would expect for stars of different ages and different distances from the galactic plane.

One of the intriguing questions within the context of the general problem of the local evolution is that of the occurrence of old, metal-poor stars. Theory so far has not satisfactorily accounted for the relatively small proportion of such stars in our local sample. A check on their real proportion is therefore especially desirable. One of the current surveys on La Silla, executed with the "Grand Prism Objectif" (GPO) aims at picking out such "underabundant" old stars by searching for them in and around the McCormick areas at high and intermediate galactic latitudes.

An interesting feature of the McCormick areas programme is its broad base of international collaboration. Apart from Dr. West of ESO and myself are also involved Drs. C. R. Tolbert, Ph. Ianna and Katy Garmany of the McCormick Observatory, and Dr. R. A. Bartaya of the Abastumani Observatory in Georgia, USSR.

# The ESO 3.6 m Telescope Control System Departs for La Silla

The ESO 3.6 m telescope control system, which left Geneva on May 2, 1976 for La Silla, has been developed by the Controls Group of the TP Division. It incorporates many novel features, some of which have also been implemented in other ESO control systems, notably those for the ESO 1 m photometric, the ESO Schmidt, and the Danish 1.5 m telescopes. The first two have in effect served as operational prototypes for several years (cf. ESO Technical Report No. 6, May 1975).

Although based on the same principles, the 3.6 m control system will have the possibility of a more automatic operation and more precise presetting and tracking, thereby facilitating the optimal use of the available observing time.

In addition to the integral computer (System 1) that serves as controller for all hardware components of the telescope, a larger computer configuration (System 2) serves as an operator for System 1. It performs continuous corrections for the telescope flexure, the refraction caused by the terrestrial atmosphere, and other reproducible non-linearities. It also allows the observer to prepare an observation file on the computer's disc storage and to edit his files by means of an alpha-numeric terminal. Several of these terminals are available and may be used simultaneously.

System 2 is also ready for connection to other, similar "front-end" computers, for instance the computer connected to a photometer or a spectrograph with a scanner.

Several months will now pass, before the System 2 computer will really start serving astronomy. It may be compared to the 3.6 m telescope building, which had to be erected basement first, although the astronomical observations take place only on the upper floors. To begin with, System 2 will be used for development and running-in of programmes, to test the electronic hardware, and later for the important check-out of the large optical elements by Hartmann and coma tests.

Upon arrival on La Silla, the 3.6 m telescope control system will first go to work in the so-called "1-metre mode", in which the System 1 computer does the job alone, without help from System 2. However, when a more detailed knowledge of the pointing, focusing, and alignment performance of the mechanical and optical structures becomes available, System 2 will gradually be charged with responsibility for these tasks.

Main desk of the ESO 3.6 m telescope control system in the ESO assembly hall before departure to La Silla.