

l	Intensity in units of maximum intensity.
L_1, L_2	Intensity of non-eclipsed components in units of maximum intensity ($L_1 + L_2 = 1$).
λ_1	Minimum intensity (l) for minimum with component 1 in front.
λ_2	Minimum intensity (l) for minimum with component 2 in front.
α	Intensity-deficiency relative to maximum intensity in units of intensity-deficiency at complete eclipse.
α_0	Value of α at minimum, i.e. maximum value of α during eclipse considered.
ϵ_1, ϵ_2	Eccentricities of meridian sections of components.
a_1, a_2	Semi-major axes of components.
b_1, b_2	Semi-minor axes of components.

Generally, quantities referring to relative motion, absolute motion of component 1, absolute motion of component 2, should be distinguished by the use of no index, index 1 and index 2 respectively.

VARIABLE STARS

P	Period.
A	Amplitude ($A_v, A_{pg}, A_{pv}, A_{rad}, A_{bol}$).
μ^{\max}	Time of maximum.
μ^{\min}	Time of minimum.
E	Number of periods elapsed.
m^{\max}	Apparent magnitude of maximum.
m^{\min}	Apparent magnitude of minimum.
M^{\max}	Absolute magnitude of maximum.
M^{\min}	Absolute magnitude of minimum.

In case μ^{\max} and μ^{\min} are inconvenient from typographic reasons, T and t might be used instead.

COMMISSION 4 (EPHEMERIDES)

PRESIDENT: Dr L. J. COMRIE.

SECRETARY: Miss J. M. VINTER HANSEN.

On August 4 a joint meeting was held with Commissions 8 and 20, with Dr J. Jackson in the chair.

Dr Jackson referred to the completion of the new fundamental catalogue FK 3 by Prof. Kopff. The resolution referred from the General Assembly to Commissions 4 and 8: "That, from the beginning of 1940, the positions of stars used for the determination of time or in connection with the radio time-signals be based on the FK 3 system" was a natural result of the appearance of the FK 3, and the chairman proposed the adoption of the resolution. This was seconded by Dr Comrie and carried unanimously.

The chairman invited members to express their opinion on the following resolution, which was adopted by the General Assembly at the Paris meeting: "Commissions 4, 8 and 20 are requested to consider the advisability of restoring to positional astronomy the term in the annual aberration depending on the eccentricity of the Earth's orbit, and to report at the next meeting of the Union." The general feeling was that the present practice of neglecting the term in question should be continued as far as star positions are concerned. Prof. Leuschner pointed out that

in certain work, for instance on Pluto, the computer must take this term into account.

The proposal by Profs. Kopff and Peters, as printed in the report of the Commission (p. 20), was discussed. The proposal was finally moved by Dr Robertson and seconded by Prof. Fayet and Dr Comrie in the following form: "Most modern catalogues give, in addition to the annual precession, the so-called secular variation, i.e. the centennial variation, of the annual precession. It is recommended that, in future, star catalogues for the equinox of 1950.0 should give the second term of the power series in time (in which T is measured in centuries) in the same form as the third term is now given, namely,

$$\frac{1}{6} \frac{d^3\alpha}{dT^3} \quad \text{and} \quad \frac{1}{6} \frac{d^3\delta}{dT^3}$$

so that the series become

$$\alpha = \alpha_0 + \frac{d\alpha}{dT} T + \frac{1}{2} \frac{d^2\alpha}{dT^2} T^2 + \frac{1}{6} \frac{d^3\alpha}{dT^3} T^3$$

$$\delta = \delta_0 + \frac{d\delta}{dT} T + \frac{1}{2} \frac{d^2\delta}{dT^2} T^2 + \frac{1}{6} \frac{d^3\delta}{dT^3} T^3$$

and therefore

$$\frac{1}{2} \frac{d^2\alpha}{dT^2} = 50v_\alpha \quad \text{and} \quad \frac{1}{2} \frac{d^2\delta}{dT^2} = 50v_\delta."$$

This was carried unanimously.

Dr Spencer Jones moved the following resolution, which was seconded by Dr Jackson and carried unanimously: "It is earnestly requested that the authors of star catalogues should state clearly in a formula, at the bottom of each page, in which form the terms of precession are given."

A proposal by M. Brisse of the Paris observatory concerning the selection of circumpolar stars for the new volume of apparent places of stars was referred to Commission 4, as it was thought inadvisable to discuss such details at a joint meeting.

