

- 4) Distance between the positions which the center of the lens takes = actual base =  $B$ ;

$$B = \theta u = \frac{1}{8} 56 \text{ mm.} = 7 \text{ mm.}$$

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## THE DE KONINGH MIRROR STEREOSCOPE AND THE MEASUREMENT OF Y-PARALLAXES

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TWO interesting papers\* in the March, 1955 issue of PHOTOGRAMMETRIC ENGINEERING mention a procedure for measuring  $y$ -parallaxes with a mirror stereoscope and parallax bar. The procedure involves a 90 degree rotation of the photographs, one about its principal point, the other about the transferred principal point. With the photos so arranged,  $y$ -parallaxes appear as  $x$ -parallaxes which are then measured with the parallax bar. Mr. Doyle

remarks that "the effect is exactly the same as that obtained in the first-order instruments by rotation of the dove prisms." The author has had occasion to work with a mirror stereoscope which includes dove prisms in its optical system, the de Koningh Mirror Stereoscope produced by G. de Koningh of Arnhem, Holland. The principal use of the dove prisms in this stereoscope has been for the detection of residual  $y$ -parallaxes in the transfer of points from one photograph to another. The dove prisms make this the ideal instrument for the precision transfer of points. The instrument should prove particularly adaptable to the orientation studies described by Hallert and Doyle.

\* Hallert, Bertil, "Discussion of Mr. Fischer's Paper: Photogeologic Instrumentation in the U. S. Geological Survey."

Doyle, Frederick J., "Photogrammetric Measurement of Spectrograms."