union in the U.S.S.R., and considering that the decision previously taken by us with regard to the place of the convening of the Congress remains in force, the Congress should be held in Leningrad. I put forward a proposal to the effect that the Congress should take place in the said city in the first half of August 1952.

Notwithstanding some disappointment in connection with the fact that the preliminary work performed by the Academy last year has yielded no result, the Academy of Sciences of the Soviet Union has complied with the wish of the Soviet astronomers and agreed to take care of all the arrangements for the Congress on the same terms as stated in 1951.

A discussion followed in which the members of the Executive Committee with the exception of Vice-President Ambartsumian expressed agreement with the President on the question of the postponed General Assembly. Sir Harold Spencer Jones stated that he was of the opinion that so long as the present tension exists it would be better not to have a General Assembly in either the U.S.S.R. or the U.S.A. A meeting in Leningrad would be better at a later time. Vice-President Ambartsumian on the second day of the session made the following statement:

Returning to the question of the place and time for the VIIIth General Assembly I must state, that I have not heard any serious arguments against its convocation in Leningrad.

It has been put forward here, that a considerable part of the Western astronomers would refuse to participate if the General Assembly takes place in the Soviet Union. However, this opinion was not borne out by facts.

On the contrary we have many evidences, showing that astronomers of all countries are strongly in favour of the Congress being held in Leningrad, in accordance with the I.A.U. Executive Committee's unanimous decision.

I could refer to the letter from 15 astronomers of France, Holland, and other countries, of April 6, 1951, to all the members of the Executive Committee, in which they are decisively protesting against the postponement of the Congress in Leningrad.

It is well known that many astronomers of Poland, Czechoslovakia and other countries have joined in this protestation. (The letters of Polish astronomers of June 15, and that of Czechoslovakian astronomers of July 27.)

It is my duty to inform you that the Astronomical Council of the U.S.S.R. receives many letters from Denmark, England and other countries expressing astronomers' great disappointment in the decision of the Executive Committee concerning the postponement of the meeting of the I.A.U.

It is worth while mentioning here that many astronomers intended bringing members of their families on a visit to Leningrad.

What is the reason of declining the invitation of the Soviet Union—the invitation which was already accepted at the previous meeting of Executive Committee and has an absolute priority as compared with any other invitation? Such an action means nothing else but discrimination against one of the member-countries of the I.A.U.

But we know that true international co-operation and friendship in science is possible only on the principles of equality between all countries, and it cannot be based on the discrimination of some of them.

To decline the invitation of the Astronomical Council of the U.S.S.R.—means to throw the I.A.U. into the flames of political passions, which would in no way contribute to the progress of our science.

Taking into account all these circumstances, I call upon the E.C. to indorse the proposal to hold the Congress of the VIIIth General Assembly in Leningrad in August, 1952.

We have also been told about the possibility of political pressure upon the participants of the Congress in Leningrad. I should like to know what are the grounds for such suppositions?

Could anyone give concrete examples testifying that political pressure has been brought to bear on scientists who have visited the Soviet Union? It is widely known that a number of major international scientific congresses had been held in the Soviet Union, such as the International Physiological Congress, the International Congress of Geology, and numerous other conferences and symposia, yet who could provide a single instance of political pressure having been exercised at these conferences? It is impossible to cite any such instances, for the simple reason that they do not exist.

Therefore all statements about the possibility of political pressure do nothing but mislead the public opinion and are being circulated in scientific circles for definite political reasons.

Here indeed is what can be cited as a glaring example of political pressure being brought to bear on a large group of scientists striving for international co-operation.

In the discussion it was proposed that a General Assembly be held in 1952 in a smaller European country. This proposal was accepted by the Executive Committee with the votes of all members except Vice-President Ambartsumian, who voted for the General Assembly being held in Leningrad.

Vice-President Abetti on behalf of the Italian National Research Council extended an invitation to hold the next General Assembly in Rome in September 1952. Voting on this proposal took place at the end of the meeting. The Executive Committee decided to accept the invitation, all members voting for the proposal with the exception of Vice-President Ambartsumian who voted against it.

In closing the meeting President Lindblad made the following statement:

In closing the session of the Executive Committee of the International Astronomical Union we thank most cordially our colleague and host, M. Danjon, Directeur de l'Observatoire de Paris, for the most excellent way in which he has arranged this meeting in this magnificent place where we always assemble so willingly, and for all the kindness he has shown us here.

The great number of questions which we have had to consider shows the vitality and importance of our Union. It is my privilege as president of the Union to express my thanks to all who have participated here.

I wish to say a few words to our Russian colleagues, to Dr Ambartsumian as well as to his associates, Professor Nemiro and Mr Orajewski. We ask Dr Ambartsumian to convey to the Academy of Sciences of the Soviet Union our deep respect and gratitude and we thank him for the co-operative spirit with which he has taken part in our meeting. We hope that he is convinced about our very deep wish to co-operate with our colleagues in the Soviet Union. For my own part I hope most sincerely that the Academy of the Soviet Union will not be too disappointed with us and that it will invite us again when the present international tension has ceased. It is my sincere hope that we shall then have the opportunity to see the astronomical development and the fine astronomical institutions in his great country.

