

**History of the
Experimental Aircraft Association's
Boeing B-17G Flying Fortress
"Aluminum Overcast"**

By: Mr. Robin A. Mitchell
EAA #282454
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Reference: Boeing B-17G Flying Fortress
USAAF Serial No. 44-85740
Civil Registration No. N(L)5017N
Current Owner - The Experimental Aircraft Association
Oshkosh, Wisconsin
Aircraft Name - "Aluminum Overcast"
Aircraft Status - Airworthy

United States Army Air Force #44-85740 is a World War II B-17G Flying Fortress, 4-engine bomber designed by the Boeing Airplane Company of Seattle, Washington, and built, under license in 1944, by the Vega Aircraft Company (now Lockheed) as B-17G-105-VE.

The B-17G is an eighth-generation variant of the original Boeing Model 299 prototype first flown on July 28, 1935 in response to a military solicitation for a new "multi-engine" long range bomber. Though the B-17 got off to a rocky start when the prototype crashed killing test pilot, Leslie Tower, it would subsequently become the backbone of the Eighth Air Force and principal element of success for the daylight precision bombing of German occupied Europe.

#44-85740 was delivered to the military on May 18, 1945, too late to see combat duty in World War II. She was sent to the Modification Center in Louisville, Kentucky prior to assignment to the Air Transport Command. Sent and placed into storage at the Syracuse, New York Storage Depot on June 24, 1945, she became one of some 228 new and 33 war-weary Fortresses, unarmed and unpainted, stored on runway 624. On October 12, 1945, #44-85740 was declared "surplus" and transferred to the Altus, Oklahoma Storage Depot on November 7, 1945.

On June 17, 1947, Mr. Pat Brandenburg, under the name of Metal Products Company of Amarillo, Texas, purchased #44-85740 from the War Assets Administration's Aircraft Disposal Division, for \$750.00. At that time, the CAA (Civil Aeronautics Administration) regional offices could assign civilian registration numbers to individual aircraft. Errors and misunderstandings of an applicants aircraft data sometimes resulted in an incorrect number being assigned to an aircraft. Such was the case with #44-85740. She was issued a standard number, NC5017N, which carried no operating restrictions. The error stood only a short time as the aircraft was sold the following month.

On July 10, 1947, Universal Aviation Company of Tulsa, Oklahoma purchased #44-85740 for \$1,800.00 and applied for registration on July 23rd. Before receiving the corrected registration number, NL5017N, on August 11, 1947, the aircraft was again sold, on August 2, 1947, to Mr. Charles T. Winters of Miami, Florida. [The "L" in the corrected registration number stood for "Limited" in that the aircraft with such designation was restricted to cargo only. Use of the aircraft for paying passengers was not permitted.] Although Winters would shortly sell #44-85740, he subsequently purchased two (2) other B-17s for use in an unsuccessful attempt to start an island-hopping freight line in the Caribbean. Winters later sold those Fortresses to the Jewish underground organization, Haganah, in 1948. The aircraft were subsequently smuggled out of the United States to Israel for use in the 1948/49 Palestine War. In 1949, the FBI's investigation of the Haganah's Miami activities, led to the arrest, conviction and 18-month imprisonment of Winters, the only associate of the U.S. underground to go to prison.

The actual intended use of #44-85740 by her first two owners, Metal Products and Universal Aviation, is unknown.

On August 16, 1947, Mr. Joe A. Lopez, Jr. a native of Puerto Rico and owner/founder of the Vero Beach Export and Import Company in Vero Beach, Florida, purchased #44-85740 through his lawyer/representative, Marshall Mitchell, for \$3,500.00. According to Mr. Thomas W. Cobb, former pilot and flight instructor for Lopez (Cobb taught Lopez to fly in 1946), the Fortress was delivered to Melbourne, Florida from Oklahoma by a ferry crew. Application for registration was made on September 15, 1947 and issued, NL5017N, on September 23, 1947.