At the meeting on August 6, the President referred to the loss the Commission had suffered in the death of Prof. E. W. Brown, who presided at the meetings of the Commission in 1932. It was gratifying to know that he had lived to see the numerical verification of his lunar theory by Dr W. J. Eckert and his Hollerith machines at Columbia University, New York. Reference was also made to the death of Prof. B. Numerov.

Apologies for absence were received from Brouwer, da Costa Lobo, Herrero, Kopff and Peters.

Of the two resolutions referred to the Commission by the General Assembly, one had already been discussed at a joint meeting with Commission 8. The other, submitted by the Egyptian National Committee, was: "That the Union recommends the early publication of the British *Nautical Almanac* and *American Ephemeris* at least three years ahead of the date in which they are actually used." This was supported in principle by Dr Comrie, who had found the late appearance of the *Nautical Almanac* very embarrassing, as it led to more requests for advance proofs than was desirable. It was also supported by Dr Spencer Jones, Mr Madwar, Dr Robertson, Miss Vinter Hansen, Mr Sadler and Prof. Leuschner, but with the reservation that two years would suffice instead of three. It was agreed unanimously that the Union should be asked to adopt the resolution in the following amended form: "That the Union recommends the publication of the principal national ephemerides at least

two years ahead of the date in which they are actually used." Mr Sadler said that, provided material is supplied from abroad in sufficient time, the *Nautical Almanac* would appear at intervals of nine months until the date of publication had advanced to the desired point.

The following resolution, printed in the report of the Commission (p. 20), was carried unanimously: "That the value of the Gaussian constant k shall be taken as 0.01720 20989 50000, the unit of time being the mean solar day for 1900.0."

In the absence of Prof. Kopff, Dr Comrie reported the completion of the FK₃ catalogue. Since the preparation of Prof. Kopff's report to the Commission (p. 22) the proofs of the second part, *Die Zusatzsterne für die Epoche 1950*, have been received. Thus Prof. Kopff's expectation that the catalogue would be completed by the date of this meeting has been realised. The Commission unanimously agreed to a resolution that Prof. Kopff should be congratulated on the successful completion of this great undertaking.

Dr Comrie then read the following note on the origin and progress of the volume of *Apparent Places of Fundamental Stars*: "When I took over the *Nautical Almanac* in 1930, I felt that the duplicate printing, by many ephemerides, of apparent places should be superseded by the issue of a single volume. Accordingly I raised the question at the 1932 meeting of the Union (*Trans. I.A.U.* 4, 20, 222), where it was resolved (*ibid.* pp. 222, 282): '... that the question of duplicate printing be referred to the directors of the principal almanacs, and that they be requested to report at the next meeting of the Union.' Before the Paris meeting in 1935, the question became involved with that of the choice of future fundamental stars. In May 1935 there was an opportunity for a meeting in Brussels of Profs. Esclangon, Fayet, Kopff and myself, which proved very helpful. At the Paris meeting, a joint meeting of Commissions 4 and 8 recommended the adoption of the FK₃ as a fundamental catalogue (*Trans. I.A.U.* 5, 282, 370). At a meeting of Commission 4, I submitted a draft resolution reading as follows (*ibid.* pp. 287, 370): 'It is recommended that, as from the date of the adoption of the star places of the FK₃, the apparent places of the 1535 stars in the FK₃ and its supplement be published in a single volume under the auspices of the International Astronomical Union, with all necessary explanations in English, French and German. It is recommended that the national ephemerides publish the apparent positions of not more than 200 stars, and that these stars be selected from the FK₃. It is further recommended that the printing be undertaken by Great Britain, and the calculations shared by France, Germany, Spain and the United States.' This was moved by Prof. Fayet and carried unanimously. During the discussion emphasis was placed on the fact that the volume was to be under the auspices of the I.A.U. It was also suggested that the first volume should be for 1940.

"In March 1936, when reprints of the Report of Commission 4 were available, I submitted this resolution to the Admiralty, asking for authority to implement it. I had planned to have the contributions of the various offices sent to England on prepared strips, so that these could be assembled in page form without recopying, in order to constitute printers' copy. Thus the principal work of the Nautical Almanac Office, after the issue of the first volume, would consist of proof-reading only.

"After August 1936 the arrangements were in the hands of my successor, Mr D. H. Sadler. He has announced the delay in getting official approval, which, together with other commitments of the Nautical Almanac Office, and the uncertainty in the date of completion of the FK₃, has unfortunately delayed the first issue till 1941.

