

PHOTOGRAPHY

# Color Photographs at Six Miles Soon To Be Possible

## Army Air Corps Photographic Experts Already Getting Good Color Reproduction From 15,000 Foot Altitudes

See Front Cover

**T**HE EYES of the Army—aerial photographs — are seeing the enemy in this war with new color vision, it is revealed by an announcement of the Army Air Corps at Wright Field.

No longer can enemy territory hide behind camouflage to which the ordinary black and white photographic print is blind. Brilliant color photographs have been obtained by the Air Corps from altitudes of 12,000 to 15,000 feet and it is expected by photographic experts that within the next few months color photographs can be made from airplanes flying five or six miles above the earth.

The color film that gives such beautiful and lifelike results in your amateur movie or still camera will not do at all for color work at such long range, Wright Field laboratory technicians discovered. Haze, which Army photographers have learned to "see through" with infrared-sensitive film for black and white photographs, becomes a new bugaboo to the color photographer. Colors at such a distance register as muddy and unbalanced.

The problem is being solved with the use of a three-lens camera with matched lenses and various combinations of films and filters which vary from day to day with weather conditions.

Great strips of film 50 feet long and dyed in tested brilliant colors are stretched out on the flying field at Wright Field to aid in the photographic experiments. Next comes a sort of trial-and-error method of attack on the problem. Various film and filter combinations are tried until the colors are reproduced correctly at the desired altitudes.

Color photography is even possible at night with the aid of brilliant flash bombs of colored light—color of light and film being carefully balanced as the result of test and experiment. These flashes are so bright that they can be seen for 200 miles. Photoelectric shutter trippers insure that the picture is taken at the peak intensity of the flash. Mean-

while the night-photography plane is hidden from the enemy by darkness and high altitude.

Another new weapon of the Army Air Forces is a photo-mapping camera developed at Wright Field which makes possible new feats in fast searching out of enemy territory.

With this new camera, now going into mass production, Wright Field camera technicians recently map-photographed an area of 1,600 square miles from an altitude of 25,000 feet and were back on the ground within three hours, 35 minutes. Tiny details are clear and sharp. Five photographs, covering strips of land 50 miles long were made. Each photograph on a strip was overlapped 60% on the preceding one and each strip overlapped the preceding one 30%.



FROM SIX MILES UP

*A Wright Field aerial photographer pointed his 40-inch telephoto camera out of a bomber and produced a negative from which this section was enlarged. Notice how clear the details show up at this immense distance.*

Ten years ago, a similar achievement would have taken long days of flying at a 15,000-foot altitude.

Good infrared photographs can now be made at 1/50 of a second. The picture on the front cover was made at 20,000 feet.

*Science News Letter, April 18, 1942*

PUBLIC HEALTH

## Polio Spread by Humans, Study of Epidemic Suggests

**E**VIDENCE that infantile paralysis may be spread from neighborhood to neighborhood and from person to person by human travel is presented by Dr. Albert E. Casey of the Louisiana State University School of Medicine (*Science*, April 3).

Dr. Casey observed an epidemic of polio in Walker County, Ala., a mountainous mining region, with 65,000 inhabitants. The epidemic began in the last week in June, reached a peak early in August, and was virtually ended by the last week in September, 1941.

Of 101 cases interviewed, not one had been isolated during the month preceding the illness, and visits were made freely among neighbors and relatives.