

Fig. 1. — The two calibrators are mounted inside the tube of the Schmidt telescope and projects calibration marks on the photographic plate.

wedge. This is fully acceptable for photometry on Schmidt plates. The same exposures were used to measure the existence of scattered light. Density variations in the wide surrounding of the calibration marks were of the order of 0.01 and no systematic density pattern could be found, proving that no disturbing light scatter occurs.

As the projector is mounted just outside the actual limiting light beam of the telescope, the projection angle is slightly larger than the angle of incidence of the star light at the edge of the plate. This causes an image distortion resulting in a magnitude difference over the height of one calibration mark of the order of 0.003 which is negligible. The projectors are dust-proof protected at the front side by a quartz window (103) which is mounted rimless, allowing effective and easy regular cleaning. The mounting of the mirror (101) which reflects the image to the plate is very delicate because the slightest stress on this mirror causes unacceptable image distortion. The mirror position can be adjusted to enable the positioning of the calibration marks at the plate edges. Figure 3 shows one of the two calibra-

## ESO Fellowships 1978–1979

The European Southern Observatory (ESO) intends to award up to six fellowships tenable in the ESO Scientific-Technical Centre which is presently located on the grounds of CERN in Geneva.

The main goals of the Centre are as follows:

- to carry out a programme of development of auxiliary instrumentation for the large telescope;
- to make studies in observational and theoretical astrophysics so that the observing facilities can be used in an optimal way;
- to foster cooperation in astronomy and astrophysics in Europe.

Most of the scientists in the Centre come from the Member States of ESO, but some are from other countries. At present, the Member States of ESO are: Belgium, Denmark, the Federal Republic of Germany, France, the Netherlands and Sweden. In addition to regular staff members, the Centre comprises research associates and post-doctoral fellows.

ESO facilities include the La Silla Observatory in Chile where telescopes with apertures of 1 m and 1.5 m as well as a 1 m Schmidt telescope have been in operation for some time, while a 3.6 m telescope is becoming operational in 1977. The ESO Sky Atlas Laboratory is located in Geneva. A CDC 7600 computer system is available at CERN.

Applicants should have a university degree, preferably a doctorate. The basic monthly salary will be not less than SFr 3076. The fellowships are granted for one year, beginning about September 1978, with reasonable possibilities for renewal for a second year. Applications should be submitted to ESO not later than 31 December 1977. Applicants will be notified by the end of February 1978. The ESO Fellowship Application form should be used and be accompanied by a list of publications. In addition, three letters of recommendation should be obtained from persons familiar with the scientific work of the applicant. These letters should reach ESO not later than 31 December 1977. Late applications may be considered in exceptional circumstances.

Enquiries, requests for application forms and applications should be addressed to

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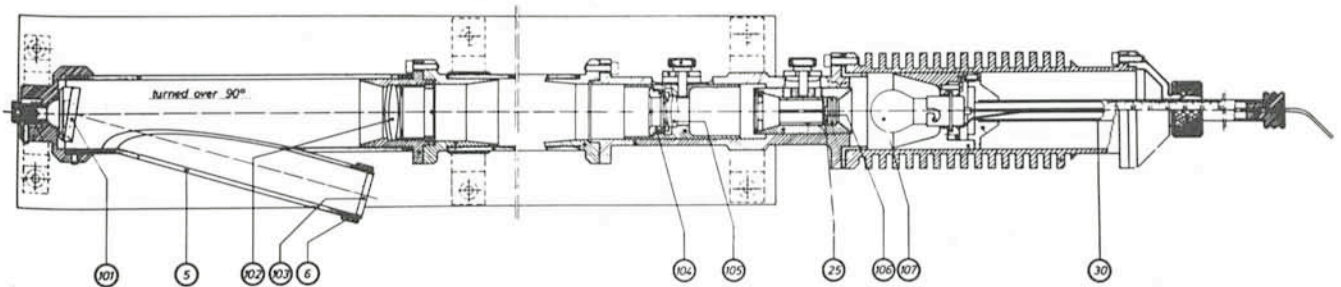


Fig. 2. — The design of the calibration device. Details are explained in the text.

Fig. 3. — Example of calibration marks on an ESO Schmidt plate. Exposure 90 minutes, IIIa-F (127-04) + RG 630. Two such marks are imprinted on each plate. The present wedge has only seven steps and will be replaced by another with fourteen steps, in order to improve the calibration accuracy. The weakest step is less than 0.01 density above sky background.