We extend also our most sincere thanks to Professor Abetti and through him to the Research Council of Italy for their kind invitation to hold the meeting in 1952 in Rome. I hope that this General Assembly will be in all successful and that it will contribute effectively to the international co-operation in our science.

SYMPOSIA

A Symposium on 'Problems of Cosmical Aerodynamics' was organized by the International Union of Theoretical and Applied Mechanics and the International Astronomical Union with the co-operation of U.N.E.S.C.O. The Symposium was held in Paris, August 16-19, 1949. Proceedings of the Symposium were published by Central Air Documents Office, U. B. Building, Dayton 2, Ohio.

The Executive Committee of the I.A.U. has decided to organize two Symposia during the General Assembly in September 1952, and has appointed Committees for preparing the Symposia.

Symposium on Stellar Evolution. Committee: Ambartsumian (Chairman), Schatzman (Secretary), H. Bondi, Struve.

Symposium on Astrometry of Faint Stars. Committee: Zverev (Chairman), Blaauw, Heckmann, J. Jackson, Nemiro, Shane, Vyssotsky.

The I.A.U. is very grateful to U.N.E.S.C.O. for allocating a grant-in-aid toward travelling expenses in connection with the Symposium on Stellar Evolution.

The Executive Committee has further decided to organize in the form of an extended meeting of the commission on Astronomical Instruments (Commission 9, President A. Couder) a Symposium on Astronomical Instrumentation.

It has also been decided to hold a Symposium on Radio-Astronomy, and the following organizing Committee was appointed: Van de Hulst (Chairman), Hagen, Laffineur, Lovell, Pawsey.

Finally, it was decided to plan a Symposium in 1953 on Co-ordination of methods of Galactic Research. Committee: Oort (Chairman), Baade, Bok, Fehrenbach, Lindblad, W W Morgan, Parenago.

U.N.E.S.C.O. GRANTS 1948, 1949, 1950 AND 1951

The following grants have been allocated to the I.A.U. by U.N.E.S.C.O. for the purposes mentioned in the breakdown given below: \$21,880 for 1948, \$14,000 for 1949, \$13,105 for 1950 and \$17,900 for 1951.

1948	\$
A. International Latitude Service	980
B. International Time Bureau	4400
C. Exchange of Astronomers (Commission 38)	3000
D. General Assembly, 1948:	
1. Transportation expenses, members of Executive Committee, Presidents of Commissions, Directors of Bureaus	8000
2. Transportation expenses, young astronomers	2000
E. Publications:	
1. Volume 7, <i>Trans. I.A.U.</i>	1500
2. <i>Name List of Variable Stars</i>	200
3. <i>Ephemerides of Minor Planets</i>	800
4. Volume of <i>Latitude Results</i>	1000
	\$21880

1949	
	\$
A. International Latitude Service	800
B. International Time Bureau	3200
C. Exchange of Astronomers (Commission 38)	4000
D. Publications:	
1. Volume 7, <i>Trans. I.A.U.</i>	1500
2. <i>Name List of Variable Stars</i>	200
3. <i>Ephemerides of Minor Planets</i>	800
4. <i>Résultats des Longitudes Mondiales, 1933</i>	500
E. Symposium on Problems of Cosmical Aerodynamics, to be organized in co-operation with I.U.T.A.M.	3000
	—————
	\$14000

1950	
	\$
A. International Latitude Service	680
B. International Time Bureau	2920
C. Exchange of Astronomers (Commission 38)	4000
D. Publications:	4505
1. <i>Solar Spectrum Tables</i>	
2. Third Edition of the <i>Parallax Catalogue</i>	
3. <i>Heliographic Charts of the Photosphere</i>	
4. <i>Synoptic Charts of the Chromosphere</i>	
5. Volume of <i>Latitude Results</i> up to the end of 1948	
6. <i>Name List of Variable Stars</i>	
7. <i>Ephemerides of Eclipsing Binaries</i>	
E. Transportation expenses, meeting of Executive Committee in 1950	1000
	—————
	\$13105

1951	
	\$
A. International Latitude Service	1000
B. International Time Bureau	3200
C. Publications:	
1. <i>Ephemerides of Minor Planets</i>	1000
2. <i>Heliographic Charts of the Photosphere</i>	350
3. <i>Synoptic Charts of the Chromosphere</i>	900
4. <i>Name List of Variable Stars</i>	250
5. <i>Ephemerides of Eclipsing Binaries</i>	350
6. <i>Quarterly Bulletin on Solar Activity</i>	2000
D. Symposia:	3850
1. Problems of Astronomical Instrumentation	
2. Astronomical Problems of Radio-Astronomy	
E. General Assembly, 1951:	
1. Transportation expenses, members of Executive Committee, Presidents of Commissions, Directors of Bureaux	3000
2. Transportation expenses, young astronomers	2000
	—————
	\$17900

Following the postponement of the General Assembly U.N.E.S.C.O. agreed to transfers of the grants, items D and E. Later U.N.E.S.C.O. also agreed to a change of title for item D 2 from 'Astronomical Problems of Radio-Astronomy' to 'Stellar Evolution'.

