June 2024

Corey J Beitler's

"Distelfink Airlines"

An Online Aviation Newsletter

"Doc" Visits Allentown

Airbus A321LR

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Ertl 1/72 Scale 1928 Ford 4-AT-15 Tri-Motor "Floyd Bennett"

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The Boeing B-29 Superfortress "Doc" on approach to land at the Lehigh Valley International Airport following a warbird experience flight on May 21. The initial visit to Allentown on May 9-12 drew such a positive response from Allentown and the surrounding Lehigh Valley communities that "Doc" returned on May 20-21 to offer additional warbird experience flights to satisfy demand.

FROM THE EDITOR'S DESK

"Doc", Tu-4, Antarctic Expedition Aircraft, E-2D Hawkeye, WW1 Airplane Plaques

Greetings Everyone:

Welcome to the June edition of "Distelfink Airlines". The summer is here, and with it comes the heart of the airshow season in the Mid-Atlantic and Northeast regions of the United States. The Mid-Atlantic Air Museum's World War II Weekend is just around the corner, and the Golden Age Air Museum is having a fly-in event in just a few weeks as well. Looking a bit farther out, "Distelfink Airlines" will be covering the Greater Binghamton Airshow in New York featuring the U.S. Navy Blue Angels in July.

The featured content for this edition covers a visit by the Boeing B-29 Superfortress "Doc", operated by the nonprofit organization "Doc's Friends", to Allentown, Pennsylvania. The restored World War II bomber made a stop at the Lehigh Valley International Airport as part of its nationwide Doc: History Restored Tour. Allentown and Lehigh Valley residents got to see "Doc" on the ground, explore the cockpit, and take a ride in it as part of a warbird experience flight. "Doc" got a very positive reception during the Allentown tour stop, with a steady stream of people coming to the Lehigh Valley International Airport to visit the airplane and ride slots selling out for the weekend. "Doc" returned to Allentown a week later to fly additional ride flights because of the positive response from the Allentown area. In addition to the tours and rides, the Doc's Friends merchandise team sold out of almost all their merchandise during the Allentown tour stop. It was great to see so many people from the local communities support "Doc" and its mission and have an interest in World War II and aviation history. The feature explores the development of the B-29 Superfortress, the restoration of "Doc", and the Allentown tour stop. Plenty of pictures are included of "Doc" as well. I want to thank Doc's Friends for visiting Allentown with their beautiful B-29 and the Lehigh Valley International Airport for hosting the tour stop. Thanks as well to my colleague Nick Chismar for taking my picture with "Doc".

"One Last Thing" has a unique classic model from Corgi related to the B-29 Superfortress, a Tupolev Tu-4 heavy bomber. How does the Tu-4 relate to the B-29? I will let you check that section out and read it for yourselves.

Two aircraft that were part of the Byrd Antarctic Expedition in the late 1920s and early 1930s are featured in this edition of the newsletter. The "Aircraft Of The National Air and Space Museum" section has the Fairchild FC-2W2 "Stars and Stripes" used by Byrd as a utility aircraft during his expedition. The "Aircraft Models" section has a neat replica Ertl made of the Ford 4-AT-15 Tri-Motor Byrd used to fly over the South Pole during his expedition. This model was found recently at a local yard sale for only $5.00.

"Aircraft of Special Interest" has a U.S. Navy Northrop Grumman E-2D Hawkeye for this edition. This Hawkeye showed up at the Lehigh Valley International Airport for some pattern work during "Doc's" visit and I was able to catch one of the approaches.

Finally, "Aviation Memorabilia" has some World War I metal aircraft plaques my grandfather had hanging in his garage for years. These plaques aren't especially valuable as they were made by the thousands, but they were enjoyed by many aviation enthusiasts in bedrooms and garages during the 1970s, including my grandfather.

Thank you again for supporting my aviation photojournalism efforts and "Distelfink Airlines" this year. Please feel free to share the newsletter with whoever you wish and invite them to join the newsletter's official social media pages listed below.

