ZEISS-AEROTOPOGRAPH G.M.B.H. - MUNCHEN

Zeiss-Aerotopograph Exhibit at VIIIth International Congress of Geometricians, Paris, September 1953

Due to the events of 1945 Zeiss-Aerotopograph, formerly of Jena, moved to Western Germany. This company stands for 50 years of Zeiss tradition in the design of photogrammetric equipment. The instruments are now manufactured at the new Zeiss plant at Oberkochen, Wuerttemberg, whereas the main offices are located at Munich.

In the spring of 1953 the constant expansion of business activities required removal to a new office building with spacious demonstration and lecture rooms at 57 Ismaninger St., Munich. Some of the events of the Photogrammetric Weeks were also held here, organized from 15 March to 14 April 1954 in collaboration with the Photogrammetric Institute of the Munich Technical University.

A number of the well-known Zeiss-Aerotopograph instruments had already been displayed at the International Congress of Photogrammetry in September 1952. Meanwhile, the number of items has been considerably expanded so that the present exhibition shows a practically complete range of photogrammetric equipment including the following instruments:

The *Stereoplanigraph* is a universal first-order precision plotting machine which has attained a stage of highest precision with the present Model C 8. Equipped with universal photo-carriers and interchangeable plotting attachments, the Model C 8 permits to plot all photography taken with the current types of cameras. It is further equipped with a printing counter which records the coordinate values by means of pulling a lever Indirectly illuminated indicator dials permit the convenient setting and reading of the orientation elements. These constructional innovations are of decisive importance for earo-triangulation and cadastral surveys. Up to date, nearly 200 stereoplanigraphs have been supplied to over 30 differents countries.

With the *Aerial Survey Camera RMK* 21/18, picture size 18 × 18 cm. (7 × 7"), equipped with the newly computed Zeiss TOPAR 1 : 4, f = 210 mm. (8.1/4") Zeiss-Aerotopograph presents an automatic aerial camera incorporating the latest results of scientific research and technical progress. The high qualities of the new lens are exemplified at the exhibition by aerial photographs taken at an altitude of 1000 meters (3.300 feet) on which the 4-inch marker buttons at the street crossings are clearly visible. The shutter has a light transmitting efficiency of 92 % and a speed of 1/500 second. The magazine accommodates film in lengths up to 120 m. enabling approximately 500 pictures to be taken without changing the magazine. A wide-angle survey camera RMK 15/23, picture size 23 × 23 cm (9 × 9"), with the newly developed high-performance wide-angle lens f = 150 mm (6") is in preparation.

The new *Automatic Rectifier SEG V* for the production of « controlled mosaics » is the first instrument of this nature to employ automatic vanishing point control. The reduction of orientation operations to only three directions and a table which is freely accessible from three sides enables any type of processing work to be carried out conveniently and rapidly. The new projection lens brings pictures into sharp focus over the entire enlargement range.

The *Radiol Secalor RS I* is a precision slot cutting instrument for mechanical radial triangulation. This two-story-slotter is the only instrument of this kind permitting to be processed vertical and tilted views. Differences between the given picture scale and the desired triangulation scale are compensated automatically.

The *Stereotop* is a plotting instrument developed on the basis of the mirror stereoscope. By adding the correction attachments of models III and IV it can be assembled into a regular third-order plotting instrument. This universal outfit of sectional design meets an urgent requirement in the field of photogrammetric instruments. Its operation is simple that it will provide so accurate and reliable data after a brief training period for the operator.

The *Aero-Sketchmaster LUZ* is an instrument for the graphical rectification of verticals and near-verticals for the completion and correction of existing maps. It is designed more or less on the pattern of the former model.

A new *Film Developing Outfit FE* 120 features extremely smooth operation and the absence of mechanical strain during the winding back and forth of the film. The equipment enables aerial film to be developed, fixed and washed in lengths up to 120 m and widths up to 24 cm.

Pocket and Mirror Stereoscopes for the observation and interpretation of stereo picture pairs have been supplied by Zeiss-Aerotopograph for many years and enjoy wide-spread popularity.

The present available items will be supplemented in the near future by a second-order plotting instrument, a phototheodolite and drying and printing equipment for aerial film.

Thus Zeiss-Aerotopograph will soon present to all users of photogrammetric equipment a list of articles that will satisfy practically all requirements.