The financial support given by U.N.E.S.C.O. to the I.A.U. through these grants has been of the greatest importance to the Union. The I.A.U. is very much indebted to

U.N.E.S.C.O., and to the Officers of U.N.E.S.C.O. and I.C.S.U. who have given their most effective help in connection with questions concerning these grants.

The I.A.U. is especially indebted to Dr Wang Ging-Hsi, National Sciences Division, U.N.E.S.C.O., Dr R. Fraser, Liaison-Officer, I.C.S.U.-U.N.E.S.C.O., and Prof. F. J. M. Stratton, General Secretary, I.C.S.U.

In addition to Vol. 7 of the *Transactions of the I.A.U.* the following volumes have been published under the auspices and with financial support from the I.A.U. U.N.E.S.C.O. grants aiding this activity of the I.A.U. (cf. above) are gratefully acknowledged.

Commission 10:		
	<i>Heliographic Charts of the Photosphere</i>	Waldmeier
Commission 11:		
	<i>Cartes synoptiques de la Chromosphère</i>	d'Azambuja
Commission 18:		
	<i>Publications des Résultats des Longitudes Mondiales 1933</i>	Tardi
Commission 19:		
	<i>Results of the International Latitude Service</i>	Carnera, Cecchini
Commission 20:		
	<i>Publications, Minor Planets Center, Cincinnati</i>	Herget
Commission 23:		
	<i>Astrographic Catalogue, Edinburgh Section, Zones -40°, and -39°</i>	Baillaud
Commission 27:		
	<i>Name List of Variable Stars, Nos 44, 45, 46 and 47</i>	Kukarkin, Parenago
	<i>English Version of Introduction and Remarks from The General Catalogue of Variable Stars (1948), from the first supplement to this General Catalogue and from the second supplement to this General Catalogue</i>	
Commission 31:		
	<i>Bulletins Horaires du Bureau de l'Heure</i>	Danjon

A grant of \$3000 was allocated by U.N.E.S.C.O. toward the publication of the collected works of Henri Poincaré. The grant was given through the I.A.U. as sponsoring organization.

THE MEETING IN ROME

As stated above the Executive Committee decided at its meeting in Paris in September 1951 to accept the invitation of the Italian National Research Council to hold the eighth General Assembly in Rome in September, 1952. Later it was decided that the General Assembly would take place from September 4 to 13.

Draft Reports of commissions received before November 1, 1951, have been printed and issued as a first volume of *Draft Reports* well in advance of the meeting. As a consequence of the fact that several of these reports had been prepared in time to be published in 1951 before the scheduled meeting in Leningrad, a number of Presidents deemed it necessary to add a supplement to their reports. These supplementary reports have been published shortly before the General Assembly in a second volume of *Draft Reports* together with the report of the Executive Committee and with some belated reports.

The Agenda for the first meeting of the General Assembly was fixed as follows:

1. Official opening of the Congress.
2. Address by the President of the Union.
3. Appointment of recorders and interpreters for the meeting.
4. Report of the Executive Committee.

5. Appointment of the Finance Committee—one member to be nominated by each adhering country.
6. Resolutions submitted by the Executive Committee:
 - (a) That the statutes be changed to the effect that the maximum of the unit of subscription be raised from 500 to 750 gold francs.
 - (b) That the Union contemplate an increase of income from its own sources, in connection with the U.N.E.S.C.O. rule that 'organizations receiving subventions shall make every effort to increase progressively their own share in the financing of the activities for which U.N.E.S.C.O. has granted a subvention'
 - (c) That the Union adopt the same financial year as I.C.S.U., *videlicet* from November 1 to October 31.
 - (d) That rules be established to guide the Presidents of commissions in preparing their Draft Reports.
7. Resolutions submitted by National Committees of Astronomy:
 - (a) Le Comité National Belge d'Astronomie exprime le vœu que les Gouvernements des Nations européennes (ou l'U.N.E.S.C.O.) aient leur attention attirée sur l'intérêt qu'il y aurait à créer en commun, en Europe ou en Afrique, un centre de recherches dont le programme comporterait l'étude et la construction des garde-temps les plus précis, notamment ceux dénommés 'horloges atomiques ou horloges à raies spectrales', ainsi que des instruments susceptibles de permettre la détermination simultanée d'unités de durée et de longueur.
 - (b) In view of the confusion and inconvenience likely to arise from the use of two different systems of abbreviations for the constellations, the Australian National Committee wishes to recommend to the consideration of the General Assembly that the three letter system, adopted by the I.A.U. in 1922, be regarded as standard.

MEETINGS OF STANDING COMMISSIONS

The schedule of the meetings of commissions for the eighth General Assembly in Rome was worked out on the following lines.

The commissions were first divided into seven groups. This grouping, an essential part of which was done by Prof. VAN DE HULST, is shown below. It may be considered as provisional and is open to change if need be.

