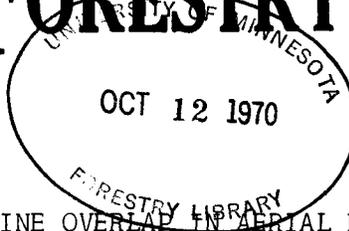


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MEASUREMENT OF CRAB AND FLIGHT LINE OVERLAP IN AERIAL PHOTOS

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Reflights of aerial photography for forestry purposes on a seven to ten year basis are becoming increasingly common on most classes of forest land ownership. Many foresters are, consequently, being called upon to contract and ultimately inspect aerial photography for their working areas. When photography is delivered for inspection, the contractor should have the individual flight lines "stripped up". That is, the individual flight lines are either taped or stapled together in overlap position with the titling visible. This makes it possible to check endlap, sidelap, crab and departure from the planned flight line. The scale presented here is designed to assist in the performance of these checks.

The flight lines should be laid out on a long table, stretched sufficiently to remove any possible kinks and secured with a few weights. Using the job flight plan map, which should have been furnished by the contractor, locate the proposed flight line in several places along the photo line with a sharp grease pencil. By means of a long straightedge or a taut string superimposed upon the indicated planned flight line, the departure from the actual flight line can be determined with the scale. This string or straightedge line also is used for crab determination. Lay the base line of the crab protractor (Figure 1) along the flight line with the protractor center at the juncture of the flight line and the edge of the photo. The degrees of crab are read directly from the protractor (Figure 2).

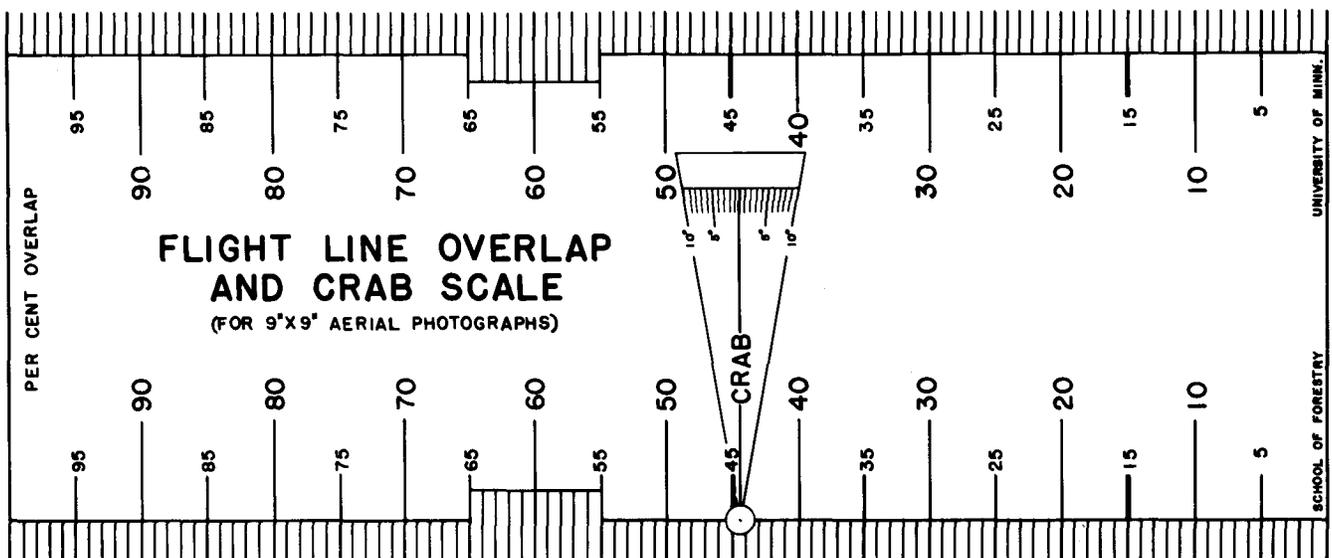


Figure 1. Flight Line Overlap and Crab Scale (2/3X).