"Mr Sadler has prepared a report on the arrangements for the calculation and

publication of this volume. This report has been duplicated and circulated to those known to be interested. In view of the stress that was placed on this volume being under the auspices of the Union, I have asked Mr Sadler to submit to the meeting of this Commission a draft of the proposed title-page, and of the relevant paragraphs describing the origin of the volume.

"The publication of this volume, ten years after I first envisaged it, will, I hope, be of great service to astronomers by giving them, in one volume, more and better apparent places than have been available in the past."

Mr Sadler's report is as follows: "The additional work and proof-reading entailed in the preparation of this volume, together with the cost of printing, necessitated official approval, before the Nautical Almanac Office could proceed with the negotiations. This approval, which was first sought in March 1936, was finally given in March 1937.

"Satisfactory arrangements have now been made by which apparent places of the 1535 stars in the FK3 will all be computed, with only a small amount of duplication, by the almanac offices of France, Germany, Spain and the United States. The Nautical Almanac Office did not previously compute any apparent places, and will not do so in future. The following table shows the number of apparent places of 10-day stars and circumpolars computed by each office (France = C.T.; Germany = B.J.; Spain = A.N.; United States = A.E.), together with the number of independent computations available, both before and after the rearrangement of the computations.

	A.E.	A.N.	B.J.	C.T.	Total	Independent total
10-day stars						
Previously computed	182	395	555	485	1617	1186
To be computed	162	376	560	426	1524	1483
Circumpolars						
Previously computed	0	0	20	94	114	94
To be computed	0	0	20	52	72	52

"Inspection of this table shows that the total number of computations has been diminished, but the number of independent apparent places increased from 1186 + 94 to 1483 + 52. There is still duplicate computation of 41 10-day stars and 20 circumpolar stars, but in the latter case Berlin require the short-period terms separately. Even so, the net result of the redistribution is to diminish the number of computations for each office except that of the B.J., and each of the four offices will eventually gain further in the diminished cost of printing and proof-reading the apparent places of stars in the almanacs.

"This redistribution has been made possible by the generous attitude of Prof. Fayet, who, with the approval of the Bureau des Longitudes, has agreed to the suggestion that the Office of the *Connaissance des Temps* should undertake the computation of apparent places of 379 stars (all Zusatzsterne) in place of those of the stars previously computed, for which duplicate computations were made by other offices.

"In addition to the computation of the apparent places of the 1535 stars, those of 15 stars not in the FK3, but which are required in navigation and surveying, are being made by the four almanac offices.

"After consultation with Prof. Kopff in 1937, the Nautical Almanac Office proposed that the first of the separate volumes of apparent places of stars should

appear for the year 1941. It was then considered doubtful, in view of the other commitments of the Nautical Almanac Office and of the time that had elapsed before official approval could be obtained, whether such a volume for 1940 could be assured by the Nautical Almanac Office, even if all the definitive positions of the Zusatzsterne were available in sufficient time for the completion of the calculations. This proposal was approved by the Directors, and the first volume (for 1941) will thus be issued about April 1940.

"A time-table for the receipt of computations, and printed forms for the preparation of copy have been circulated to the almanac offices and approved. It is not expected that there will be any delay in either the computation or the preparation of the copy. For 1941 and perhaps for one or two years afterwards, the Nautical Almanac Office will have to do a certain amount of recopying and transformation, but eventually the scheme should involve only the pasting of individual computations on to printed forms.

"A draft paging scheme and list of contents has been circulated to the almanac offices. The volume is to contain mean and apparent places of the 1483 + 52 stars in the FK3, together with an Index to Apparent Places and an Introduction in several languages, including all necessary explanations of the quantities tabulated. The arrangement of the tabulations will be similar to that adopted in the Nautical Almanac, with the exception that four 10-day stars will appear on each page. The details of the arrangement and tabulations have been discussed, and agreement has been reached on all points, which have now been incorporated in the printed forms."

Mr Sadler then submitted a draft title-page, which was approved. He submitted also a draft preface, which would appear in English only, and would be followed by detailed explanations in three languages. Profs. Fayet and Leuschner urged that the preface should give more details of the origin of the volume, and in particular that it should refer to events before 1935, and quote references; Mr Sadler agreed that these details should be given but considered that they would be better included in the Introduction, which will be in three languages, than in the Preface, which will be in English only.