Regards,
-Corey

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What's Inside:

Airbus A321LR

A SAS Airbus A321LR on approach to the Washington Dulles International Airport in Virginia after a flight from Copenhagen, Denmark. This Airbus A321LR is one of three in the SAS mainline fleet, which consists entirely of Airbus narrow and wide-body aircraft.

The Airbus A321LR is a narrow-body, twin-engine, commercial airliner designed and manufactured by Airbus. The Airbus A321LR is a variant of the Airbus A321neo (an acronym for "new engine option") developed from the Airbus A321 and A320neo family of aircraft. The A321neo is the longest-stretched fuselage variant of the A320 series and the newest variant of the A321. The A321neo typically seats 180 to 220 passengers in a two-class layout and has a range of 3,000 to 4,000 nautical miles. The A321neo cruises at 518 miles per hour and can fly at a ceiling of 39,500 feet. The A321neo family of aircraft includes the A321neo, the A321LR, and the future A321XLR.

The original Airbus A321 (now A321ceo for "current engine option) was introduced into service in 1994 with the German airline Lufthansa. In 2010, after the A321 had proved to be a success, Airbus announced the A321neo as an improvement and replacement for the A321. Targets for improvement with the A321neo were increased range, payload capacity, and fuel efficiency per passenger. The A321neo was fitted with sharklets on the wings as standard and powered by new CFM International LEAP 1A or Pratt & Whitney PW1100G-JM turbofan engines. The timeline from design and development to the first flight took only six years. The first A321neo entered service in 2017. Quality control and development problems with the PW1100G-JM engine delayed the aircraft's entry into service for operators who selected the Pratt & Whitney engine option. The A321LR, a long-range variant fitted with extra fuel tanks, entered service a year later in 2018. A variant that will boast an even greater operational range of 4,700 nautical miles, the A321XLR, is expected to enter operational service in late 2024. As of April 2024, over 6,300 A321neo aircraft have been ordered by 85 customers, of which 1,339 have been delivered.

The Airbus A321LR pictured here is operated by Scandinavian Airlines, more commonly known and styled as SAS. SAS is the flag carrier airline of Denmark, Norway, and Sweden. The airline was founded in 1946 by merging three separate airlines and has been described as an icon of Danish-Norwegian-Swedish cooperation. SAS and its subsidiaries, SAS Connect and SAS Link, operate 180 aircraft and fly to 125 destinations worldwide. The airline's primary hub is at the Copenhagen-Kastrup Airport. This Airbus A321LR is one of three operated by SAS, whose mainline fleet also includes Airbus A319-100, A320-200, A320neo, A330-300, and A350-900 aircraft.


SAS
SE-DMO


SAS
SE-DMO

Homco/Sexton World War I Aircraft Wall Plaques

This set of four World War I fighter aircraft metal wall plaques was sold by Homco/ Sexton in the mid-1970s. The four planes depicted in the set include a Fokker Dr. I Triplane, a Fokker D.VII, a Nieuport 11/17, and a Spad X.III. These plaques were sold as wall décor pieces for a child's bedroom or garage. This set of plaques hung on the cabinets of my grandfather's garage, where he enjoyed them for several years.

During the 1970s, wall plaques, or hangings, became a popular form of wall décor in many American homes. These wall plaques were made of metal or wood and usually represented a specific theme or subject matter. To create a themed décor display on a wall in a home, these wall plaques were usually offered in sets of two or more. Popular themes for wall plaques included patriotic, historical, animals, sports, and transportation. Today, some of these wall plaques are collectible due to the quality of their castings, paint detail, and subject matter.

Home Interior and Gifts (Homco) was a direct sales company specializing in home décor accessories and gifts. Founded in 1957, the company sold its products through direct sales representatives at home parties. At the peak of its business, over 35,000 sales representatives marketed and sold Homco's products through these parties. After the home party sales model collapsed in the 1990s, Homco's days were numbered. The company went defunct and filed for bankruptcy in 2008.

