

39. COMMISSION POUR LA CREATION D'OBSERVATOIRES INTERNATIONAUX

PRÉSIDENT: M. H. Shapley.

MEMBRES: MM. Abetti, Baade, J. G. Baker, F. Becker, Bourgeois, Bowen, Brück, Danjon, Eckert, Spencer Jones, Lindblad, Lindsay, Oort, Redman, Samaha, Shajn †, Stoy, Struve, Waldmeier, Witkowski, Woolley.

Never in the long history of astronomy has there been more building and planning of astronomical instruments than in 1954 and 1955, and rarely if ever has there been so much co-operation in research as now. Several large observatories have become essentially international in that they make special arrangements for the researches of visiting scientists. Our commission might appropriately be renamed 'Commission on International Co-operative Projects', since the conclusion stated in the preceding report of this commission still holds—namely, that a fully international observatory appears not feasible but smaller or regional co-operative plans are manageable.

At the Dublin meeting of the commission we should plan to speak of those astronomical projects that merit joint attack. They include certain studies of fast-acting variable stars, and the establishment of additional co-operative high-altitude coronagraphic stations (proposal of Dr Abetti). We should have reports of progress in establishing co-operative enterprises, and sketches of the programmes. For example, we should hear about the work at Canberra (Yale, Columbia, Munich, and Uppsala), and also about the Armagh-Dunsink-Harvard telescope at the Boyden Station, the West European project for a southern hemisphere observatory, the inter-institutional plans for the south-west of the United States, the programmes for visiting astronomers at Saint Michel, and especially the important international and inter-institutional plans and progress in radio astronomy. Helwan's provision for visiting scientists, when the 74-inch reflector is completed (probably in 1955), will be reported by Director Samaha, who invites suggestions on research programmes. The progress with the radio telescope and with other astronomical equipment in the Belgian Congo will be reported by M. Bourgeois. The data on nightly cloud conditions at the Montezuma Station (in northern Chile) of the Smithsonian Institution will be supplied by Dr Aldrich, and possibly an interim report on current investigations of 'seeing' in South Africa will be available.

With respect to the exceptional progress in telescope building at present, we should note among other developments:

The new Pulkovo Observatory has been dedicated in 1954.

Large reflectors are under way in Australia, Egypt, France, England for the Royal Observatory, and at the Lick Observatory.

Schmidt telescopes are under construction or just completed in Sweden, Germany, Italy, Switzerland, Manchester, St Andrews, Belgium, Castel Gandolfo, Vanderbilt University (Tennessee), and elsewhere. A micro-Schmidt telescope is under way at the Yerkes Observatory.

Large coronagraphs are nearing completion at the Climax (Colorado) Observatory, and at the Sacramento Peak (New Mexico) Station of the Harvard Observatory and the United States Air Force.

Large radio telescopes are planned (or are already under way) in England, France, Italy, United States (five), Holland, Germany, and Australia.

The Bonn Observatory has established a new station in the Eifelbergen.

Most of the new instruments will be international in that provision for visiting scientists is an integral part of the planning.

The increasing internationalism of a science that has always been outstandingly international suggests that Commission 39 and Commission 38, on the Exchange of Astronomers, should work closely together. These two commissions could very appropriately meet jointly at Dublin.

HARLOW SHAPLEY
President of the Commission

ACTING PRESIDENT: Prof. F. J. M. Stratton.

SECRETARY: Prof. B. J. Bok.

The most important decision arrived at during the meeting in Dublin of Commission 39 is embodied in the following resolution:

Commission 39 proposes that it be suspended until such time as the need arrives to reactivate it. The Commission urges the Executive Committee not to lose sight of the continuing need for a truly international observatory.

This resolution has now taken effect and Commission 39 can therefore be considered as disbanded as from the close of the Dublin meeting.

The first item of business was the acceptance, with some minor modifications, of Shapley's report. Next on the agenda came a discussion of five groups of observatories that possess an international character. The new organization for the Boyden Station and the astronomical plans for the Belgian Congo were the subject of comments by several of the members present. Lindsay reports that as of 1 July 1955 the co-operative plan for the management of Boyden Station has taken effect, with the understanding that the present provisional plans hold for a two-year period and with the hope expressed that a more permanent arrangement may follow that covered by the two-year transition plan. The responsibility for the management and operation of Boyden Station rests with a Council of six composed of Menzel (Chairman), Bourgeois (Treasurer) and Brück, Heckmann, Lindblad and Lindsay as members. It was made clear during the discussion that the European astronomers on this Council do not represent solely their observatories, but that they speak for all of the astronomers of the co-operating nations, Belgium, Germany, Ireland, Northern Ireland and Sweden. The planned sharing of instruments and in part of programmes is an important feature of the present arrangement. Swings and Bourgeois spoke further about the plans for astronomical development in the Belgian Congo. They pointed out that the observatory, which is to be one of many units of a larger Institute for Scientific Research in Central Africa, will devote its efforts primarily to geophysical research. Because of climatic conditions optical astronomical research will have to be of a fairly limited character. There will be a Danjon astrolabe for purposes of time measurement. There will also be a Schmidt telescope with attached spectrograph. The primary mirror of the new Schmidt will have a diameter of 95 cm. and the aperture of the corrector plate will be 63 cm. This will be a very versatile type of Schmidt telescope and provisions will be made for spectrographic observations at the Cassegrain and Coudé focus. There will be no hole in the primary mirror.

There followed a discussion initiated by Gratton regarding the making available of pieces of auxiliary equipment and telescopes not now in use at some of the larger observatories for research purposes at institutions now lacking equipment. Gratton pointed out that there are at present in several observatories spectrographs and photometers, or parts of them (prisms, gratings and the like) which are not in use because the staff's interest has shifted to other problems, or because instruments of more recent design have been obtained. He pointed out that there is considerable precedent already for the making available of such equipment either on a loan basis or through sale at a low price and he asked Commission 39 to do whatever it could to encourage such exchanges. In the discussion that followed it became evident that the majority of those present favoured informal arrangements between observatories and individuals. It was, however, felt important by those present that Commission 39 should express itself strongly in favour of such exchanges and the Commission went on record in urging astronomers to do everything possible to promote activities of this sort.

Oort then proposed the resolution to abolish Commission 39, which is reproduced above at the beginning of the present minutes. This resolution was passed unanimously, but in the discussion that preceded the final vote several members expressed the hope

that the abolishment would be of a temporary rather than permanent nature. Minnaert expressed the view that the idea of a truly international observatory, which embodies much more than the regional plans that are now in operation or about to go into effect, was too beautiful an idea to abandon lightly and he expressed the conviction that sooner or later the plan for a truly international observatory will be revived. It was the consensus of all those present that the officers of the International Astronomical Union be urged not to abandon the basic idea of a truly international observatory and Danjon concluded the discussion by proposing that the Executive Committee of the I.A.U. should inform U.N.E.S.C.O. of the tenor of this discussion.