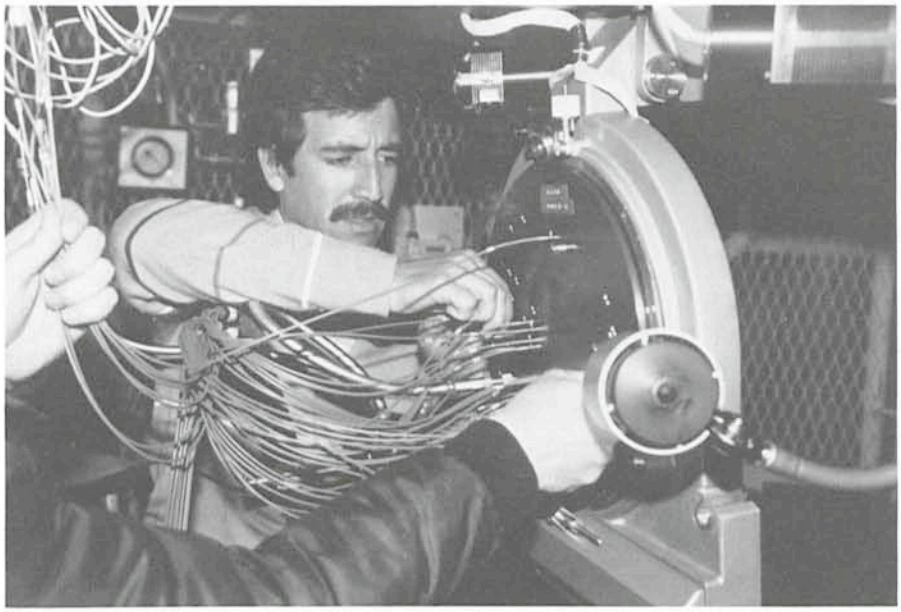

Figure 4: *View of the protected optical fibres being inserted into a starplate. The silver-coloured guide bundles can be seen at the lower left of the starplate.*

Tentative Time-table of Council Sessions and Committee Meetings in 1986

April 3–4	Committee of Council, Chile
April 24	Scientific Technical Committee
April 29–30	Finance Committee
May 21–22	Council, The Hague
May 26	Users Committee
June 10–11	Observing Programmes Committee, Lyon
November 18	Scientific Technical Committee
November 20–21	Finance Committee
December 8–9	Observing Programmes Committee
December 11–12	Committee of Council

All meetings will take place at ESO in Garching unless stated otherwise.

tector in rigid alignment. Since the Boller and Chivens shutter and order-sorting filter functions cannot intersect the beam path and can therefore not be used, they are duplicated within the OPTOPUS collimator structure. Spectral calibrations must be made via the fibres, and this is achieved by means of comparison sources which are built into the OPTOPUS adaptor. The calibration light beams are diverted upwards from the Cassegrain focal plane to the recently installed white diffusion screen, which provides an authentic simulation of the telescope pupil.

The spectrograph entrance slit is materialized by the fibre output ends, which are arranged in a straight, polished row in such a way as to simulate a classical "long-slit" arrangement. Each fibre output provides a circular spot of light, thus giving rise to a set of parallel, independent spectra at the detector (as shown in Figure 1).

The optics of the collimator are optimized for the Boller and Chivens plus F/1.44 Schmidt camera configuration, although in December a special adaption was made to enable the more luminous PCD camera to be used. At the expense of a slight reduction in the number of fibres and the spectral range available, an appreciable gain in sensitivity ($\lambda\lambda$ 3600–6100 Å) was achieved with this camera. Each fibre output is projected onto the detector with a monochromatic image size of 65 μm (2.2 pixels) or 90 μm (3 pixels) depending on whether the Schmidt or PCD camera is used.

Acquisition and guiding are important instrumental functions, which in the case of OPTOPUS are assured by a separate system, as depicted in Figure 3. The conventional slit-viewing camera cannot be used for guiding in this case, because the observed stars are not imaged onto the Boller and Chivens entrance slit. With OPTOPUS the guide star images are picked up and fed to a TV camera by means of two flexible coherent fibre bundles, for which holes with special orienting inserts are prepared in each starplate. The camera is of the (non-integrating) intensified CCD

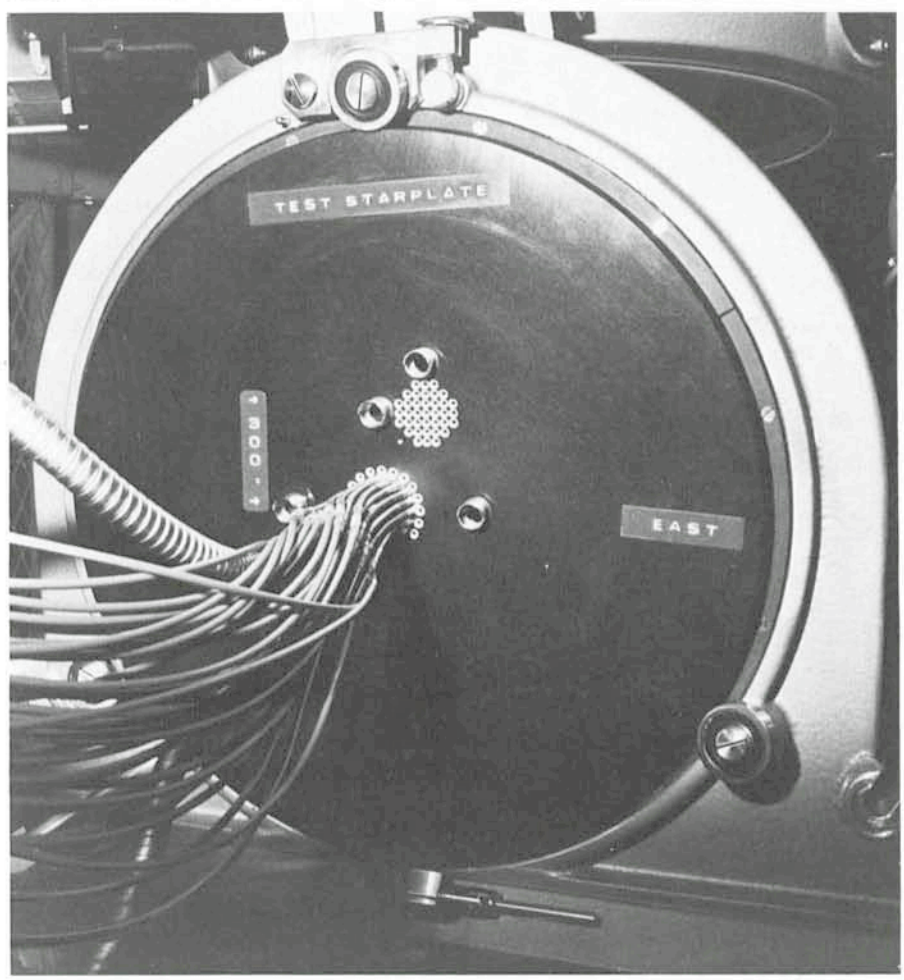

Figure 5: *Close-up view of the starplate used for observation of Halley's comet, showing the compact fibre arrangement. The diameter of the connectors imposes a minimum proximity corresponding to 25 arcseconds between adjacent fibre cores.*