Homco partnered with several décor manufacturers to offer a variety of products. One of the companies Homco partnered with was Sexton Metalcraft Inc. Sexton manufactured wall plaque sets cast in metal. Homco sold several of Sexton's wall plaque sets through its direct sales network, including this World War I fighter aircraft set. The set included metal wall plaques of a Nieuport 11/17, a Spad X.III, a Fokker Dr. I Triplane, and a Fokker D.VII, and was sold by Homco in 1975 and 1976. Many of these sets found their way onto the walls of children's bedrooms, as well as garages and basements. Sexton also sold and marketed these wall plaques under their name. As a result, these wall plaques are stamped with either a Homco or Sexton copyright but are essentially the same item. These wall plaques were made in large numbers and are still commonly found at flea markets, antique shops, and through online auction listings. Pricing varies based on condition, but even the best examples sell for reasonable prices. Even today, these World War I fighter aircraft wall plaques make a colorful addition to the wall of a garage or bedroom of an aviation enthusiast, young or old.

This collection of Homco/Sexton World War I airplane wall plaques belonged to my grandfather. He had them hanging on the cabinets in his garage. The minor paint loss adds to the patina of these old wall plaques and shows how much he loved and cherished them over the many years he owned them.

The two French fighter aircraft are a Nieuport 11/17 and a Spad X.III. The French Nieuport has a well-known production error as the roundel is sculpted into the mold but not painted, unlike the markings on the German aircraft plaques. The plaques are well-sculpted and are decent representations of the actual aircraft.

The mold used to make the red Fokker D.VII plaque was accidentally destroyed during manufacturing. As a result, only a limited number of these plaques were made, and this one is very hard to find in the secondary market. Usually, when found on the secondary market, the set does not include the D.VII plaque.

Ertl 1/72 Scale 1928 Ford 4-AT-15 Tri-Motor "Floyd Bennett"

Ertl made this excellent 1/72 scale 1928 Ford 4-AT-15 Tri-Motor "Floyd Bennett" die-cast mode as part of its "Prestige Series" of model airplanes in 2002. The model is a replica of the Ford Tri-Motor used by Lt. Commander Richard E. Byrd to fly over the South Pole during his 1928-29 Antarctic Expedition. The model has excellent details accurate to the original aircraft, including simulated metal corrugated surfaces, skis fitted to the landing gear, a three-bladed propeller for the nose engine, and accurate colors and markings.

The Ford Tri-Motor is a three-engine American commercial airliner and transport aircraft. Production started in 1925 by the companies of Henry Ford and ended in 1933 after 199 aircraft had been built. With its enclosed cockpit and passenger cabin and three-engine design for improved safety and reliability, the Ford Tri-Motor revolutionized commercial air travel in the late 1920s and early 1930s.

The development of the Tri-Motor began in the early 1920s when Henry Ford and other investors bought stakes in the Stout Metal Aircraft Company. The company was designing an all-metal, single-engine commercial aircraft. By 1925, Henry Ford had bought out all the other investors and Stout's aircraft designs. The single-engine Stout monoplane was turned into a tri-motor design. Although the prototype flew poorly, refinements continued to be made to the aircraft, and the definitive models, the 4-AT and the 5-AT emerged.

The 4-AT carried a crew of three and eight to nine passengers and was powered by three air-cooled Wright radial engines. The 5-AT was an improved variant with more powerful Pratt & Whitney air-cooled radial engines and increased passenger capacity. All models of the Tri-Motor had surfaces covered in corrugated aluminum and a rudder and elevators actuated by metal cables strung along the sides of the aircraft. The engine gauges were mounted on the engines themselves, with the pilot looking out the window to read them.

Similar to Ford automobiles of the time, the Tri-Motors were reliable, rugged, and inexpensive to operate. Servicing the engines could be completed in the field using simple scaffolding. The landing gear wheels were exchangeable with skis or floats to fly into remote areas, and the passenger cabin seats were removable, allowing the Ford Tri-Motor to operate as a cargo aircraft.

The impact of the Tri-Motor on commercial aviation was immediate. Although slow, with a top speed of less than 130 miles per hour, the Tri-Motor represented a major advancement over other commercial aircraft of the era. During its heyday, over 100 airlines worldwide flew at least one example of the Tri-Motor in either commercial airline or air cargo service.