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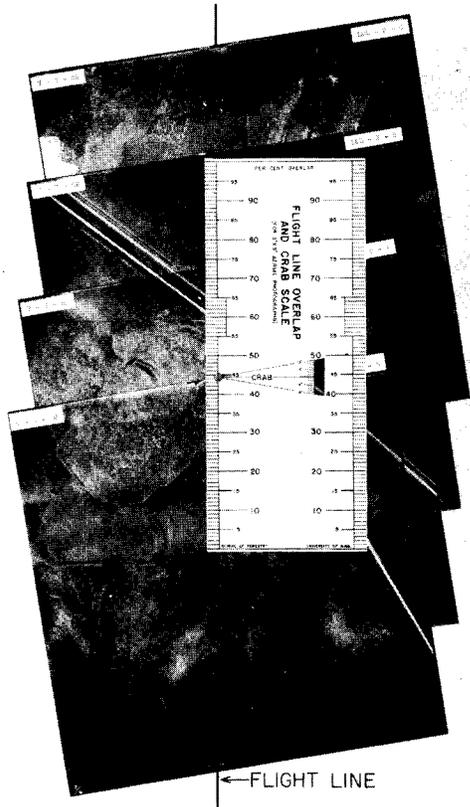


Fig. 2 - Measurement of crab. Note that in the paper print scale it is necessary to cut out the protractor center and crab scale reading box.

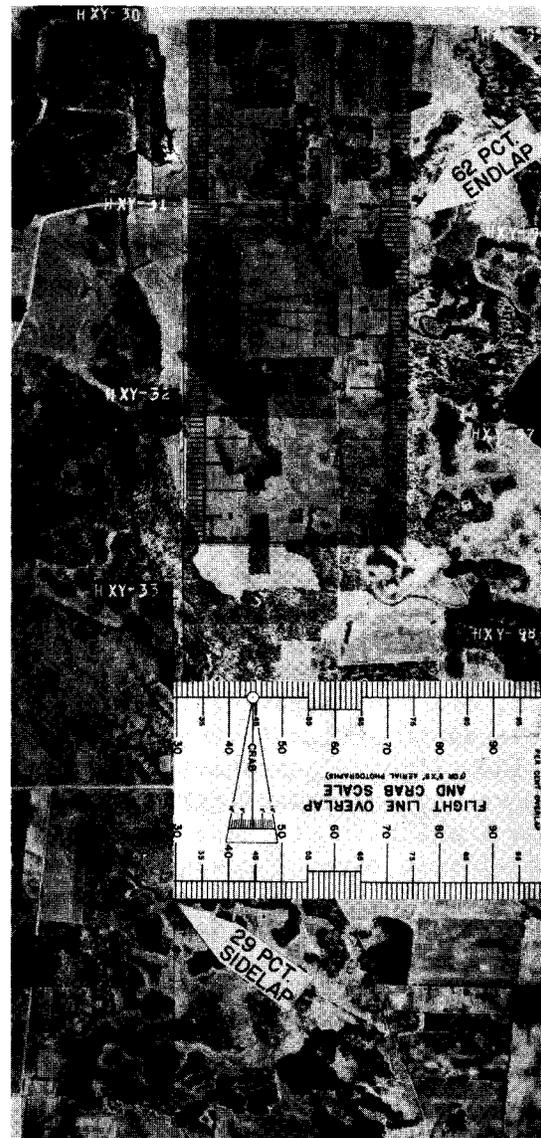


Fig. 3 - Measurement of endlap and sidelap

Measurement of endlap and sidelap is illustrated in Figure 3. Where little or no crab or drift is present, endlap can be measured by placing the scale on the middle of the photo edge. Where endlap is questionable, and crab and/or drift are present, the endlap should be measured on both sides of the line. Sidelap is determined by holding the adjacent lines in overlap position and inserting the scale between them as in the illustration.

Albinson, Inc., 520 4th Ave. So., Minneapolis, Minnesota, has agreed to provide copies of this scale in a black-line film transparency at a cost of approximately \$1.75. Paper prints are also obtainable - price available upon request.