

20. COMMISSION DES POSITIONS ET DES MOUVEMENTS DES PETITES PLANETES, DES COMETES ET DES SATELLITES

Report of Meetings

PRESIDENT: S. Arend.

SECRETARY: P. Herget, with the assistance of E. Rabe.

INTERPRETER: S. D. Gossner, for first meeting; J. Kovalesky, for second meeting.

First meeting, 18 August 1961

President S. Arend opened the meeting and welcomed the members present. He paid tribute to the following deceased members of the Commission: A. Dubyago, A. Patry, and Mlle J. Vinter Hansen. He announced the selection by the Executive Committee for the coming triennium of Paul Herget as President, and Mme Yakhontova as Vice President. The following were elected as members of the Organizing Committee of the Commission: S. Arend, D. Brouwer, F. K. Edmondson, W. Fricke, H. Hirose. The following were elected as members of the Working Committee for Comets: J. G. Porter, Chairman; M. P. Candy, F. Kepinski, L. Kresak, S. G. Makover, and Miss E. Roemer.

The President then briefly reviewed the *Draft Report*, calling attention to a recent summary report of the observing programme of the Goethe Link Observatory, covering the years 1954–61 and prepared by F. K. Edmondson, and a manuscript collection of 2000 accurate positions of minor planets, recently reduced by Mme Laugier, Nice.

Referring to page 177, line 8, (see Vol. XIA) Miss Roemer indicated that an accuracy of $0^{\circ}25$ was needed, except that in unusual and special circumstances a search might extend to $1^{\circ}5$ on either side of the ephemeris. On page 179, line 9, for “doubles identifications” read “doubles designations”. On page 183, line 16, read “Mlle E. Roemer s’efforce d’obtenir chaque fois au voisinage de la nouvelle lune une . . .”.

The President reiterated the importance of identifications, such as were made by the late A. Patry and others. It was reported that the “Identifizierungsnachweis” prepared at the Heidelberg Astronomisches Rechen-Institut will be printed before the end of the year. Herget exhibited a copy of “Elements of Unnumbered Planets”, recently prepared at the Cincinnati Observatory.

The Chairman then invited discussion of the different recommendations and suggestions listed on page 186 of the *Report* (Vol. XIA).

Concerning page 186, item 1 was discussed, and the secretary offered to consult K. A. Thernöe, Copenhagen. Under item 2, Brouwer indicated that he simply thought that the matter should periodically be under review. Marsden referred to the need in cases of large eccentricity which can only be observed near perihelion, and Arend suggested that special ephemerides should be given in the MPCs. Under item 3, Herget described the method Patry used, and the justification for this request. Most of all, a successor to Patry is needed to make use of the accurate motions demanded in this recommendation.

Edmondson indicated that for pairs of plates more accurate motions could be given, without requiring the reduction of accurate positions. The President expressed the hope that the recommendation will be followed by all observers.

Herget summarized a report from Mme Yakhontova, which indicates that the Leningrad Institute of Theoretical Astronomy is prepared to produce ephemerides for 1059 planets; that for 238 other planets ephemerides are produced without perturbations; and that for 308 other planets the collaborators are expected to provide the ephemerides, namely Cincinnati, Tokyo, and for (1566), (1580), and (1620), S. Herrick. This is a considerable change in responsibility from the assignments adopted in 1948, and it is mentioned in order to give formal recognition to this new distribution of ephemeris computations, and to the large share assumed by the ITA.

The number of provisional designations assigned per year is now about half of what it was six or eight years ago, showing a substantial decrease in the total amount of minor planet observing. Herget suggested that a repetition of the Kuiper Survey of 1950–52 might be undertaken as an economical means of securing some reliable positions for nearly all of the ordinary minor planets.

Second meeting, 21 August 1961

The following resolutions were adopted:

Commission 20 recommends that the Minor Planet Center in Cincinnati continue issuing the Minor Planet Circulars, and that a sum of \$750.00 per annum be made available for defraying the necessary expenditures. [This resolution was approved, and incorporated in the report of the Finance Committee.]

Commission 20 wishes to stress the importance of the work of identifications of minor planets, especially as carried on with such great success by the late A. Patry, and recommends most strongly that this work should be continued.

Concerning page 186, item 1 (see Vol. XIA) Thernöe has agreed to print a special IAU card, calling attention that telegraphic comet positions are understood to be referred to the equinox at the beginning of the year, unless another equinox is given in the place provided near the end of the message. It is therefore necessary to specify 1950·0 when this equinox is used, in accordance with the precepts of the formerly adopted resolution. Porter agreed that no formal action or changes are required.

Miss Roemer stated her willingness to observe, on request, faint satellites and special objects down to magnitude 18 (and in extreme cases to 20·5). J. Kovalevsky asked for observations of J VIII, Brouwer asked for J IX (for Hori's work); and Herrick expressed his appreciation for similar valuable observations made in the past. Wilkins inquired about observations of the satellites of Mars, and Kuiper described his series observed in 1952 and 1956.

Porter reported that the *Catalogue of Cometary Orbits*, 1960, will be off the press soon. He displayed a proof-copy. It contains 829 sets of elements; and much credit is due M. P. Candy, B. Marsden, and other BAA (British Astronomical Association) members for its completion and for their thorough efforts to remove errors of all sorts. The President extended to Dr Porter the thanks of the Commission for this valuable catalogue.

The Commission adopted items 4, 5, and 6 on page 186 (see Vol. XIA). The purpose of 5 (a) is to permit daily motions to be computed easily. Under 5 (b), Miss Roemer requested references, if possible, and she indicated that, in general, the effects of phase angle may be omitted.

Porter discussed briefly his report on page 188. He asked for reports of all cometary orbit work which is being undertaken. Some duplication of effort would be a good thing and would serve as a valuable check. He urged that we abandon the concept of a "definitive orbit" and the custom of granting "proprietary rights" to any one investigator who announces his intention to compute an orbit. The reports of Commission 20 and Sub-Commission 20a were adopted.

President Arend expressed the hope that Dr Porter's new position as Chairman of the Working Committee for Comets would serve to continue the good relations of the RAS (Royal Astronomical Society) and the BAA with the work of Commission 20. Upon his own retirement as President of the Commission he thanked all who had co-operated, both the theoretical workers and the observers, and expressed his wishes for a successful future of the Commission.

The meeting adjourned.