During the first days of the congress the commissions met separately in order to deal with technical and other matters, which are of little interest to other commissions. These separate meetings were arranged in such a manner that commissions out of the same group did not meet simultaneously. It was hoped that by this procedure the large number of meetings of the thirty-nine standing commissions would interfere least with the wish of many participants to attend several of these meetings.

Next to the separate meetings a number of combined meetings were organized. So far this was done only when the Presidents of the commissions concerned suggested such meetings themselves. Most of the combined meetings were arranged between commissions out of the same group.

Practice should indicate whether the number of combined meetings can be increased in the future and whether the system of meetings can still be improved.

PROVISIONAL GROUPING OF COMMISSIONS

Group I. *General Commissions*

3	Notations	38	Exchange of astronomers
5	Abstracts	39	International observatory
6	Telegrams	41	History
9	Instruments		

Group II. *Fundamental Astronomy*

4	Ephemerides	18	Geographical positions
7	Celestial mechanics	19	Latitude variation
8	Meridian astronomy	20	Minor planets, comets, etc.
8a	Photographic catalogues	20a	Periodic comets
17	Motion of Moon	31	Time

Group III. *Physics of Earth and planets*

15	Comets	22a	Zodiacal light
16	Planets	22b	Meteor star maps
22	Meteors		

Group IV *Sun*

10	Photospheric phenomena	12	Sun's radiation and solar spectroscopy
11	Outer layers of Sun	13	Eclipses
11a	Motion pictures of prominences		

Group V *Spectroscopy, photometry, theoretical astrophysics*

14	Standard wave-lengths	35	Constitution of the stars
14a	Tables of intensities	36	Spectrophotometry
25	Stellar photometry	36a	Standards of line-intensity
25a	Magnitude sequences	36b	Theory of stellar atmospheres
29	Stellar spectra	40	Radio-astronomy
29c	Molecular bands		

Group VI. *Galactic objects*

26	Double stars	34	Planetary nebulae and interstellar matter
27	Variable stars	34a	Atlas of galactic nebulae
29a	Novae	37	Clusters
29b	Spectra of variables	42	Photometric double stars
30c	Spectroscopic double stars		

Group VII. *Stellar statistics, galactic structure and extragalactic nebulae*

23	Carte du ciel and sky surveys	30a	Fundamental radial velocities
24	Parallaxes and proper motions	30b	Standard wave-lengths
28	Extra galactic nebulae	32	Selected areas
30	Radial velocities	33	Stellar statistics

INCOME AND EXPENDITURE

At the General Assembly in Zürich in August, 1948, it was decided that the unit of contribution for the years 1949–51 be fixed at 500 gold francs, the gold franc being defined in accordance with the Statutes of the International Council of Scientific Unions, Vol. 3, p. 107, 1937, as 0.2903225 grammes fine gold, or 0.3266 U.S. dollars.

The gold francs account (cf. *Trans. I.A.U.*, Vol. 7, p. 33, 1950) has been used as previously to account for payments from a contributing country directly toward one of the activities of the I.A.U.

On January 1, 1952, the unexpended balance was about \$58,000. Of this amount, however, somewhat over \$15,000 is committed, for publications and as a consequence of virements of U.N.E.S.C.O. grants in connection with the postponement of the General Assembly (cf. p. 38). The net balance is approximately \$43,000. The increase of the balance, from about \$5,000 on January 1, 1948, is due partly to the fact that a number of arrears have been paid, and partly to the U.N.E.S.C.O. support which has reduced the I.A.U. support necessary for sponsored activities to figures below those of the 1948–51 budget.

The co-operation of National Committees and Adhering Bodies in securing the subscriptions is gratefully acknowledged.

It should be emphasized that, although the financial situation of the I.A.U. is now satisfactory, the I.A.U. even with its present reserves could not support the activities now sponsored for more than a few years, if U.N.E.S.C.O. grants would not be available, or much reduced, in the future.

TOTAL INCOME AND EXPENDITURE, 1948-51

In computing total income and expenditures for the years 1948-51 rates of exchange of the various currencies in question were determined as follows: For each year separately the ratio of the subscriptions received in a given currency to the nominal value of the subscriptions in gold francs gives the effective gold franc rate of exchange of that currency. For example, for 1949 the rate of exchange of the pound sterling was taken to be equal to that before the devaluation in September 1949, since the subscription in question had been paid before the devaluation.

The subscriptions received, including arrears paid, are given below.

1948	1949	1950	1951	Total
\$11,300	12,292	18,985	14,854	\$57,431

The amounts paid 1948-51 on the annual grants (cf. *Trans. I.A.U.* 7, p. 60) are given in the following table. The amounts of the U.N.E.S.C.O. grants through which the I.A.U. was partly reimbursed are also given.