The Tri-Motor's place at the top of commercial aviation was brief. By 1933, much faster and more modern commercial aircraft appeared. After they were retired from mainline airline service, Tri-Motors found use as second and third-tier airliners and cargo transports. While Henry Ford never profited from the Tri-Motor, his name lent credibility to the aircraft and the commercial aviation industry in its infancy. Ford helped create much of the infrastructure for modern commercial aviation, including paved runways, radio beacons, hangars, and passenger terminals.

Ertl is a famous brand in the die-cast toy and collectible industry, with the company being well-known for its detailed die-cast replicas of tractors and agricultural equipment. Historically, the company has also produced die-cast replicas of muscle cars, race cars, trucks, and aircraft. Some of their vehicle replicas also functioned as banks. In the early 2000s, Ertl produced detailed die-cast replicas of the Ford 4-AT Tri-Motor and Douglas DC -3/C-47 as part of a "Prestige Series" of model airplanes.

This Ertl Ford 4-AT Tri-Motor die-cast model is a replica of the 1928 Ford 4-AT-15 that was used by Lt. Commander (later Admiral) Richard E. Byrd during his 1928 -29 Antarctic Expedition. Nicknamed the *Floyd Bennett* by Byrd in honor of his former chief pilot who had passed away just before the Antarctic expedition, this Tri-Motor was used by Byrd and his copilot, navigator, and two others to make the first geographic flight over the South Pole on November 29, 1929. For the Antarctic expedition, the Tri-Motor was modified by installing a more powerful engine in the nose with a three-bladed propeller, an extra fuel tank, and fitting skis to the landing gear. Today, this Tri-Motor survives and is on display in the Henry Ford Museum in Dearborn, Michigan.

Ertl's model of Lt. Commander Byrd's Ford Tri-Motor is a decent model of this historic aircraft. The model has the correct color scheme and markings for the *Floyd Bennett*, including the bright canary yellow top wings, a safety feature so the airplane would be easy to find if it was forced down over the Antarctic terrain. Ertl's model also has simulated corrugated metal surfaces, moving propellers, an opening passenger cabin door, and landing gear fitted with skis. The model also includes a sturdy metal display stand to display the Tri-Motor on a desk or bookshelf. The model's box has a colorful illustration of the aircraft, with the backside having aircraft specifications and a short description of Lt. Commander Byrd's incredible expedition.

Ertl's 1/72 scale Ford Tri-Motor model is solidly built, with almost all major parts of the model being die-cast metal. The display stand is also made of die-cast metal and does an excellent job supporting the model for display on a table, bookshelf, or desk. Another excellent feature of this model is the box art, something Ertl was famous for with their models in the early 2000s. On the front of the box, Ertl printed a colorful illustration of the Tri-Motor in flight. The back of the box has a history of the airplane, its specifications, and Byrd's Antarctic expedition.

"Doc" Visits Allentown

The restored Boeing B-29 Superfortress is one of only two airworthy examples of the heavy bomber that played a pivotal role in ending World War II.

The restored Boeing B-29 Superfortress "Doc" flies over the Lehigh Valley International Airport in Allentown, Pennsylvania, during one of the scheduled warbird experience flights. The Doc: History Restored Tour visited the airport twice in May with "Doc", offering warbird experience flights as well as ground and cockpit tours of the bomber.

The editor of this newsletter poses with "Doc" during its visit to Allentown as part of the Doc: History Restored Tour. (Photo Courtesy of Nick Chismar)

Ideally located in the center of the Lehigh Valley, the Lehigh Valley International Airport serves the travel needs of residents of the surrounding communities and the major population centers of Allentown, Bethlehem, and Easton by offering flights to 15 destinations nationwide through four airline partners. Three cargo airlines also operate flights to and from the airport. With its two asphalt runways, ground facilities, a modern terminal building, and ramp space for passenger and cargo aircraft, the Lehigh Valley International Airport can handle any type of flight operations, including commercial, cargo, charter, corporate, military, medical, and general aviation.