Dr Comrie then read three proposals relating to this volume, received during the meeting from M. R. Brisse, of the Paris Observatory. The first of these asked that provision should be made for interpolation with second differences on every day of the year, especially at the beginning and end. The second asked that the coefficients of the short-period terms of nutation, which are now given at the foot of the columns of apparent places in two different forms in the various ephemerides, should be given in both forms, so that each observer can continue to use his own national ephemerides for these terms. Mr Sadler undertook to make the two provisions desired. The third proposal, which related to an amendment of the list of circumpolar stars, was not adopted.

Dr Comrie also read proposals received during the meeting from M. A. Ilinic, of Pulkovo Observatory, for the inclusion of other terms in the apparent places. It was agreed that the views of those concerned should be sought before the next meeting on the question of including parallax corrections for all stars, based on the parallaxes in Schlesinger's Catalogue.

The Commission then discussed Dr Robertson's proposal, as printed on p. 21 of the report of the Commission. Dr Robertson explained that, in seeking the best correction to the Moon's position for use in eclipse predictions, he had found a few observations made by professional astronomers more valuable than many obser-

vations made by amateurs. Dr Comrie took the view that prediction and observation should be limited to magnitude 7.5; faint stars can be observed for a few days only during each lunation, and tend to render the distribution of observations with respect to mean elongation very unsymmetrical. Dr Spencer Jones was opposed to encouraging observations of faint stars. Mr Sadler suggested that the U.S. Naval Observatory should undertake the observations.

A proposal submitted by Prof. Kepiński, of Warsaw, to Commission 20 and referred to Commission 4 was discussed. The difficulty of interpolating the geocentric rectangular co-ordinates of the Sun at long intervals (e.g. 8 days) was pointed out, and the suggestion made that the ephemerides should also give co-ordinates referred to the centre of gravity of the Earth and Moon. An ephemeris constructed from such barycentric co-ordinates could then be interpolated, and transformed easily to a geocentric ephemeris. Dr Comrie remarked that an approximate ephemeris could be interpolated without difficulty, whereas an accurate ephemeris would not be constructed at intervals greater than four days, so that no practical difficulty need arise. Prof. Banachiewicz agreed that such co-ordinates were not strictly necessary, but said that they would be useful and that he would like to publish them in the Polish almanac *Rocznik Astronomiczny*. Dr Spencer Jones moved: "That Commissions 4 and 20 have learned with pleasure that Prof. Banachiewicz will publish barycentric co-ordinates of the Sun in *Rocznik Astronomiczny*, if this be recommended by the Union, and feel that this will be a useful contribution to astronomy." This was carried unanimously.

Dr Comrie reminded the Commission that it inherited from Commission 7, in 1932, the duty of taking an interest in tables that would be of use in astronomical work. He submitted the following report on activities during the last three years: "In 1927 and 1928 the Nautical Almanac Office prepared a 7-figure table giving the natural values of the six trigonometrical functions for every second of time. This was first announced in the *British Astronomical Association Handbook* for 1929, and later in the *M.N.R.A.S.* 92, 341 (1932), and in *Trans. I.A.U.* 4, 20 (1932). By 1935 official authority for the publication had been obtained (*Trans. I.A.U.* 5, 32), but, owing to the shortage of competent proof-readers at the Nautical Almanac Office, it was not possible to send the tables to the printer immediately. They are now in press, and should be available next year. A similar 6-figure table has been prepared by Prof. Peters, but, as far as is known, no arrangements have been made for its publication.

"In August 1930, at the meeting of the Astronomische Gesellschaft in Budapest, Prof. Peters and I planned the joint preparation of 7-figure tables of the natural values of the four principal trigonometrical functions for every second of arc. This plan was soon afterwards extended to include a similar 8-figure table, as the 8-figure tables of Gifford are far from satisfactory, both in accuracy and in arrangement. This project, involving the calculation of 1800 pages of tables, was pushed forward energetically in 1931 with the aid of a Burroughs machine (*M.N.R.A.S.* 92, 523) and announced publicly in 1932 (*M.N.R.A.S.* 92, 341 and *Trans. I.A.U.* 4, 20, 224). The completion of the table was announced in 1935 (*Trans. I.A.U.* 5, 32), when the following resolution (*ibid.* pp. 288 and 370) was carried: 'That this Union considers early publication of the 7- and 8-figure tables of the four principal trigonometrical functions for every second of arc prepared by Prof. Peters and Dr Comrie to be highly desirable in the interests of science generally.' A copy of the report of Commission 4, containing this resolution, was forwarded to the Admiralty in March 1936.

