

New York, 5-16 March 1973

REPORT OF THE WORKING GROUP ON EXTRATERRESTRIAL TOPOGRAPHIC FEATURES

Group Terms of Reference

The competence of the Group of Experts on Geographical Names to consider the field of extraterrestrial names was determined at its Second Session in 1970. The Working Group^{1/} then established consequent upon this determination was charged with the examination of such toponyms without qualification as to scope or methods (United Nations document ESA/RT/C/GN/1 dated 29 April 1970).

Relevant Resolutions - London Conference

Resolutions by the Second United Nations Conference on the Standardization of Geographical Names which are specifically relevant to this Working Group are numbers 21, 24 and 34.

The Chairman summarized action since the London Conference. The contemporary state of mapping of the Moon and the current mapping programmes for both the Moon and Mars emphasized the need to devise systems of reference for extraterrestrial features acceptable to all nations. These mapping programmes include the 1:250,000 lunar mapping programme now being undertaken in the United States and the mapping of Mars from Mariner photography.

A circular letter had been sent by the Chairman to the individual members of his Group, including Colonel Sharma, Dr. Radó and Dr. Lapesa, who had requested to be associated with the work of the Group during the later stages of the London Conference. The letter reported on co-responsence which had taken place between the Chairman (Professor A.M. Komkov) and Dr. A. Dollfus, President of both the Inter-Union Commission for Lunar Studies and Commission 17, "The Moon", of the International Astronomical Union and with Professor D. Menzel, Chairman of the I.A.U. Working Group on Lunar Nomenclature.

1/ Chairman: A.M. Komkov (U.S.S.R.)
Rapporteur: H.A.G. Lewis (U.K.)
M.F. Burrill (U.S.A.)

Dr. S. Radó did not take part in the discussion.

Colonel Sharma and Dr. Lapesa did not attend.

Dr. Burrill reported that at a meeting in Washington on 23 January 1973, attended by Dr. Menzel and representatives of the Department of State, NASA, the US National Committee of the I.A.U., the Smithsonian Institution, the National Academy of Science and the Board on Geographic Names, it was made clear that only twenty to thirty names are required for Moon maps soon to be produced for NASA, that these can be drawn from an existing bank of names, and that the matter of formal contact between NASA and Dr. Menzel's subcommittee remained to be discussed at a meeting in Houston, Texas, in March 1973.

Discussion

The naming of extraterrestrial features is a complex matter and one which properly falls within the orbit of the United Nations Group of Experts on Geographical Names. Nomenclature of extraterrestrial features must be acceptable to all nations and this fact together with the need to determine how best to render names in a standardized form in each of the various languages of the world places the matter firmly in the province of the United Nations Group of Experts on Geographical Names. The drawing-up of such systems of nomenclature was not appropriate to astronomers alone. Naming of features on the Near Side and the Far Side of the Moon had traditionally been commemorative. Because the number of names allocated by astronomers were relatively few in number, a subsidiary system had been employed for the Near Side which entailed the addition of alphabetic (Latin and Greek) suffixes and, for certain features numerical suffixes, to identify minor features located near named topographical features. This system was well established and widely used by astronomers both professional and amateur. There was a reluctance on the part of many of them to abandon the system. However, the topographic detail now shown on large scale maps prepared from photographs taken by space vehicles was far in excess of what could be seen by telescopes from Earth. For such detailed maps the alpha-numeric suffix was of limited use, in many cases confusing, and not to be recommended.

Commemorative naming of major features on the Far Side of the Moon had taken place but so far no letter or number suffixes had been employed. It appeared most desirable to avoid using the latter method for designating features of secondary importance on that side of the Moon except possibly where they are located within the perimeter of a major feature.

Direct exploration of the Moon by manned and unmanned lunar missions has produced a truly immense amount of surface information. As a part of the Apollo programme new names had been allocated to many small features. Although those names were intended solely for the purpose of operational reference during the missions, they inevitably tend to gain currency in just the same way as Antarctic names have become established by continued usage.

In a properly conceived system of extraterrestrial nomenclature, the appropriateness of names from the toponymic point of view would receive special attention.

There is the further question of the legal standing of names allocated to extraterrestrial surface features by non-governmental bodies. It was agreed that the status of the Group of Experts as a United Nations body and the standing of the experts as official representatives of their own linguistic/geographic divisions made the Group of Experts the body best constituted to deal with this question.

The large-scale cartographic work now being undertaken and the increasing currency of Martian and Lunar names emphasized the urgency of devising adequate systems of nomenclature and uniform methods of rendering names in various linguistic systems compatible with the aims of international standardization of the names of terrestrial features. There is clearly a necessity to co-ordinate all naming activity and achieve uniformity in the processes employed.

Conclusions

1. The Working Group will consider the extent to which names should be allocated and on what basis. In this connexion, NASA and other agencies engaged in extraterrestrial mapping will be invited to furnish details of their programmes, both current and projected, with a view to assessing the magnitude of the task in the near future and in the longer term.
2. Guide-lines will be drawn up by the Group of Experts and various methods of naming will be studied. No system of naming will be rejected out of hand. Commemorative naming, using the names of learned men of all nationalities, will be considered. Bearing in mind the limited number of such commemorative names available, the Group of Experts will examine the feasibility of using terrestrial geographical names, geographical and other terms, and the use of ordinary words selected from the languages of the entire world. In this task the assistance of the United Nations Organization and its member nations is requested.

3. The Group of Experts will confer with astronomers and others on the extent to which retention of alpha-numeric suffixes is desirable, but the extension of this method of designating features on the Far Side of the Moon and on Mars will be discouraged.
4. Systems for identifying small features will be investigated and tested, including methods based on the use of co-ordinates.
5. The Working Group is charged with examining how best to achieve legal international status for names allocated to extraterrestrial features.
6. The Working Group, in accordance with resolution 21 of the London Conference, will continue its activity in drawing up a plan for international agreement on the standardization of the names of extraterrestrial topographical features in co-operation with the international organizations (ICSU, IAU, etc.).
7. In this connexion, the Chairman of the Group of Experts, Dr. M. Burrill, together with the co-ordinator of the Working Group on Extraterrestrial Topographical Features, Professor A.M. Komkov, will maintain contact with those organizations and will prepare a status report for the next General Assembly of the I.A.U.
8. Members of the Working Group will inform each other of contacts with international organizations.
9. The Working Group will obtain and exchange information on extraterrestrial mapping programmes.