AERONAUTICS

Aerial Attacks Evaluated

German submarines, planes, oil and transportation were wiped out one by one. Report includes military, economic and morale effects.

➤ A SCIENTIFIC and strategic evaluation of the effects of the aerial attacks on Germany by the Allied air forces during the war is given in an official over-all report released by the U. S. Strategic Bombing Survey headed by Franklin D'Olier, with Charles C. Cabot as secretary. The Survey, with civilian officials, was established in November, 1944, by the Secretary of War, and its headquarters was in London. It covers military effects, economic effects, and effects on the morale of the civilian population.

The report includes data on bombing activities, but states, "Of far more significance than statistics of strength and damage is the outstanding fact that the Allied Air Forces won the air war over Germany and obtained mastery of the skies of Europe." Because of this, Germany was fatally weakened because it was denied such vital military needs as oil, planes and tanks.

The Survey, with a staff of 300 civilians, 350 officers and 500 enlisted men, secured first-hand information on damages in Germany from bombs by inspection and from captured German reports. Members of the staff also interviewed captured officers, including members of the German General Staff.

In the spring of 1943, the report states, Allied naval and air power scored a definite victory over German submarines. After that, "submarines were dropped from first priority and the German aircraft industry was substituted.

The German ball-bearing industry, the supplier of an important component, was selected as a complementary target."

An adequate supply of anti-friction bearings was correctly assumed to be indispensable for German war production.

After a reduction in German air power through destruction of planes, oil became the priority target in the German economy. "The German oil supply was tight throughout the war," the report declares, "and was a controlling factor in military operations."

"The chief source of supply, and the only source for aviation gasoline, was 13 synthetic plants together with a small production from three additional ones that started operation in 1944," the statement continues. Because of air attacks, production from the plants declined steadily and by July 1944 every major plant had been hit. "The Germans viewed the attacks as catastrophic."

The attack on the synthetic oil plants cost Germany also its synthetic nitrogen and methanol supply and a considerable part of its rubber supply. The nitrogen was indispensable in the manufacture of explosives, and also in fertilizer to produce essential food. Methanol was needed for TNT, hexogen and other high explosives.

"The attack on transportation was the decisive blow that completely disorganized the German economy," the Survey reveals. "It reduced war production in all categories and made it difficult to move what was produced to the front. The attack also limited the tactical mobility of the German army."

Germany entered the war with an excellent railway system. It was generally adequate for the demands placed upon it until the spring of 1944. The heavy attacks in September and October 1944 on marshalling yards, bridges, lines, and on train movements, produced a serious disruption in traffic over all of western Germany.

Science News Letter, November 10, 1945

Boron, a little-known but common non-metallic element, may be used to increase the hardness of steel and is used in certain alloy steels during the war scarcity of chromium, nickel and manganese.

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