"The actual printers' copy was produced in the Nautical Almanac Office. When

I left in August 1936, the copy for 0° – 20° of both tables was in the possession of Prof. Peters, and that for 20° – 45° was at the Nautical Almanac Office. Prof. Peters has since duplicated the entire calculations, so as to have a completely independent table. His government has agreed to publish the 8-figure tables. The War Office has shown a desire to sponsor the publication in England of the 7-figure tables. My contact with surveyors during the last two years has shown that they would welcome the existence of this 7-figure table more than any other. Calculating machines are now in great demand, and lead to the necessity for natural values of the trigonometrical functions.

“About 20 years ago Prof. Peters prepared the copy for an 8-figure table of the four principal functions for every $0^{\circ}.001$. The fact that no opportunity of publishing this has presented itself has caused Dr S. Herrick, of the University of California at Los Angeles, to suggest (*P.A.S.P.* 50, 234, 1938) that a similar table at interval $0^{\circ}.01$ should be published. Although this would contain larger differences it would still be linear. As the use of the table would be confined to computers using calculating machines, the magnitude of the differences is immaterial provided that first differences only are required. It is hoped that it may be possible for such a table to be produced and printed in the near future.

“Since the last meeting of the Union a new edition of the 8-figure logarithmic tables of Bauschinger and Peters has appeared. Prof. Peters has also published a 6-figure table of the natural values of the six trigonometrical functions as *Kreis und Evolventen Funktionen*. He has announced that he is now engaged in preparing extensive tables for the centesimal division of the quadrant, which is to be adopted in Germany. His great contributions to science by means of his tables have been recognised by the award of the Leibnitz Medal of the Prussian Academy of Sciences, on which we extend to him our hearty congratulations.”

Captain Calder Wood, of the War Office, stated that it was his duty to advise his department and colonial surveyors on methods of computing. There is a marked tendency towards the abandoning of logarithmic calculation in favour of mechanical calculation, for which natural tables are essential. As 7-figure tables would serve for 90 per cent of such calculations, his department was anxious to secure their publication, notwithstanding the fact that provision has now been made for the publication of 8-figure tables. He was strongly of the opinion that both public and private surveyors in the British Empire and in the United States would prefer 7-figure tables to 8-figure tables, although the latter are necessary for occasional work.

Mr Sadler announced that he was going to Berlin after this meeting to arrange to hand to Prof. Peters the remainder of the 8-figure tables, in return for the portion of the 7-figure tables held by Prof. Peters.

The following resolution, for submission to the General Assembly, was moved by Prof. Leuschner and was carried unanimously: “That the Union learns with pleasure that the 8-figure tables of the four principal trigonometrical functions for every second of arc prepared by Prof. Peters and Dr Comrie will be published by the German Government. In view of the importance of having 7-figure tables as well as 8-figure tables, and of the far greater use that would be made of the former, it is strongly recommended that the British Government should undertake the publication of the corresponding 7-figure tables prepared by the same authors.”

Prof. Leuschner also moved: “That Commission 4, having heard of the proposal by Dr Herrick to publish 8-figure tables of the natural values of the trigonometrical functions at interval $0^{\circ}.01$, expresses its approval of this proposal, and

hopes that the means of publication may be speedily found." This was carried unanimously.

Since the last meeting of the Union, several new air almanacs (see *Report*, p. 21) have come into being. Specimens of these were shown. Mr Sadler also showed specimens of the improved form that the British *Air Almanac* will have in 1939.

Dr Comrie presented the following report on recent tables for the solution of the PZS spherical triangle: "The activity during the last two years in the preparation of tables for the solution of the navigational triangle calls for special comment. Before 1936 the navigator had tables by Ageton (H.O. 211), Aquino, Ball, Davis, Dreisonstok (H.O. 208), Gingrich, Ogura, Pinto, Smart and Shearme, Weems, and others less well known. The adoption of celestial navigation by long-distance aircraft has been mainly responsible for recent activities.

"At the end of 1936 the U.S. Hydrographic Office published, as its Publication No. 214, *Tables of Computed Altitude and Azimuth*, covering latitudes 30° to 39° . These tables give computed altitudes to $0'.1$, and azimuths to $0^{\circ}.1$ for every degree of latitude and hour angle, and for varying intervals of declination. Unfortunately they were found to contain numerous serious errors, and so were replaced in the following year by a new edition. Further volumes are in preparation.

