

AERONAUTICS

B-29 Superfortress

Half again as large as the B-17 Flying Fortress, this new battleship of the air carries a greater bomb load faster than any other plane in the world.

See Front Cover

► THE B-29 Superfortress, the U. S. Army Air Forces' latest battleship of the air, carries a greater bomb load and flies faster, farther, and higher than any other plane in the world.

Facts about this heavy bomber announced by the War Department show that it is half again as large as the B-17 Flying Fortress. It has a wing spread of 141.2 feet, a fuselage 98 feet long and when it rests on the runway it is as tall as a three-story building, 27 feet.

Four engines with 8,800 maximum horsepower thrust it through the air at speeds in excess of 300 miles an hour, and the largest propellers ever produced by mass production, four blades of 16.5 feet diameter, apply this greatest power a plane has ever had.

The range of the B-29 is not revealed but it is known to be well in excess of the 700 mile radius of combat operation credited to the B-17. The bomb load is also still a secret, but it is known to be larger than the 6,000 pound load the Flying Fortress carries. Its practical altitude can extend above 30,000 feet, more than six miles in the air.

The B-29 has more fire power than most planes in use today. Announced armament includes multiple 50 caliber machine guns and 20 millimeter cannon. These are installed in power turrets.

The slender tapering wings, set far behind the elongated nose, are built for speed and range. The wings carry greater loads of fuel and bombs than any wings ever built.

The new B-29 is nearly all-electrically operated. With the exception of the hydraulic braking system, every piece of moving equipment is operated by an electric motor or cable controlled by the copilot and flight engineer.

Dual tires, the first used on any airplane, are used on the tricycle landing gear. The great weight of the bomber makes a dual tire nose wheel essential so that the gear will operate satisfactorily, even if one tire blew out.

The development of the B-29 was conducted in greatest secrecy during the past

four years. Bell, Martin, and Fisher Body Division of General Motors joined forces with Boeing to produce this larger, faster bomber. The B-29 Superfortress is the result of making a magnified and improved composite of the Aircobra, Ma-rauder, and Flying Fortress.

Today, B-29's are being produced in large numbers in the greatest manufacturing program ever put behind a single implement of war, involving six of the largest aircraft factories in the United States.

Science News Letter, June 24, 1944

PUBLIC HEALTH

Children Will Receive Protection Against Measles

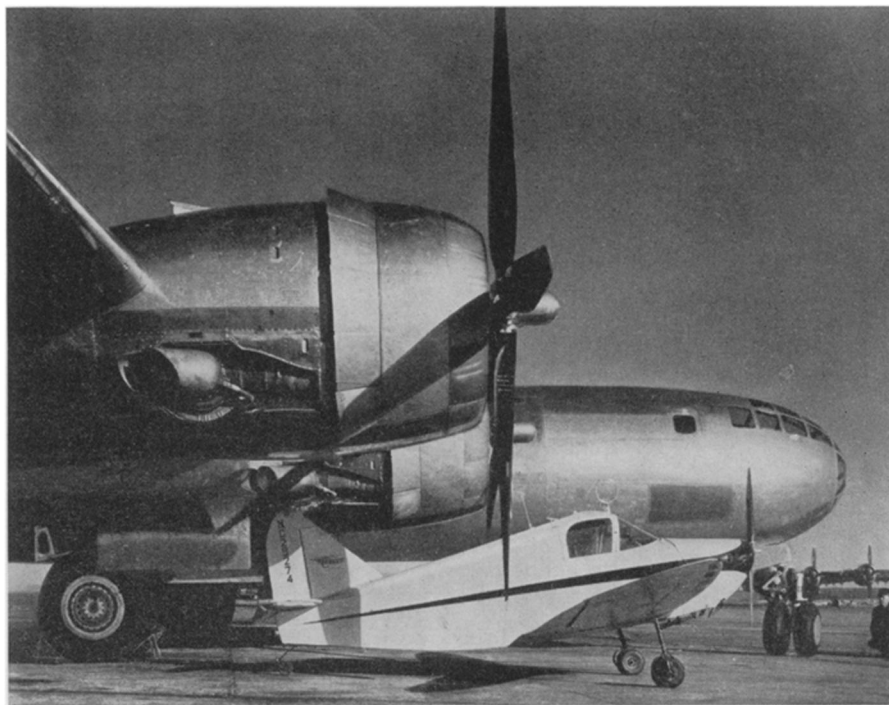
► MEASLES protection will be available to America's children, and grown-ups too, if necessary, through a by-product

of blood donated by patriotic citizens all over the country to the Red Cross for the nation's fighting men.

The protection will be given by a substance called gamma globulin, separated from blood plasma by Dr. Edwin J. Cohn of Harvard University. (See *SNL*, May 27) The globulin can be used either to prevent measles or to modify the attack so the patient is not very sick but develops resistance to further attack. The American Red Cross, functioning as coordinator, will assist in transferring the measles preventive from the manufacturers to state and local health departments. These will pay the cost price and distribute the material without charge.

Announcement of this latest development of the blood donation program comes from the Navy Department with a detailed progress report by Vice Admiral Ross T. McIntire, Surgeon General of the U. S. Navy.

Fully a year before Pearl Harbor the Navy's Bureau of Medicine and Surgery began the project which has yielded gamma globulin for the prevention or modification of measles; concentrated serum albumin for saving lives threatened by shock from battle wounds; fibrin film and fibrin foam which are proving valuable in surgery of battle wounds, espe-



HIGH ALTITUDE BOMBER—Towering above a single engine reconnaissance plane is the giant four-engine Boeing B-29 Superfortress, equipped to carry the heaviest load of bombs, faster and farther than any other plane. Used recently in a heavy bombing of Japan, the B-29 will soon be hammering away in war theaters.