	Amount paid (dollars)	Reimbursement through U.N.E.S.C.O. grants (dollars)
Commission 5 (Bibliographie mensuelle)	489	—
„ 6 (Bureau des Télégrammes)	1,568	—
„ 10 (Cartes héliographiques de la photosphère)	1,003	700
„ 11 (Cartes synoptiques)	3,521	1,800
„ 19 (Bureau central de la Variation des Latitudes)	3,674	3,460
„ 20 (Centre des Petites Planètes, à Cincinnati) ...	3,000	2,250
„ 27 (Liste des Noms d'Etoiles variables) ...	793	750
„ 31 (Bureau International de l'Heure)	15,880	13,720
„ 38 (Echange des Astronomes)	14,301	11,000
Bureau de l'Union	23,954	16,204

Remarks

Commission 5. An amount of \$489, previously granted, was also paid during the period.
 Commission 19. An amount of \$1617, previously granted, was also paid during the period.

Commission 27. The cost includes that of translation and printing of the *Introduction to Catalogue and Ephemerides of Variable Stars*.

Commission 31. An amount of \$8884, previously granted, was also paid during the period. Of the \$15,880 paid, the sum of \$5900 was paid directly by U.N.E.S.C.O. to the B.I.d.H.

The U.N.E.S.C.O. grants toward expenses of the Bureau of the Union, totalling \$16,204, were for the following purposes:

- (1) Travel expenses, General Assembly, Zürich, 1948, \$8912.
- (2) Symposium on cosmical aerodynamics, 1949, \$2092.

- (3) Travel expenses, meeting Executive Committee, 1950, \$1000.
- (4) Travel expenses, meeting Executive Committee, 1951, \$1200.
- (5) Printing of *Trans. I.A.U.*, Vol. 7, \$3000.

In addition to the annual grants, the following special grants (cf. *Trans. I.A.U.* 7, p. 60) were paid by the I.A.U. during the period 1948–51.

	Amount paid (dollars)	Reimbursement through U.N.E.S.C.O. grants (dollars)
Commission 18 (Publication des Résultats des Longitudes Mondiales 1933)	800	500
„ 19 (Dépenses du Déménagement du Bureau Cen- tral à Turin)	327	—
„ 23 (Carte du Ciel)	8,909	—
„ 27 (Cartes d'Etoiles variables dans l'Hémisphère sud)	250	—

Remarks

Commission 23. The grant voted at the Zürich General Assembly plus previous grants = \$14,590.

Payment of the following special grants, voted by the General Assembly in Zürich, 1948, was not requested during the period 1948–51, but the amounts are committed:

- (1) Solar spectrum tables, \$1960.
- (2) Publication of the results of the latitude variation observations up to the end of 1948, \$2613.
- (3) Publication of the third edition of the *Parallax Catalogue*, \$1633.

INCOME AND EXPENDITURE, 1948

DOLLARS

	INCOME	EXPENDITURE	
Balance, Jan. 1, 1948	...		
Subscription:	...		\$30883.65
Chile (1947)	...		
China (1948)	...	\$97.98	
Finland (1948)	...	196.00	
Vatican City State (1946, 1947, 1948)	...	98.00	
U.S.S.R. (1948)	...	294.00	
India (1948)	...	784.00	
Switzerland (1948)	...	196.00	
Belgium (1948)	...	98.02	
		<u>195.42</u>	
Interest	...		\$1959.42
U.N.E.S.C.O. grants 1948, dollar account	...		28.11
Transfer, balance Zürich meeting	...		8280.00
			<u>1084.79</u>
			\$11352.32
			<u>11352.32</u>
			<u>\$42235.97</u>
			\$882.00
			1000.00
			1340.64
			8883.94
			1200.00
			117.00
			<u>4528.38</u>
			<u>\$17951.96</u>
			24284.01
			<u>\$42235.97</u>

INCOME AND EXPENDITURE, 1949

DOLLARS

INCOME		EXPENDITURE	
Balance, Jan. 1, 1949	...	Commission 10, Heliographic Charts	...
Subscriptions:	...	Commission 18, Longitudes Mondiales	...
Czechoslovakia (1948)	...	Commission 20, Minor Planets Center	...
Chile (1948, 1949, part)	...	Commission 23, Carte du Ciel	...
India (1949)	...	Commission 31, B.I.H.	...
Switzerland (1949)	...	Commission 38, Exchange of Astronomers	...
Chile (1949, balance)	...	Symposium on Problems of Cosmical Aerodynamics,	...
Vatican City State (1949)	...	travel expenses	...
Canada (1948 + 1949)	...	Transfer to Copenhagen account	...
U.S.A. (1949)	...	Bureau of the Union	...
Belgium (1949)	...		...
Czechoslovakia (1949)	...		...
U.S.S.R. (1949)	...		...
Interest	...		...
U.N.E.S.C.O. grants 1949, dollar account	...		...
	\$24284.01		\$326.60
	\$294.00		800.00
	195.96		1000.00
	326.70		38.36
	163.30		3219.81
	65.32		2000.00
	163.30		805.00
	783.84		851.56
	1306.77		15.20
	325.52		\$9056.53
	489.90		
	1306.40		
	\$5421.01		
	4.06		
	6300.00		
	\$11725.07		
	11725.07		26952.55
	\$36009.08		\$36009.08