Recently, the Lehigh Valley International Airport welcomed an unusual visiting aircraft to its airspace, runways, and ramp. The restored Boeing B-29 Superfortress *Doc* operated by the non-profit organization "Doc's Friends" visited Allentown, Pennsylvania, as part of its nationwide *Doc: History Restored Tour*. The tour stop allowed residents of Allentown and the surrounding Lehigh Valley region the unique opportunity to see one of only two airworthy examples of the B-29 Superfortress World War II heavy bomber up close, tour the cockpit, and even fly on *Doc* during a warbird experience flight.

The Boeing B-29 Superfortress is an American four-engine heavy bomber. With a wingspan of just over 141 feet and a length of 99 feet, the B-29 was the largest bomber to see service during World War II and also saw combat in the Korean War during the early 1950s. Designed for high-altitude bombing, the B-29 had a top speed of 357 miles per hour, could carry 20,000 pounds of ordnance, fly as high as 31,000 feet, and had a range of over 5,300 miles. In addition to high-altitude bombing, the B-29 was used for dropping incendiary bombs on cities and industrial areas and naval mines to blockade harbors and ports. The B-29 Superfortress is most famous for its role in dropping the atomic bombs on Hiroshima and Nagasaki, which helped convince the Japanese government to surrender and bring an end to World War II. The B-29 Superfortress is the only aircraft ever to drop a nuclear weapon in combat.

The B-29 Superfortress was designed with state-of-the-art technology for its time, including a pressurized cabin to allow operations from high altitudes, dual-wheeled tricycle landing gear to support its size and weight, and an analog computer-controlled central fire control system that allowed a fire control officer and two gunners to direct defensive machine gun turrets at four locations on the aircraft. Another advanced feature of the B-29 was its Norden bombsight, which combined optics, a mechanical computer, and an autopilot to identify a target and fly the airplane to it while compensating for wind and other weather effects. The aerodynamic shape of the B-29's fuselage also allowed it to fly faster, farther, and higher than previous bombers.

The Boeing B-29 Superfortress flew for the first time on September 24, 1942. An advanced design with challenging production and operational requirements, the B-29 proved complex and expensive to build, and the aircraft became subject to many delays and setbacks as technical issues were discovered and solved. Boeing and its subcontractors incurred many cost overruns as they struggled to get the B-29 into service. Many B-29s were sent straight from the production line to repair depots for modifications. As a result, the B-29's entry into service fell behind schedule.

The major cause of the maintenance headaches was the B-29's engines. The Wright R-3350-23 Duplex Cyclone radial engine was plagued with reliability problems. Engine fires and catastrophic failures were common. Measures to fix the engine problems and get the B-29 into operational service included cuffs placed onto the propeller blades to divert more cooling air into the intake, increasing oil flow by installing baffles and rubber pushrod fittings to reduce oil loss, and replacing the uppermost valves of the engines as well as entire engines more frequently. Although these measures improved engine reliability, the engine issues were never fully solved until the B-29D/B-50 Superfortress was developed, which used the more powerful Pratt & Whitney R-4360 radial engine as its powerplant.

