

Bombers do not leave the ground unless photographs prove the value of the mission.

From each theatre comes the cry for "more pictures." In combat operations one hundred prints may be distributed from each negative. The Air Force commander and his staff, the Navy, ground forces, and Allied airmen clutch at every scrap of photographic information.

Photographic planes streaking over bombed cities after a mission bring back exact answers to a commander's questions. What factories have been struck? What storage dumps remain intact? How long will railroad yards and switching-points be bottlenecked?

Camouflage is seldom effective. Modern photographic methods detect it instantly.

Daily sorties over the Channel ports told the British the exact status of Hitler's invasion plans. They merely counted the landing-barges, and when the prize looked worthwhile, they bombed them into splinters.

Following a practice copied from the British, American fighters with cameras come in at low altitude, get their pictures and return quickly to base.

Recently, after a test in America, a photograph taken from a Lockheed Lightning going faster than 300 m.p.h., as low as 300 ft., was so sharp that engineers could count the telephone wires which the plane had flown over.

Tests have been conducted with a "strip film" camera which makes a continuous picture on roll film.

Cameras are indispensable in searching out weak spots in our aircraft through recording take-off and landing characteristics, recording instrument dial readings during test manoeuvres, training pilots and testing various types of materials.

Typical of photography's triumphs in wartime is the story of one photo squadron. In April, 1942, nine officers and 60 men disembarked in Australia with four Lightnings modified for photographic use.

With no more than five airplanes in the air at any one time, the squadron flew 457 missions in an eight-month period.

One photographic flight over Buna eventually cost the Japs 83 airplanes. Quickly processed pictures told a story which sent a swarm of U.S. fighters streaking for the enemy airdrome. Seventy-nine were caught on the ground and four more were picked off in the air. Photographs showed that they had landed to refuel.

One morning the Squadron Commander received a rush request for complete aerial mapping of Guadalcanal and adjoining islands. The mission was beyond the range of the Lightnings, stripped down though they were. A Boeing B-17 Flying Fortress was equipped as a mapping airplane. Flying just beneath a high cloud ceiling along the hump of the central range, the big plane, carrying a wide angle camera, completed the mapping in three passages, then went on to Florida and Tulagi Islands. The job was done in one afternoon.

Soon afterwards the first American offensive in the South Pacific was launched. We made our early gains with minimum loss because the photographic reconnaissance made on this flight had supplied the maps.

Aerial photography also helped turn back the Jap land assault on Port Moresby from the Gona-Buna area along the Kokoda Trail. Once the enemy had crossed the Owen Stanley Range, they were confident of smashing through to the Allied base at Moresby. But photographic aircraft made a forty-five minute daily flight along the length of the trail, spotting supply dumps and encampments. When the Japs had cached supplies at forty-seven installations on the trail's length, Allied aviation attacked the targets.

Eleven days of bombing left the Jap forces with neither ammunition nor food. Photography had previewed this action, and photography recorded each step in the Jap defeat.

Technical difficulties arose from the extreme heat, humidity, and dust. But these photo experts learned to overcome climate as well as enemy. They stripped the cameras after each mission and coated moving parts with a thin film of oil. Thanks to this, the squadron had only one