INCOME AND EXPENDITURE, 1950

	DOLLARS	
INCOME		EXPENDITURE
Balance, Jan. 1, 1950		<i>Commission 10</i> , Heliographic Charts
Subscriptions:		<i>Commission 20</i> , Minor Planets Center
Spain (1949)		<i>Commission 23</i> , Carte du Ciel
Hungary (1948, 1949)	\$1306.40	<i>Commission 27</i> , Charts, Southern Variable Stars
Poland (1947)	522.56	<i>Commission 31</i> , B.I.H.
Switzerland (1950)	784.00	<i>Commission 38</i> , Exchange of Astronomers
Italy (1950, part)	163.30	Bureau of the Union, including travel expenses, meeting
Belgium (1950)	326.60	Executive Committee, September, 1950
U.S.R. (1950)	324.10	
U.S.A. (1950)	1306.40	
Chile (1950, 1951, part)	163.36	
Spain (1950)	1306.77	
Czechoslovakia (1950)	228.62	
	1306.40	
	489.90	
Interest	<u>\$8228.41</u>	
U.N.E.S.C.O. grant 1950, dollar account	28.12	
Transfer from Copenhagen account	8940.00	
	800.00	
	<u>\$17996.53</u>	
	17996.53	Balance, Jan. 1, 1951
	<u>\$44949.08</u>	
		<u>\$35863.03</u>
		<u>\$9086.05</u>

INCOME AND EXPENDITURE, 1951

DOLLARS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1951	\$35863.03
Subscriptions:	
Roumania (up to 1950)	\$2613.20
U.S.S.R. (1951)	1306.40
Switzerland (1951)	163.30
Belgium (1951)	323.42
Italy (1951, part)	326.60
Finland (1951)	165.00
Spain (1951)	1306.40
Japan (1951)	1306.80
Interest	\$7511.12
U.N.E.S.C.O. grant 1951, dollar account	12.09
Transfer from Copenhagen account (subscription of Japan, 1950)	8950.00
	649.64
\$17122.85	\$326.00
	Commission 10, Heliographic Charts
	Commission 38, Exchange of Astronomers
	Quarterly Bulletin (U.N.E.S.C.O. grant \$2000.00)
	Transfer to Stockholm account
	Bureau of the Union, including travel expenses, meeting
	Executive Committee, September, 1951
	1714.43
	\$6050.92
Balance, Jan. 1, 1952	46934.96
\$17122.85	\$62985.88
	\$52985.88

INCOME AND EXPENDITURE, 1948

INCOME		POUNDS		EXPENDITURE	
	£ s. d.	£ s. d.		£ s. d.	
Balance, Jan. 1, 1948	...	1652 15 11	Commission 23, Carte du Ciel	...	120 0 0
Subscriptions:	...	...	Commission 38, Exchange of Astronomers	...	175 0 0
Canada (1941-47) ...	509 6 2	...	Bureau of the Union (travel expenses Zürich meeting) ...	...	579 3 1
Great Britain (1948) ...	192 18 9	...			874 3 1
U.N.E.S.C.O. grants 1948, pound account	702 4 11				
Cambridge University Press (Sale, publications) ...	917 7 5		Balance, Jan. 1, 1949	...	2398 19 7
	14 5				£3273 2 8
	1620 6 9	1620 6 9			
		£3273 2 8			

INCOME AND EXPENDITURE, 1949

INCOME		POUNDS		EXPENDITURE	
	£ s. d.	£ s. d.		£ s. d.	
Balance, Jan. 1, 1949	...	2398 19 7	Commission 38, Exchange of Astronomers	...	125 0 0
Subscriptions:	...	...	Transfer to Copenhagen	...	600 0 0
Great Britain (1949) ...	324 11 6	...	Bureau of the Union, including travel expenses, Symposium on Cosmical Aerodynamics	...	43 1 9
Cambridge University Press (Sale, publications) ...	324 11 6	...			768 1 9
U.N.E.S.C.O. grants 1949, pound account	4 7 4				
Transfer from Copenhagen ...	677 8 5		Balance, Jan. 1, 1950	...	3098 18 10
Transfer from gold francs account ...	449 8 7				£3867 0 7
	12 5 2				
	1468 1 0	1468 1 0			
		£3867 0 7			

INCOME AND EXPENDITURE, 1950

		POUNDS			EXPENDITURE		
INCOME		£	s.	d.			
Balance, Jan. 1, 1950	...	...	3098	18 10	Commission 38, Exchange of Astronomers		
Subscriptions:	...	...	...	...	Bureau of the Union (including costs of printing <i>Transactions</i> , Vol. 7, £1275. 15s. 2d., and travel expenses, meeting Executive Committee, September, 1950) ...		
Yugoslavia (up to 1949)	...	700	0	0			
Egypt (1949, part)	...	72	11	6			
Australia (1949)	...	116	16	7			
South Africa (1948, 1949, 1950)	...	151	13	7			
Yugoslavia (1950)	...	175	0	0			
Great Britain (1950)	...	466	11	5			
India (1950)	...	116	12	10			
		1799	5	11			
Cambridge University Press (Sale, publications)	...	9	15	3			
		£1809	1	2	...	...	3356 18 5
			1809	1 2	...	...	£4908 0 0