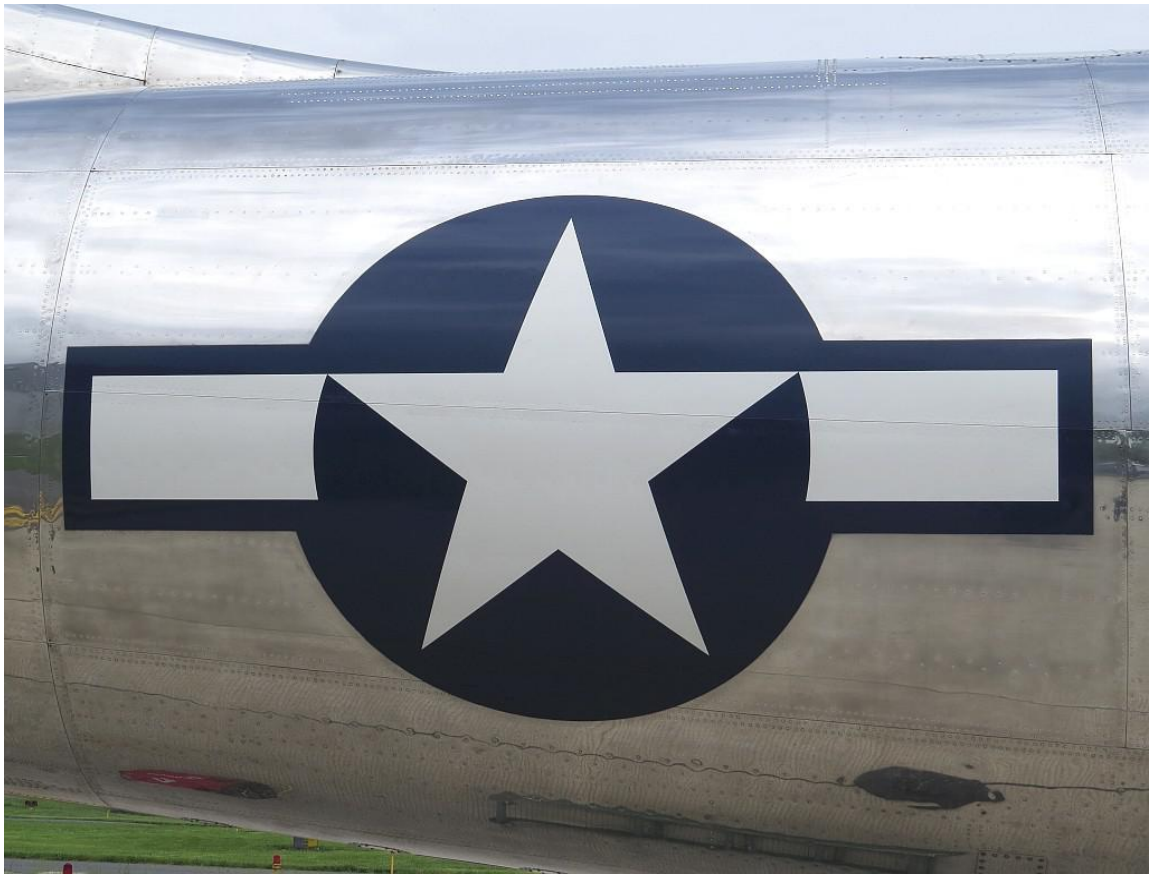
The restored Boeing B-29 Superfortress "Doc" arrives at the Lehigh Valley International Airport on May 6 for the Doc: History Restored Tour visit to Allentown, Pennsylvania. Operated by the nonprofit organization Doc's Friends, "Doc" is one of only two airworthy B-29 Superfortresses in the world today. The B-29 was World War II's largest bomber and was used exclusively in the Pacific theatre of operations by the U.S. Army Air Corps.

The B-29 Superfortress was a large aircraft and Boeing designed the landing gear to be dual-wheeled to support the bomber's weight and size on runways. The nose landing gear also featured dual wheels.

The B-29 Superfortress was powered by four Wright R-3350-23 Duplex Cyclone 18-cylinder radial engines producing 2,200 horsepower each. Unfortunately, this engine was plagued with problems, and it caused delays for the B-29 entering service. After World War II, the engine was redesigned, and its reliability improved. "Doc" uses hybrid R-3350 engines, combining two later versions of the engine that have more power, improved reliability, and plentiful spare parts sources.

Similar to other bombers of the era, the Boeing B-29 Superfortress had a tail gunner position. The tail guns can be seen in this photograph, behind the large tail section. To access this position, the tail gunner had to climb through an access tube. Also visible in this photograph is the B-29's tailskid. Since the fuselage was so long on the B-29 Superfortress, Boeing installed a deployable tailskid to prevent tail strikes.

One of the revolutionary advancements of the B-29 was its defensive armament. GE developed a remote firing system using analog computer technology for the gunners to control the B-29's gun turrets. The benefits of this system were that more than one turret could be brought to bear on a target at a time, and gunners could control multiple turrets. This Plexiglas window would have been used by the side gunners to view targets in central fire control.