On October 1, 1947, Cobb delivered NL5017N to the "Eighth Air Depot" for cargo conversion. The "Eighth Air Depot" was a post-war modification and service center located at the former Army Air Corps Basic Flying School facility, Hendricks Field, Sebring, Florida. [Hendricks Field was activated on June 23, 1941, designated by that name January 14, 1942, deactivated December 31, 1945, surplused January 25, 1946 and turned over to the City of Sebring, February 26, 1947. Hendricks Field became the first Combat Crew Training School for the B-17 Flying Fortress with the first Fort arriving at 11:55PM, January 29, 1942. Hundreds of crews were trained and dispatched to the European and North African Theaters of Operation from Hendricks Field during which time, the flying safety record of the base ranked among the best in the AAF.]

NL5017N's cargo conversions included the addition of a 3/8" thick Micarta cargo floor extending from the rear bomb bay bulkhead to the tail, removal of the radio room bulkhead and the addition of tie-down straps at a cost of some \$11,000.00. The total cost of this new bomber-turned-cargo plane, equipped with Tokyo tanks for extended range, now stood at \$14,500.00. The total operational time on the airframe stood at just 37 hours!

Lopez operated a cattle ranch west of Melbourne, Florida and began his Fortress operations in December, 1947, hauling 16,000 lbs. of dressed beef, fresh from his slaughter house in Malabar, Florida, to either his native San Juan or Ponce, Puerto Rico. The Fortress would return to Vero Beach, Florida, usually the next day, with a cargo of green, undressed cow hides from the island's few cattle ranchers. Cobb related that the first flight to San Juan left Vero Beach about midnight. On the way, all four (4) voltage regulators went out, apparently due to her time of inactivity, causing the batteries to boil and spill acid into the belly of the plane. With electrical systems almost out, Cobb made an uneventful landing in San Juan. After the cargo of meat was removed, the floor was lifted and baking soda spread liberally inside the hull. Following a thorough flushing with water, a close inspection yielded no structural damage to the frame or the skin. New regulators were obtained in San Juan the following morning and after installation, the Fortress returned to Florida without further incident.

According to Cobb, the Fortress performed extremely well, suffering only the normal routines of maintenance. Her last known operational duties during 1948/49 with Lopez, are believed to have included the shipment of baby chickens from Miami, Florida to South America. Lopez died in a boating accident in Vero Beach in 1954.

On June 27, 1949, Aero Service Corporation of Philadelphia, Pennsylvania purchased NL5017N from Lopez for \$28,000.00. She was converted into a high altitude camera platform and survey aircraft at Aero's Mercer County Airport maintenance facility in West Trenton, New Jersey. One of several owned by Aero Service, the Fortress proved to be well suited to its new task because of its high altitude steadiness, range and reliability. Following her conversions in June/July 1949, she operated as a photomapping aircraft over much of Arabia until May, 1953. [In 1949, the CAA deleted the need to include the aircraft classification in the registration number, thus, on June 29, 1949 #44-85740 received civil registration N5017N.]

In June, 1953, N5017N returned to Mercer County Airport for extensive maintenance and overhaul. During the next five weeks, wings were removed, control surfaces replaced and four new fuel tanks installed. In addition, she received a complete rewiring, a new Bendix Pioneer PB-10 auto-pilot, new paint inside and out, and four overhauled engines and propellers. She also had all of her instruments, hydraulic systems and landing gear completely rebuilt, and, had new oxygen systems and radio communications equipment installed. She was returned to active foreign service in September, 1953.

In 1954, while in Libya, she performed aerial mapping duties and completed the Shoran controlled magnetometer work begun in 1953. From Libya, she flew to Thailand for several months of Far East service before returning again to Libya. She then flew to Italy and later, to Egypt.

During the next three years, she spent considerable time in Libya, Arabia and Lebanon. While in Arabia, the Fortress flew forty-four consecutive double-shift days during September and October, 1956, photomapping more than 150,000 square miles. In 1957, she obtained 64,000 square miles of high altitude photography in one month before she was again overhauled in Lebanon and returned to service.