INCOME AND EXPENDITURE, 1951

		POUNDS			EXPENDITURE		
INCOME		£	s.	d.			
Balance, Jan. 1, 1951	...	...	3356	18 5	Commission 38, Exchange of Astronomers		
Subscriptions:	...	...	...	...	Bureau of the Union (including Cambridge University Press and travel expenses, meeting of Executive Committee, September, 1951) ...		
Australia (1950)	...	116	13	6			
Yugoslavia (1951)	...	175	0	0			
Great Britain (1951)	...	466	11	5			
India (1951)	...	116	12	10			
Denmark (1951)	...	58	6	5			
Norway (1951)	...	58	6	5			
Germany (1951, West Germany)	...	291	12	1			
		1283	2	8	...	...	3617 19 1
			1283	2 8	...	...	£4640 1 1

INCOME AND EXPENDITURE, 1948

GUILDERS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1948	Fl. 1055.78
Subscriptions:	
Egypt (1946)	Fl. 577.43
Australia (1947)	519.21
Eire (1948)	259.42
Egypt (1947)	576.85
Spain (1947)	2032.76
Spain (1948)	2032.76
Portugal (1948)	533.60
	<u>6532.03</u>
Interest	7.64
Sale, Lunar Maps	7.52
U.N.E.S.C.O. grants 1948, guilder account	738.10
Transfer back, Zürich meeting	93.38
	<u>7378.67</u>
	Balance, Jan. 1, 1949
	3795.85
	<u>Fl. 8434.45</u>

50

INCOME AND EXPENDITURE, 1949

GUILDERS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1949	Fl. 3795.85
Subscriptions:	
Australia (1948)	Fl. 520.45
Portugal (1949, part)	533.50
Netherlands (1948, 1949)	1390.12
	<u>2444.07</u>
Interest	17.71
	<u>2461.78</u>
	Commission 27, Etoiles Variables (Name List of Variable Stars)
	660.00
	Commission 38, Exchange of Astronomers
	2253.39
	Bureau of the Union (including travel expenses, Symposium on Cosmical Aerodynamics)
	1500.00
	Transfer to Copenhagen
	5208.07
	Balance, Jan. 1, 1950
	1049.56
	<u>Fl. 6257.63</u>

INCOME AND EXPENDITURE, 1950

GUILDERS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1950	Fl. 1049.56
Subscriptions:	
Netherlands (1950)	Fl. 1241.08
	<u>1241.08</u>
Interest	5.35
Transfer from Copenhagen	1500.00
	<u>2746.43</u>
	Balance, Jan. 1, 1951
	<u>821.36</u>
	<u>Fl. 3795.99</u>
	<u>Fl. 1873.30</u>
	<u>1101.33</u>
	<u>2974.63</u>

51

INCOME AND EXPENDITURE, 1951

GUILDERS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1951	Fl. 821.36
Subscriptions:	
Netherlands (1951)	Fl. 1240.00
	<u>1240.00</u>
Interest	1.98
	<u>1241.98</u>
	Balance, Jan. 1, 1952
	<u>1453.62</u>
	<u>Fl. 2063.34</u>
	<u>Fl. 609.72</u>
	<u>1453.62</u>
	<u>Fl. 2063.34</u>

4-2

INCOME AND EXPENDITURE, 1948

		GOLD FRANCS			
INCOME		Gold frs.	EXPENDITURE		Gold frs.
Subscriptions:					
Italy (up to 1947)	...	...	Commission 6, Télégrammes Astronomiques ...	...	1200
France (1948)	...	4800	Commission 19, Variation des Latitudes (Latitude Bureau) ...	...	7200
Denmark (1948)	...	2400	Transfer to French francs account (Commissions 5, 11, 23, 31)	...	2400
Norway (1948)	...	300	Transfer to Swiss francs account, Zürich meeting	...	1575
Norway (1948)	...	300			
Sweden (1948)	...	600			
Mexico (up to 1948, part)	...	1575			
Italy (1948)	...	2400			
		Gold frs. 12375			Gold frs. 12375

52

INCOME AND EXPENDITURE, 1949

		GOLD FRANCS			
INCOME		Gold frs.	EXPENDITURE		Gold frs.
Subscriptions:					
France (1949)	...	...	Commission 6, Télégrammes Astronomiques ...	...	500
Norway (1949)	...	4000	Commission 19, Variation des Latitudes (Latitude Bureau)	...	4000
Italy (1949)	...	500	Transfer to French francs account (Commissions 5, 11, 23, 31)	...	4000
		4000			
		Gold frs. 8500			Gold frs. 8500

INCOME AND EXPENDITURE, 1950

		GOLD FRANCS	
INCOME		Gold frs.	EXPENDITURE
Subscriptions:			Gold frs.
France (1950) ...	...	4000	<i>Commission 19, Variation des Latitudes (Latitude Bureau) ...</i>
Italy (1950, part) ...	...	3000	Transfer to French francs account (Commissions 5, 11, 23, 31)
		<u>Gold frs. 7000</u>	<u>Gold frs. 7000</u>

