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MODERN PURSUIT VERSUS MODERN BOMBARDMENT

A series of tactical operations have been carried out during the past few months by the First Wing stationed at March Field, Riverside, Calif., under the direction of Lieut.-Col. E.E. Arnold, Commanding Officer, utilizing Pursuit and Bombardment tactical units equipped with the latest types of aircraft now in service. The units employed in these tests were the 3th, 73rd and 9th Pursuit Squadrons of the 17th Group, with Boeing P-26A airplanes, and the 9th, 11th and 31st Bombardment Squadrons of the 7th Group with B-12 Martin Bombers.

In general, the operations were conducted with the planes either carrying actual standard armament loads or equivalent. In all problems it was either assumed that there was a well trained ground observation unit which would report the approach of "hostile" aircraft or scouting planes were actually employed for this purpose. Observation points on the ground were selected to conform as nearly as possible to those that would be selected under actual war conditions and "hostile" airplanes were required to radio their positions when passing over these points in certain types of interception problems; several minutes were permitted to elapse before the messages were delivered to the intercepting units, as there would necessarily be a small delay in war time due to the operation of the network and the time necessary for the issuance of field orders, although all units are "on the alert". Once in the air, however, all position reports were given direct by radio to the unit commanders and, likewise, succeeding orders were given direct to the pilots by radio by the various unit commanders.

The following phases of serial operations were covered:

a. Interception of Bombardment by Pursuit, when Pursuit is located at or in the immediate vicinity of the objective:

- (1) When Bombardment approaches in a direct line at an altitude of 18,000 feet.
- (2) When Bombardment approaches in a direct line at an unknown altitude (high, intermediate and low).
- (3) When Bombardment approaches on an unknown course at an unknown altitude.

b. Interception of Bombardment by Pursuit, when Pursuit is located to one flank of the objective and of the attacking Bombardment.

- (1) When Bombardment approaches in a direct line at a known altitude.
- (2) When Bombardment approaches on an unknown course and unknown altitude.

A total of 26 interception problems were

carried out. Tactics and types of formations used were those best suited for Pursuit in the attack of Bombardment, and the planes used the following types of armament:

- (1) Single-seater Pursuit, armed with synchronized .30 caliber machine guns.
- (2) Single-seater Pursuit, armed with fixed synchronized .50 caliber machine guns or small cannon.
- (3) Pursuit armed with bomb-dropping gear with a capacity of from 15 to 40 bombs of from 5 to 10 lbs. weight.

In preparing the interception problems, an attempt was made to secure operations over all kinds of terrain. Thus, in some of the problems, the Bombardment started their mission over the ocean, in others, far out over the desert, and still others over the mountains. Accordingly, the Pursuit was given an opportunity to work over very varied terrain at varied altitudes. In as many problems as possible, the Bombardment started from dispersed areas and assembled over a known point before continuing to their objective. In all cases, the Pursuit was given such information as they would normally receive from ground look-out stations and the position of these observation stations was varied to assure front lines at varying distances from the objective of the bombardment attack.

The time required to issue orders and clear the airdrome, the time to reach various altitudes, the many echelonments and altitudes used for attacking elements, their relative positions with respect to the bombardment, and the order of attack by the elements forms an extremely interesting and instructive study. All this data will be compiled by the Information Division, Office of the Chief of the Air Corps, and sent to the Air Corps Tactical School, the overseas departments and, at the request of the Commanding Officer of the General Headquarters Air Force, to Wing and separate Group Commanders of the Air Force. This information will be for official use only. Still further data relating to armament, equipment and technical functioning, will be furnished to the Chief of the Materiel Division.

These upper air laboratory tests are to be continued at March Field, it is understood. Undoubtedly, as the later types of airplanes are furnished to other Pursuit and Bombardment units, they will desire to carry out similar tests. It is to be hoped there can be made available complete equipment of camera guns for both Pursuit and Bombardment, so that still more realistic data may be secured.