10 PHOTOGRAPHIC TECHNICAL SQUADRON

MISSION
Their principal mission in the Army Air Forces is to analyze, classify, reproduce and transform certain areas covered by photography into maps and prepare for storage the many AAF aerial photographs and negatives taken during the war years.

In order to perform this mission the squadron is comprised of an analysis and classification section, a photographic laboratory, a photo interpretation section and a photogrammetric and reproduction section each equipped with the most modern devices.

The process of editing the mountains of photographs taken during the war years by the AAF goes on continually. When the film first arrives at the organization it is sent to the analysis and classification section where the bad or useless film is separated from that which has a potential value for mapping or record purposes.

LINEAGE
10 Photographic Technical Squadron

STATIONS
Bolling AFB, DC

ASSIGNMENTS

COMMANDERS
Maj Charles F. Wilson

HONORS
Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

MOTTO

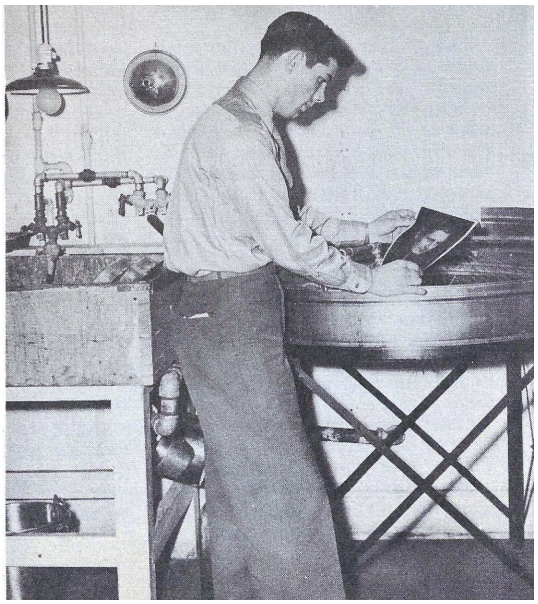
OPERATIONS

One of the 10 Photo's first assignments was to assist in the processing and to index the complete AAF photographic coverage of the atom bomb tests at Operation Crossroads.

The following officers are responsible for 10 Photos efficient operations: Maj. Charles F. Wilson, commanding officer; Maj. Thomas L. Walker, executive officer; Capt. Victor H. Kerr, photo interpretation; Capt. Joseph G. Macek, Pentagon laboratory; Capt. William W. Robinson, Boiling Field laboratory; Capt. James I. Waters, analysis and classification; Capt. William G. Yea-bower, photogrammetry; Capt. Jesse N, Tessier, reproduction; Capt. Marvin H. McCarter, supply officer; and CWO Richard E. Stauffer, adjutant.

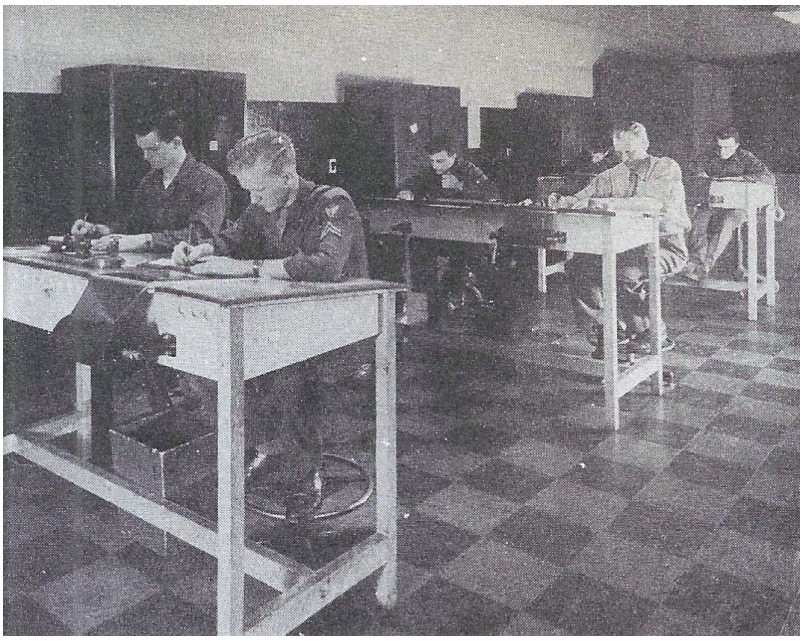
One of the most interesting phases of work accomplished by this organization is to transform aerial photographs into maps. In order to understand the methods by which these maps are made; suppose a "work order is submitted to AAF headquarters requesting a map be made of a certain county in your home state. The work order, of course, lists the area to be mapped, the purpose for which the map is to be used, the scale to which it is to be drawn and the number of copies required. The enormous index of AAF aerial film is checked to see if the area has sufficient photographic coverage. In the event it has, the negatives concerned are removed from file and sent to the laboratories, where a print of each negative is made. All prints are then sent to the photogrammetric section where the map itself is compiled. This is a long and tedious process, even with the aid of the most modern tools and gadgets such as the "Sketchmaster" which through a system of mirrors, throws the image of the photograph upon the drawing paper. Careful matching of many photographs, intricate mathematical computations and skillful handling of the instruments are required before the map drawing is ready for tracing. A separate tracing has to be made of each color area as it is to appear on the finished map as only one color can be printed at a time. In the reproduction section a photographic negative is then made of each separate tracing. These negatives in turn are then transferred to sensitized zinc plates. In the printing press one plate at a time is inked and run over a rubber roller which in turn transfers the ink to the paper. The paper is run through the press as many times as there are colors in the map, printing a different color each time, in much the same way as your Sunday comics are printed. The zinc plates can be used over and over again since the image can be removed by the use of abrasives. The map is now completed in four colors and ready for use with every village, road, even each stream in the county as it would appear from the air, with the extraneous and confusing details of a photograph

