

and computation facilities. All observational data are needed in machine-readable form, preferably on punched cards, and all steps of the revision programme are to be carried out on an electronic computer. The first step is therefore the key-punching of those old and new star catalogues which have to be incorporated into the General Catalogue. (For future publications of observational and other catalogues the publishing institutions themselves should make their catalogues available on punched cards.) The Astronomisches Rechen-Institut will distribute a list of star catalogues which are needed with highest priority on punched cards, and an enquiry shall determine whether assistance in key-punching can be expected.

The existence of star catalogues in machine-readable form (e.g. on punched cards) is a necessary condition not only for the formation of a General Catalogue but also for any kind of future analysis of observed star positions. In the past it was only in rare cases that all the star positions in observational catalogues were analysed. In the future, however, it will be easily possible to make use of the full amount of information contained in the observations. The key-punching of the old and new star catalogues—if shared by various institutions—can be expected to be completed within a few years. After all necessary data are on punched cards, the formation of the revised General Catalogue when carried out on an electronic computer will be feasible in well-controlled steps in a reasonable time. The programming of the various steps for the electronic computer is under way at the Astronomisches Rechen-Institut.

## 6. WHAT DATA WILL BE PROVIDED BY THE AGK<sub>3</sub>?

*W. Dieckvoss*

For the region of declination  $-2^{\circ}.5$  to the northern celestial pole the plates of the AGK 2, comprising the zones Bonn, Bergedorf and Pulkovo, have been repeated at Bergedorf. All stars contained in the photographic part are measured and proper motions have been derived.

The final AGK 3 catalogue will thus give proper motions of 180 000 stars with mean errors of  $\pm 0''.008$ /year. Those stars belonging to the meridian circle work of the AGK 2 (printed in the relevant volumes under the headings 'Babelsberger Meridianbeobachtungen') will be omitted. Also other double stars with uncertain co-ordinates will be omitted.

The system of the AGK 3 will be the FK 4. Spectral types and photographic magnitudes will be included and, in a belt of  $20^{\circ}$  width around the galactic equator, colour equivalents also.

Extensive tables in the introduction will provide means of correcting the positions of the AGK 2 for errors depending on magnitude and colour.

With these 180 000 absolute proper motions in a unified system a basic material will be available to bring other catalogue work to a unified system, especially the immense Yale-zone work.