"In January 1937 I submitted to the Air Ministry a scheme for improved tables for the direct solution of the spherical triangle, giving altitudes to $1'$ and azimuths to 1° . Later in 1937 I formed the view that the great bulk and cost of such tables would offset the advantage to be gained by having a direct solution of the spherical triangle, and agreed to compile for Messrs Hughes and Son a new set of *Sea and Air Navigation Tables*, based on the division of the spherical triangle into two right-angled triangles. Although this principle has been used in many tables, the present arrangement is novel, and, it is believed, more convenient than any previous arrangement. With 129 pages of tables, a position line may be found for any latitude, in perhaps a minute longer than by the use of direct tables. The sea navigator, who clings (although needlessly) to his supposed accuracy of a few tenths of a minute of arc, to whom a saving of a few minutes' time is not material, and who usually has to provide tables at his own expense, will prefer the shorter tables. The choice of the air navigator remains to be seen.

"Commander P. V. H. Weems, of Annapolis, Maryland, is preparing an extensive series of *Star Altitude Curves*, from which, by plotting simultaneous altitudes of selected pairs of stars, the latitude and local sidereal time may be read directly. This is, in theory, an advance even on the direct solution of the spherical triangle, but suffers from the restrictions in the choice of stars, the limitations of all graphical methods, and the necessity for revision because of precession. Nevertheless, at a time when bubble sextant observations may be several minutes in error, the method should prove attractive to air navigators."

Mr Sadler mentioned that the Nautical Almanac Office had, at the request of the Air Ministry, undertaken the computation of tables for the direct solution of the navigational spherical triangle. These tables are designed on the same lines as the American tables published as H.O. 214, but differ in that they cater solely for air navigation and give the altitude to the nearest minute of arc, and the azimuth to the nearest degree only. The tables are to be published in twelve volumes, each catering for a belt of 5° of latitude. In each volume the declination is to be fixed for four pages, which will then contain a simple double-entry table with arguments latitude and hour angle. The declination is given for each integral degree from 0° to 28° , and thereafter for the mean declinations of the

22 brightest stars; provision for interpolation for the odd minutes of declination, and for precession in the case of the stars, is made by means of tabulated variations. In each group of four pages for a given declination, the altitude and azimuth are tabulated for each integral degree of latitude and hour angle; no provision for interpolation is made for these arguments. The tables are being computed independently, and copy for the first three volumes is complete. It is expected that the first volume will be ready shortly, and issued under the title of *Astronomical Navigation Tables*.

Dr Robertson showed a photostatic copy of the new catalogue of zodiacal stars which he had recently completed. He remarked that it had been originally started by Dr Comrie, who handed it over to Dr Eichelberger. The real work, however, had been done by himself in 1930–38, after the retirement of Dr Eichelberger.

Dr Comrie asked if the catalogue was complete to magnitude 7.5, the limit now adopted for occultation predictions, and was assured that it was. He then remarked on the satisfaction that astronomers would feel that Hedrick's zodiacal catalogue, produced at Washington 40 years ago, had been succeeded by this new catalogue. The Commission then expressed its gratitude to Dr Robertson for completing this work.

At the end of the session Prof. Leuschner moved the following resolution which was seconded by Prof. Fayet and carried unanimously: "Commission 4 having been advised that Dr Comrie will retire from the Presidency at the close of the 1938 meeting of the I.A.U., hereby expresses to him its appreciation of his constructive policies and leadership, and of the efficient manner in which he has conducted the work of the Commission."

COMMISSION 5 (BIBLIOGRAPHY)

PRESIDENT: PROF. KNUT LUNDMARK.

SECRETARY: DR PER COLLINDER.

The Commission held a well-attended meeting on August 4. Fifteen were present, of whom five were members.

The President greeted the members and said some words regarding the two members deceased since the last General Assembly, *viz.* Prof. P. Stroobant, and Count de la Baume Pluvinel, and referred to the distinguished services rendered to the history of astronomy by the late President of the Commission, Prof. Stroobant.

The draft report was read and comments were given by the President. In this connection a letter to the President from M. Bourgeois was read.

Prof. Vyssotsky had made the suggestion that steps should be taken to translate the astronomical parts of the old Russian chronicles. Now that Prof. Vyssotsky himself was not in a position to undertake this, he was willing to try to find Russian collaborators for the translation. The President pointed out the considerable interest connected with this plan. The investigation of the astronomical references in old literary and historical documents is important not only because of their contribution to the cultural history of mankind but also because they, in many instances, reveal hidden astronomical observations of novae, comets, meteors, etc. It was agreed to appoint Prof. Vyssotsky as President of a Sub-Commission for carrying out his proposal.