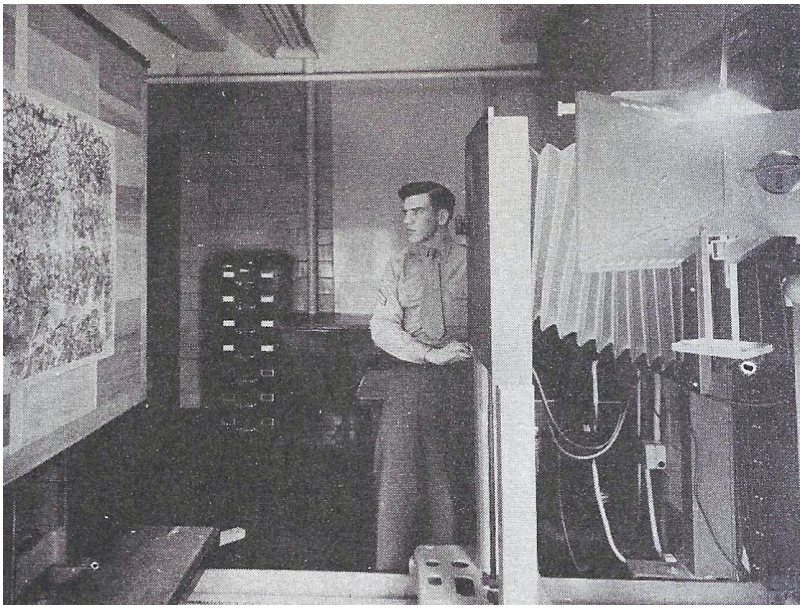
eliminating a great deal of ground surveying, which, until the early 1920's was the only method by which data for topographic maps could be gathered.

