

D. IAU REPRESENTATIVES IN OTHER ORGANIZATIONS

1. *La Fondation Internationale du Pic du Midi*: A. Lallemand.
2. *Le Comité Consultatif pour la Définition de la Seconde (CCDS) du Bureau International des Poids et Mesures*: B. Guinot, H.M. Smith.
3. *Le Comité Consultatif pour la Définition du Mètre du Bureau International des Poids et Mesures*: A. H. Cook.
4. *Le Comité Consultatif International des Radiocommunications*: H. M. Smith.

IV. SERVICES AND FUNCTIONS OF THE IAU

A, B, C. No change of principle against Trans. IAU XIIC, 17.

D. THE CENTRAL BUREAU FOR ASTRONOMICAL TELEGRAMS

Smithsonian Astrophysical Observatory, Cambridge, Massachusetts 02138, U.S.A.

Director of the Bureau: Dr B.G. Marsden

Associate Directors: Dr O.J. Gingerich, Dr R.B. Southworth

For nearly a century astronomers have maintained a telegraph and cable network for rapid communication of such celestial news as the discovery of comets and novae. When the International Astronomical Union was established the Central Bureau for Astronomical Telegrams was placed under its jurisdiction (through Commission 6 of the Union), initially at the Brussels Observatory, and then for a great many years at the Copenhagen Observatory. Since 1965 the Bureau has been at the Smithsonian Astrophysical Observatory.

Telegrams or cables can be received any time of day or night at the Smithsonian Observatory. The cable address is SATELLITES, NEWYORK, the telex number is 92-1428, and the Western Union address for astronomers in North America is RAPID SATELLITE, CAMBMASS. In North America, telegrams are sent out collect via Western Union to any astronomers agreeing to pay for the messages. The larger share of other addresses are reached through the Regional Warning Centers of the International Ursigram and World Days Service (the AGIWARN network). The financial arrangements depend on the particular Regional Warning Centers, whose addresses appear below; observatories served through the Meudon center are expected to place a deposit with the Central Bureau.

France, British Isles, Spain, Portugal, Italy, Greece, Middle East, North Africa, Germany, Austria, Belgium, Denmark:

Dr P. Simon, Observatoire de Paris, Section d'Astrophysique, 92-Meudon, France.

Sweden, Norway, Finland:

Mr Per Akerlind, Board of Swedish Telecommunications, Stockholm 16, Sweden.

The Netherlands:

Mr H. Van Lohuizen, Radio Receiving Station NERA, Nederhorst den Berg, The Netherlands.

Czechoslovakia, Poland, Hungary, Rumania:

Mr P. Tříska, Czechoslovak Academy of Sciences, Geophysical Institute, Ionosphere Department, Praha, Spořilov, Czechoslovakia.

U.S.S.R., People's Republic of China, Bulgaria:

Mrs L. N. Liakhova, Institute of Terrestrial Magnetism, Ionosphere and Radio Propagation (IZMIRAN), Leninskii r-p, P. O. Vatutenki, Moscow, U.S.S.R.

Japan:

Dr H. Uyeda, Radio Research Laboratories, Ministry of Posts and Telecommunications, Kokubunji P. O., Koganei-shi, Tokyo, Japan.

Australia, New Zealand:

Mr F.E. Cook, Ionospheric Prediction Service, Commonwealth Center, Elizabeth Street, Sydney, N.S.W., Australia.

It is not necessary for observatories to receive all the "astrograms"; instead, subscribers can specify only the desired standard categories (the identifying telegram code word appears in the second column):

- A. ALPHA Comet discoveries, brighter than magnitude 12.
- B. BETA Comet discoveries, fainter than magnitude 12.
- C. CHARLY Comet observations and brief finding ephemerides (primarily for observers).
- D. DELTA Precise positions, orbits and ephemerides (primarily for computers).
- E. ECHO Novae or supernovae, brighter than magnitude 12.
- F. FRANCE Novae or supernovae, fainter than magnitude 12.
- G. GAMMA All others, including planetary or lunar phenomena, spectroscopic binaries, etc.

Almost all the messages are transmitted according to a telegraphic cipher code. The code is described in *Trans. IAU, XIIC*, pp. 34–38, to which the corrections in *Trans. IAU, XIIC*, pp. lxxxii–lxxxiii should be noted. Corrected reprints of the code may be obtained from the Central Bureau. Some messages cannot be cast in the standard coded form, but observers are nevertheless urged to include sufficient redundancy to prevent errors.

In addition to the astrograms, the Central Bureau maintains an even wider coverage by means of its postcard *Circulars*, which are issued irregularly about 50 times a year. These contain confirmations of the telegrams, predicted ephemerides for comets and unusual asteroids as well as observed positions, observations of novae and supernovae, and other astronomical information that requires rapid dissemination. About 600 observatories and amateurs subscribe to the *Circulars*.

The *Circulars* are available by advance subscription only, for 50 or 100 issues (not corresponding to a calendar year). These financial arrangements are entirely separate from the telegrams. The subscription rates below are those as of 1 December 1967 and depend on the destination and mode of transport:

	North America	Other
100 consecutive issues, airmail	\$15.50	\$24.50
100 consecutive issues, surface mail	13.50	18.50
50 consecutive issues, airmail	9.00	13.50
50 consecutive issues, surface mail	8.00	10.50

There will be a reduction of \$1.00 for subscribers who do not require invoices. Checks, bank drafts or money orders should be made payable to the "Central Bureau for Astronomical Telegrams".

V. THE PUBLICATIONS OF THE INTERNATIONAL ASTRONOMICAL UNION

A. TRANSACTIONS OF THE IAU

XIIIA—Prague 1967; pp. 1151, Reidel Publishing Company, Dordrecht, 1968

XIIIB—Prague 1967; pp. 319, Reidel Publishing Company, Dordrecht, 1968

B. PROCEEDINGS OF SYMPOSIA

- 24. Spectral Classification and Multicolour Photometry; ed. by K. Lodén, U. Sinnerstad; pp. 383; Academic Press (London), 1966; 120s.
- 25. The Theory of Orbits in the Solar System and in Stellar Systems; ed. by G. Contopoulos; pp. 380; Academic Press (London), 1966; 120s.
- 26. Abundance Determinations in Stellar Spectra; ed. by H. Hubenet; Academic Press (London), 1966; pp. 374; 120s.
- 27. The Construction of Large Telescopes; ed. by D.L. Crawford; pp. 234; Academic Press (London), 1966; 70s.