

31. COMMISSION DE L'HEURE

PRÉSIDENT: M. R. A. SAMPSON, *Royal Observatory, Edinburgh, Great Britain.*

MEMBRES: MM. B. Baillaud, Banachiewicz, Bianchi, Bigourdan, Castro, Chrétien, Cooke, Curry, Dodwell, Dyson, Gen. Ferrié, Gallo, S. Hirayama, Littell, Mašek, Moreau, Nörlund, Ribeiro, Stewart, Voûte.

The dislocation of the rates of exchange, especially the variations of the value of the franc, during the three years covered by this Report have made the business of the Bureau one of peculiar anxiety and difficulty. The variations within France itself have been acute, especially in the year 1926, and it was essential to take some steps, in justice to members of the Staff. Accordingly I authorized in that year, in view of the good work that had been accomplished, the payment of a bonus to the observers, computers, and junior grades. All costs of maintenance however were enhanced and it would have been impossible to carry on the business of the Bureau had not the Executive Committee, at the beginning of 1927, taken action to stabilize grants at the approximate values at which they stood at the Assembly at Cambridge in 1925. In consequence of this the Grant received has been raised from 50,000 fr. to about 62,000 fr. It is however insufficient at this figure, and we must contemplate a deficit at the end of the current year. The grant was fixed at 50,000 fr. at Rome when the value of the franc was about 60 to £1. The Commission made no further demand in 1925 at Cambridge, when it had risen to about 100 fr. to £1. We had at that time a surplus, and in view of the uncertainty of the movement of the franc, and that the change of purchasing value was not so great within France, the reason for making no demand will be understood. The position is now different. In my judgment the grant should be raised from a stabilized value of £496 as at present, to one of £600 giving an income of 75,000 fr. to carry on the Bureau. This would apply to the years 1929, 1930, 1931. There should be also a supplementary grant for 1928 of 13,000 fr., raising the sum allowed from 62,000 fr. to 75,000 fr. I shall ask the Commission to send to the Executive Committee a request to that effect.

I have examined the Vouchers for all sums paid up to December 31 last, and find all in agreement, with the exception of certain payments due for vacations in 1927 which were still outstanding when this Report was written. I have also seen the certificates from the bank showing the balance in hand. This balance on December 31 was 1388 fr.

The Commission is indebted to M. B. Baillaud for many acts of friendship towards its work and towards the Bureau. His latest service was to allocate to the Bureau the use of the two meridian rooms of the Observatory on the level of the terrace, adjoining the octagon room where wireless reception is made, together with some premises below. These apartments are convenient and appropriate in their position, but they were not designed for office work, and much is still wanting before they are in proper order. In the course of 1926 M. Baillaud retired from the Directorship of the Observatory of Paris. M. Deslandres was appointed to the office, with which that of the Director of the Observatory at Meudon was combined. I am happy to assure the Commission that though M. Deslandres is not a member of this Commission, nor was previously engaged with its work, he has shown the greatest possible zeal and interest in its efficiency, and has confirmed it in the tenure of the same premises in the Observatory of Paris.

At the last Assembly at Cambridge, the system of signals emitted by French stations was revised. The new system was put into operation in 1926 and has

proved a complete success. I have put *Signal Systems* upon the Agenda merely as a token, and to give an opportunity for any expression of opinions, but there does not appear, so far as I know, to be any modification that is desirable.

With regard to the co-ordination of signals issued from other sources and the reduction of variant systems to standard type, whether the new international type, or the American type, I have to report that I got into correspondence with the authorities of the chief outstanding cases. Mr H. Spencer Jones, H.M. Astronomer at the Cape, interested himself in the matter and has secured the necessary apparatus for emitting the new international signals from the Cape. In the case of the Japanese signals, through the courtesy of Professor Nagaoka, the question has been brought before the competent authorities in Japan, including the Radio Commission, the Department of Communications and the Tokyo Astronomical Observatory. The replies are favourable in principle to unification and the question is under examination.

Some progress has been made in other cases but there is nothing definite to report.

The most important new signal is a signal emitted from the Observatory of Greenwich, through the Rugby Station (G.B.R.) at 10^h and 18^h. The signal sent is the vernier portion of the new international signals. The wave-length employed is 18,740 metres.

The most important event in which the Commission is interested was the successful execution of a trial of the World Longitude Scheme, but this was organized in Commission No. 18 and will be dealt with in its Sessions, and it is unnecessary to initiate an independent discussion in this Commission.

As there is on the present occasion little to report I think the opportunity a good one to bring before the Commission the reconsideration of the Regulations under which the Commission is constituted. These regulations were formed in 1919 and terminate in 1931. We have had nine years' experience of their working, and it would be convenient to embody this experience in a draft, which we could ask the Executive Committee to file, as representing our views of the points which a new system of Regulations should embody. I propose therefore to ask the Commission to review the present regulations and to give me instructions that can be embodied in a new draft, to be submitted again to the Commission, and after approval to be incorporated in our Report to the Executive Committee.

The outstanding point that requires definition is the relation of the Commission and its Bureau with the Director of the Observatory of Paris. There are other points also in which the interests and the working of the Bureau might be better defined.

The Agenda for our consideration will then be:

- (i) Report on the Accounts of the last Triennium.
- (ii) Report of the Director of the Bureau.
- (iii) Questions arising from (ii).
- (iv) Systems of Time Signals.
- (v) Reconsideration of the Regulations.
- (vi) Any other relevant business.
- (vii) Request to Executive Committee for an allocation of funds for 1929-31.

R. A. SAMPSON
President