During the twelve years the Fortress was owned by Aero Service, N5017N flew almost one million miles, sufficient to circle the globe more than thirty-five times, much of it over the Eastern World above 30,000 feet. Much of Saudi Arabia was mapped using this aircraft. In addition, she provided Shoran controlled and visual photography of Iran, Laos, Libya, Viet Nam, Cambodia, Egypt and Jordan.

Aero Service Corporation sold #44-85740 on August 10, 1962, due to an economic cutback, to Chris D. Stoltzfus & Associates of Coatesville, Pennsylvania. Flown and placed into storage at Coatesville Airport, the Fortress was never modified for service as an aerial sprayer as was intended, and spent the next several years inactive with shrouded engines and covered glass. When Coatesville Airport expanded, becoming Chester County Aviation, Inc., Stoltzfus was forced to move the Fortress to his private air strip across the road. Although Stoltzfus had no formal instruction or flight time in a B-17, he was a gifted pilot. According to his wife, he simply climbed in, fired up and took off. He circled the field a set her down on his 3,000 foot grass strip, commenting that the Fortress was easier to fly than a DC-3. Stoltzfus had attempted to move the Fortress once before but was forced to remain at Coatesville for repairs to a blown supercharger.

Chris D. Stoltzfus & Associates sold the Fortress on December 16, 1966 to Hugh Wheelless, Sr. of Dothan Rental and Leasing Company, Inc. (later, February 1980, Dothan Aviation Corporation, Inc.) of Dothan, Alabama. Modified here for aerial spraying duties with the addition of a hopper and chemical spraying system, she was used for a variety of applications including agriculture/pest control programs, forest dusting and forest fire fighting throughout the Southeastern United States.

In 1978, Dothan Aviation Corporation, Inc. went out of business and the Fortress was again sold on November 20, 1978 to Mr. William E. Harrison, Jr., President of Condor Aviation of Tulsa, Oklahoma for \$75,000.00. Total airframe time now stood at 6,051 hours. On May 21, 1979 N5017N was acquired by a corporation of businessmen headed by Harrison known as "B-17s Around The World" and based in Tulsa, Oklahoma. Their intent was to restore and maintain the Fortress as an airworthy, flying display of our aviation heritage. However, due to the enormous financial responsibilities associated with such an undertaking, the Corporation donated #44-85740 to the Experimental Aircraft Association on March 31, 1981 with the proviso that the Association continue the restoration program as time, money and availability of parts permitted, and, to maintain the aircraft in an airworthy condition for as long as was possible.

Since the EAA acquired the B-17, it has maintained its airworthy "Limited" classification and has continued the restoration program. Today, the Fortress, known as "Aluminum Overcast", appears at various airshows across the United States and is on static and aerial display. From a total production of 12,731, N5017N is one of only thirty-five or so B-17s known to remain in existence worldwide. She is one of only twelve currently remaining in an airworthy condition.

The B-17 Flying Fortress is representative of one of the finest aircraft ever built. Her military and civilian capability, her durability and adaptability to the countless tasks she has undertaken, is evidenced by the Fortresses which remain today. The airworthy Fortresses are a tribute to Boeing and the thousands of men and women who designed, built, flew and maintained her. They are also a tribute to the time, effort and dedication of those men and women, who today, salvage, restore, maintain and preserve the mighty B-17 Flying Fortress for future generations.

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Sources and Acknowledgements:

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City of Amarillo, Texas - Chamber of Commerce, Sara Fyfe
Public Library, R. Groman
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Mr. John L. Brady, V.P. Public Relations, Joseph E. Seagram & Sons, Inc.
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Mr. John C. Burton, Director, Public Relations, Experimental Aircraft Association
Oshkosh, Wisconsin
Mr. Thomas W. Cobb, former pilot, Vero Beach Export & Import Company
Vero Beach, Florida
Mr. George Dumont, former employee, Eighth Air Depot
Sebring, Florida
Mr. Virgil Fenn, former pilot, Dothan Aviation Corporation, Inc.
Dothan, Alabama
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Vero Beach Chamber of Commerce - Vero Beach, Florida