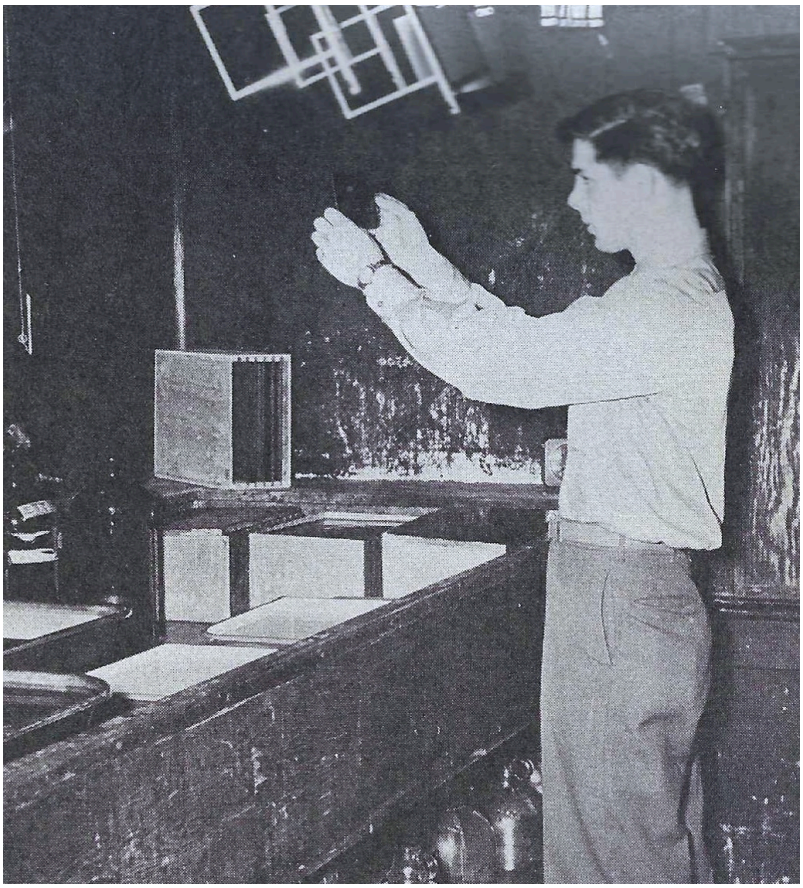


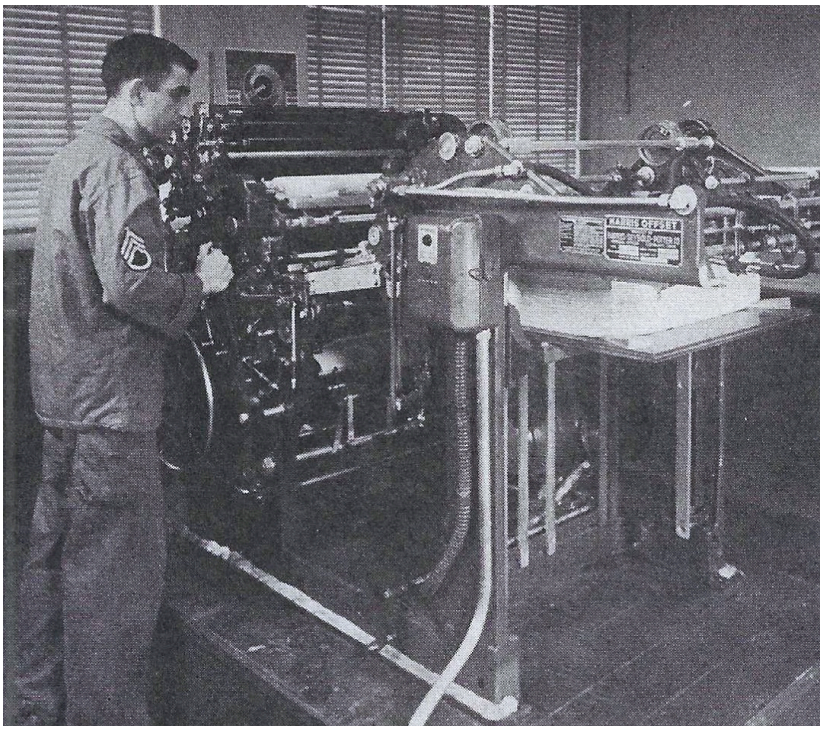
Negative processing, checking and telling.

Maj Charles F. Wilson

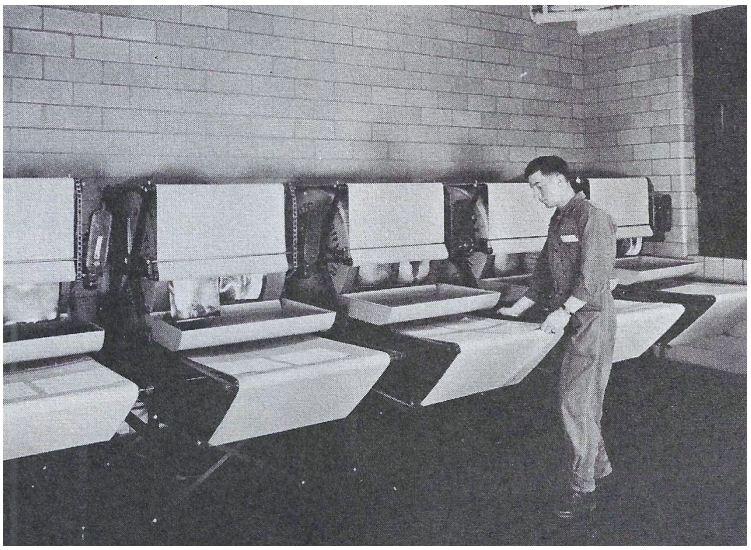








Operating Harris Offset Printing Press.



Operating of B-8 Pako dryers used for matte drying prints.

Sources
Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.
Bolling Field Command, Washington D.C. 1948. Newsfoto Publishing Company. San Angelo, TX. 1948