

COMMISSION 22: METEORS AND INTERPLANETARY DUST  
(METEORES ET LA POUSSIERE INTERPLANETAIRE)

Report of Meeting 20 August 1979

PRESIDENT: I. HALLIDAY

SECRETARY: B.A. MCINTOSH

Administrative Session, 09:00, 20 August 1979

I. OFFICERS AND MEMBERSHIP

The 25 members and guests present stood in silence for a few moments in memory of two recently deceased colleagues: V.V. Fedynsky, U.S.S.R., member, and J.W. Rhee, U.S.A., consultant.

The President noted that officers of the Commission were elected by the IAU Executive Committee. Nominations by the Commission should take into account equitable geographic distribution and ability to fulfill the requirements of the positions. Confirmed were: W.G. Elford, President, and O.I. Belkovich, Vice-President.

The President announced the names of new members; and that the total membership was now eighty. (The complete list, including members of the Organizing Committee, is reproduced elsewhere in this volume.) Consultants for the next term are: V. Benyukh, E. Grün, K.B. Hindley, F. Horz, G. Schwehm, A.K. Terentjeva, J. Trulsen, D.K. Yeomans.

II. REPORT OF THE COMMISSION

As in the past, selected members were asked to prepare sections of the report which were then put together and edited by the President. Dr. Halliday noted that restrictions on the number of pages made it impossible to include all references. The report was approved without discussion.

III. IAU/IAGA JOINT COMMITTEE

Current progress of the joint committee of IAU Commission 22 and IAGA Commission 5 - "On Radar Observations of Meteor Rates and Radiants, and Anomalies at the Base of the Thermosphere" was reported by the Convener, C.S.L. Keay. It was proving very difficult to effect standardization of radar equipments because of local constraints. New radars in various stages of planning, construction or operational testing were: Australia (two - Elford, Keay), Canada (two - Jones, McIntosh), New Zealand (Baggaley), U.K. (Kaiser). It was noted from the floor that a system was being operated in New Hampshire, U.S.A.

Belkovich described radars being operated in the U.S.S.R. at Dushanbe, Kazan, Kharkov, Kiev, and Oblinsk.

IV. RESOLUTIONS

After considerable discussion the Commission approved a resolution on comet missions. (Submitted jointly by Commission 15, 20, 21, and 22. The text may be found elsewhere in this volume.)

The Commission was polled for its opinion on the desirability of an administrative resolution regarding conflicts of meetings among IAU, COSPAR, and IUGG. Noting that COSPAR already has a non-conflict policy and also that it may change its meeting interval to 2 years, and that geographic location of meetings frequently created

problems as severe as time conflicts, concensus was that such a resolution was unnecessary.

The Commission agreed to co-sponsor a Joint Discussion on the formation and early history of the Solar System.

Incoming President expressed the members' thanks to the retiring president for his work on behalf of the Commission during the past three years.

Scientific Session, 10:30, 20 August 1979

The President noted that only a short scientific session had been scheduled because of the existence of IAU Symposium No. 90, "Solid Particles in the Solar System" to be held in Ottawa, August 27-30, jointly sponsored by Commissions 21 and 22 and by COSPAR.

Under the general theme, "Observational Techniques : Present and Future", the following papers were presented:

1. Interplanetary dust - J.A.M. McDonnell.
2. Television-type photo-optical devices - R.L. Hawkes.
3. Camera networks - I. Halliday.

(Radar observing techniques were covered earlier by Keay and Belkovich.)

Summaries of three papers originally submitted to Symposium 90 were presented here because the authors were unable to travel to Ottawa. P.B. Babadzhanov, V.S. Getman. Orbits, chemical composition and fragmentation features of meteoroids in the atmosphere according to instantaneous photographs. P.B. Babadzhanov, Vu.U. Abrudov. Evolution of orbits and intersection conditions of the earth of Geminid and Quadrantid meteor streams. O.I. Belkovich, Radar meteor studies at Kazan.

The problem of anomalous sounds from bright meteors - sounds heard simultaneously with the visual sighting - was reopened by C.S.L. Keay in describing his investigations of a fireball in southeast Australia, 1978, April 7.