

The B-17 Aluminum Overcast

The Experimental Aircraft Association's B-17G-VE, serial number 44-85740 - nicknamed, *Aluminum Overcast*, was delivered to the U.S. Army Air Corps on May 18, 1945. Although delivered too late to see action in World War II, the airplane has an interesting history.



First Owner

Purchased as surplus from the military inventory for a mere \$750 in 1946, the airplane has flown more than 1 million miles. It has served as a cargo hauler, an aerial mapping platform and in pest control and forest dusting applications.

Return to Military Roots

The airplane's return to its military roots began in 1978, when it was purchased by a group of investors who wished to preserve the heritage of the magnificent B-17. The group, "B-17s Around the World," was headed by Dr. Bill Harrison. Their goal was to return the B-17 to its former glory.

Donation to EAA

The economic reality of simply maintaining a vintage bomber, let alone the cost of restoration, prompted the group to donate the B-17 to the Experimental Aircraft Association in 1983. Since that time, an extensive program of restoration and preservation was undertaken to insure *Aluminum Overcast* would be a living reminder of World War II aviation for many years to come. The restoration has taken more than 10 years and thousands of hours by dedicated staff and volunteers at EAA Oshkosh, Wisconsin, headquarters.

Aluminum Overcast proudly carries the colors of the 398th Bomb Group of World War II, which flew hundreds of missions over Nazi-held territory during the war. *Aluminum Overcast* commemorates B-17G #42-102515 which was shot down on its 34th combat mission over Le Manior, France, on August 13, 1944. Veterans of the 398th helped finance the bomber's restoration.

The Plane

When the airplane was sold in 1946, most of the original military equipment had been removed. Over the years, these items have been located, restored and returned to *Aluminum Overcast*. These include:

- The Norden bombsight located in the nose of the airplane
- Restoration of the navigator's position also located in the nose of the airplane
- Installation of the waist guns located on each side of the bomber
- Rebuilding the radio compartment, including original communications equipment
- Returning the airplane's floor to its original specifications
- Installation of a complete tail turret assembly
- Installation of a replica top turret just behind the pilot and co-pilot seats

The airplane was on display at the EAA AirVenture Museum in Oshkosh, Wis., until October, 1993 when it was moved to EAA's Kermit Weeks Flight Research Center for maintenance and restoration in preparation for its first national tour in 1994. The B-17 will eventually be housed in the EAA AirVenture Museum's "Eagle Hangar," which features numerous World War II aircraft and exhibits.

When *Aluminum Overcast* is on tour, aviation enthusiasts can actually walk through the airplane. If they

wish, they can take a trip back in time and feel the might of this magnificent flying machine through the flight experience program. Half hour flights are available at all [Tour stops](#). Proceeds from the tour help keep *Aluminum Overcast* flying and will assist the continuing restoration, maintenance and preservation efforts of EAA.

Even those too young to have lived through World War II can appreciate the history associated with this airplane. The "Flying Fortress" was one of the airplanes that helped the Allies achieve victory in World War II.

The B-17 is an important part of both U.S. and aviation history. It can help us understand the technology of the times, the era in which the aircraft was developed and the human sacrifices which make today's freedoms possible.

History of the B-17

The Boeing B-17 "Flying Fortress" is a World War II bomber used primarily in Europe. B-17s from the Eighth Air Force participated in countless missions from bases in England. These missions often lasted for more than eight hours and struck at targets deep within enemy territory. Because of their long-range capability, formations of B-17s often flew into battle with no fighter escort, relying on their own defensive capabilities to insure a successful mission.

During the War, B-17s were among the most modern aircraft in the U.S. inventory. However, the advent of the jet age and advances in technology made the Flying Fortress obsolete soon after the conclusion of the War. In the years following World War II, most B-17s were cut up for scrap, used in Air Force research or sold on the surplus market.

In 1934, the Boeing Aircraft Company of Seattle, Washington, began construction of a four-engine heavy bomber. Known as Boeing model 299, it first took flight on July 28, 1935. The government ordered production of 13 of these aircraft, now designated the Y1B-17. Delivery of these first production models was between January 11 and August 4, 1937.

The B-17 received the name "Flying Fortress" from a Seattle reporter who commented on its defensive firepower. The B-17 underwent a number of improvements over its 10-year production span. Models ranged from the YB-17 to the B-17-G model. Throughout the War, the B-17 was refined and improved as battle experience showed the Boeing designers where improvements could be made. The final B-17 production model, the B-17G, was produced in larger quantities (8,680) than any previous model and is considered the definitive "Flying Fort." With its 13 .50-caliber machine guns -- chin, top, ball and tail turrets; waist and cheek guns -- the B-17G was indeed an airplane that earned the respect of its combatants. In addition, air crews liked the B-17 for its ability to withstand heavy combat damage and still return its crew safely home.

Between 1935 and May of 1945, 12,732 B-17s were produced. Of these aircraft, 4,735 were lost during combat missions.

Today, fewer than 100 B-17 airframes exist and fewer still are in airworthy condition. At one time, more than 1,000 B-17s could be assembled for mass combat missions, less than 15 of Boeing's famous bombers can still take to the air.