INCOME AND EXPENDITURE, 1951

		GOLD FRANCS	
INCOME		Gold frs.	EXPENDITURE
Subscriptions:			Gold frs.
France (1951) ...	...	4000	<i>Commission 19, Variation des Latitudes (Latitude Bureau) ...</i>
Italy (1951, part) ...	...	3000	Transfer to French francs account (Commissions 5, 11, 23, 31)
		<u>Gold frs. 7000</u>	<u>Gold frs. 7000</u>

INCOME AND EXPENDITURE, 1948

		SWISS FRANCS, ZÜRICH MEETING	
INCOME		Sw. frs.	EXPENDITURE
Transfer from gold francs account (subscription Mexico) ...	...	2196.15	Commission 38, Exchange of Astronomers ...
U.N.E.S.C.O. grant ...	...	12686.00	Bureau of the Union (including travel expenses, Zürich meeting) ...
Transfer from dollar account ...	...	497.30	Transfer to dollar account ...
			Transfer to dollar account ...
			Transfer to French francs account ...
			Transfer to guilder account ...
		<u>Sw. frs. 15379.45</u>	<u>Sw. frs. 15379.45</u>

INCOME AND EXPENDITURE, 1949

DANISH CROWNS		D. crs.	EXPENDITURE		D. crs.
INCOME			EXPENDITURE		
Subscriptions:					
U.S.A. (1948)	...	3751.36	<i>Commission 6, Télégrammes Astronomiques</i>	...	1099.68
Denmark (1949)	...	785.48	<i>Commission 38, Exchange of Astronomers</i>	...	2984.95
Egypt (1948, part)	...	1043.25	Bureau of the Union (including travel expenses, Symposium on Cosmical Aerodynamics)	...	5817.29
Finland (1949)	...	1124.82			9901.92
Sweden (1949)	...	2254.86			10915.10
		D. crs. 8959.77	Balance, Jan. 1, 1950	...	10915.10
Interest	...	5.27			
Transfer from guilder account	...	2706.00			
Transfer from dollar account	...	5764.00			
Transfer from Swedish crown account	...	396.00			
Transfer from pound account	...	2915.08			
Transfer from French francs account	...	70.90			
		D. crs. 20817.02			D. crs. 20817.02

INCOME AND EXPENDITURE, 1950

DANISH CROWNS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1950	D. crs. 2712.09
Subscriptions:	
Portugal (1949, 1950, part)	...
Norway (1950)	2256.50
Denmark (1950)	1130.00
Portugal (1950, balance)	1130.00
Spain (1935-46, part)	896.59
Japan (1950)	9349.92
	4495.54
	<u>D. crs. 19258.55</u>
Interest	22.74
Sale, publications	14.30
U.N.E.S.C.O. grant, 1950, Danish account	2689.07
	<u>21984.66</u>
	D. crs. 32899.76
	<u><u>32899.76</u></u>
	<u><u>32899.76</u></u>
Balance, Jan. 1, 1951	11766.85

INCOME AND EXPENDITURE, 1951

DANISH CROWNS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1951	D. crs. 2712.09
Subscriptions:	
Egypt	...
Portugal (1951)	3370.23
	2256.50
	<u>D. crs. 5626.73</u>
Interest	236.18
	<u>D. crs. 5862.91</u>
	D. crs. 17629.76
	<u><u>17629.76</u></u>
	<u><u>17629.76</u></u>
Balance, Jan. 1, 1952	3504.96

INCOME AND EXPENDITURE, 1949

SWEDISH CROWNS	
INCOME	EXPENDITURE
U.N.E.S.C.O. grant, 1949, Swedish account	Bureau of the Union (travel expenses, Symposium on Cosmical Aerodynamics)
S. crs. 1218.50	Transfer to Copenhagen account
	Balance, Jan. 1, 1950
<u>S. crs. 1218.50</u>	S. crs. 1218.50

INCOME AND EXPENDITURE, 1950

SWEDISH CROWNS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1950	<i>Commission 38</i> , Exchange of Astronomers
Transfer from Copenhagen account, subscription, Sweden (1949)	Bureau of the Union, including travel expenses, meeting of Executive Committee, September, 1950
Subscription, Sweden (1950)	Balance, Jan. 1, 1951
S. crs. 3387.00	S. crs. 4175.00
<u>S. crs. 4175.00</u>	<u>S. crs. 4175.00</u>

INCOME AND EXPENDITURE, 1951

SWEDISH CROWNS	
INCOME	EXPENDITURE
Balance, Jan. 1, 1951	Bureau of the Union, including travel expenses, meeting of Executive Committee, September, 1951
Transfer from New York account	Balance, Jan. 1, 1952
Subscription, Sweden (1951)	S. crs. 2617.57
S. crs. 2465.50	<u>S. crs. 2617.57</u>
<u>S. crs. 2617.57</u>	<u>S. crs. 2617.57</u>