The Barling Bomber

ASPJ STAFF

In 1920 the Army Engineering Division issued specifications for a large triplane bomber to the Witteman-Lewis Company of Teterboro, New Jersey. Commonly referred to as the NBL-1 (night bombardment, long distance) or Barling Bomber (after its inventor, Walter Barling) and designated the Witteman-Lewis XNBL-1, it was the Army's first long-range night bomber. The aircraft was designed in Ohio and partially fabricated and assembled in New Jersey. Each section not exceeding 13 feet, six inches in length traveled by rail to Ohio for final assembly and testing at Wilbur Wright Field (now part of Wright-Patterson AFB, Ohio).

The Barling featured a triwing, a box tail, and six Liberty 12-A engines—four tractors (pullers) and two pushers mounted midwing, directly behind the inboard tractor engines. At the close of World War I, the Army owned Liberty aircraft engines far in excess of its airframes. Consequently, Congress mandated that the World War I surplus be used before the service could purchase new equipment. The Barling was one of many aircraft that featured government-furnished engines. The Barling's wingspan of 120 feet (the exact distance of the first sustained heavier-than-air flight and longer than the B-17's wingspan of 104 feet) made it unwieldy and underpowered, yet it needed only 320 yards to take off. The maximum speed of 96 miles per hour and range of 170 miles were far less than Army-aviation enthusiasts had hoped to achieve with the design. Initially costing $375,000, the aircraft carried a final price tag of $525,000, excluding its special hangar, which cost more than $700,000.

Although aviators considered the Barling inadequate from the day it rolled down the grassy field on its first flight, its design included some futuristic features, such as material resistant to antiaircraft attack (wood and aluminum construction in the fuselage) and separate compartments for each crew position (pilot/copilot, navigator, and radio operator). The cockpit featured a single control knob for all six engines, revolution indicators for each engine, and an electric clock; the flight-engineer station was positioned directly behind the pilot/copilot. The revolutionary landing gear featured an adjustable, multiwheeled (10 of them) chassis, concepts still incorporated in large aircraft designs.

Frequently characterized as "Mitchell's Folly" (after Brig Gen William "Billy" Mitchell), the aircraft had "disappointing speed, load and endurance" (Wagner, 29). Later in the decade, Air Service personnel disassembled the Barling and stored it at Wilbur Wright Field. In 1928 Maj Henry H. "Hap" Arnold discovered it during an inspection and requested permission to dispose of it. Because congressional interest regarding the investment in the huge airplane remained high, his request was disapproved. Nevertheless, Arnold persisted in his efforts to eliminate the Barling from the Air Service's Table of Equipment by asking to liquidate a warehouse of excess material, conveniently omitting the fact that this material included the Barling. Congress approved his request. Thus, the Barling ended its existence after a disappointing history as the nation's largest interwar-era bomber. All that remains are two of the 10 large tires from its revolutionary landing gear, currently housed at the United States Air Force Museum at Wright-Patterson AFB.

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