The large U.S. insignia on the side of the fuselage of "Doc". "Doc" also carried this insignia on both the top side of the left wing, and the underside of the right wing. The current U.S. insignia has a thin red stripe in the center of the white bar. During World War II, red was omitted from the U.S. insignia to avoid any confusion in combat with the Japanese red roundel, also known as the Hinomaru.

The B-29 was officially introduced into service in May 1944. Initially, B-29s were based in China and used for raids against Japanese targets in Singapore and Thailand. Some early B-29s were stripped of their defensive armament and converted into bulk fuel tankers to keep Allied forces supplied with fuel in the China-Burma-India theatre of operations. Eventually, the B-29s moved to airfields on the Pacific islands of Guam, Saipan, and Tinian. From these new airfields, B-29s were used for large-scale bombing raids against the Japanese home islands and mainland Japan. B-29s were also deployed to drop mines to blockade major Japanese ports and prevent the movement of supplies by sea.

The most famous B-29s were those that were part of the Silverplate series. These B-29s were extensively modified to carry nuclear weapons. Some of the modifications made included enlarged bomb bays, fuel-injected engines, and reversible pitch propellers. In 1945, two of the Silverplate B-29s were used to drop nuclear weapons on Japan. On August 6, 1945, the B-29 *Enola Gay* dropped the atomic bomb *Little Boy* on Hiroshima. Three days later, on August 9, the B-29 *Bockscar* dropped the bomb *Fat Man* on Nagasaki. Although the use of these weapons remains controversial because of the loss of life and devastation they inflicted, they did persuade the Japanese government to surrender and end the war. Using the two atomic bombs also saved thousands, if not millions, of lives. Operation Downfall, the planned U.S. invasion of mainland Japan, would have cost the U.S. military an estimated 500,000 to over 1 million casualties. Japanese military and civilian losses were predicted to be even higher.

Production of the B-29 ended after World War II, and surplus examples were phased out and scrapped. Some B-29s remained in inventory and equipped the bomber squadrons of Strategic Air Command when the U.S. Air Force was formed in 1946. The B-29 was also used in specialized roles, such as air quality sampling during nuclear weapons testing, a mother ship to drop research and test aircraft at altitude, and weather reconnaissance.

The Boeing B-29 Superfortress "Doc" was built in 1944 at Boeing's Wichita plant as #44-69972. "Doc" never saw service in World War II but was used for radar calibration duties and later as a target tug. When "Doc" was assigned for radar calibration duty, the defensive gun turrets, except the tail guns, were removed from the aircraft. Doc's Friends chose to restore "Doc" as it appeared when it was operated as a radar calibration aircraft.

The B-29's final use in combat was during the 1950-53 Korean War. Initially used in daylight bombing raids, B-29s were quickly switched to night operations with the appearance of MiG-15 jet fighters in North Korean skies. Targets attacked in B-29 bombing raids included bridges, dams, and industrial centers. During the Korean War, the B-29 flew 20,000 sorties and dropped over 200,000 tons of ordnance. B-29s were also used during the Korean War in the reconnaissance role and for leaflet drops.

The final development of the B-29 Superfortress was the B-50 variant, initially designated the B-29D. The B-50 was fitted with more reliable and powerful Pratt & Whitney R-4360 radial engines. These new engines finally cured the various engine issues that had plagued the B-29 through most of its service life. Other improvements introduced on the B-50 variant included a strengthened structure, a taller tailfin, and a steerable nosewheel.

Introduced in 1948, the B-50 served in the U.S. Air Force for over 20 years. After its use as a strategic bomber ended, the B-50 was modified and used for other roles. Several were modified to become air refueling tankers for Tactical Air Command and others for air-sea search and rescue missions. The last B-50s in service were modified examples used as weather research aircraft for the Air Weather Service. These B-50s were retired in 1965 after extensive corrosion was found in their airframes.

Doc is one of only two airworthy B-29 Superfortresses in the world today. The B-29 was built in 1944 at Boeing's Wichita production facility and assigned military serial #44-69972. The B-29 was delivered to the U.S. Army Air Corps in March 1945 and arrived in the inventory too late to see any combat in World War II. In 1951, the B-29 was converted into a radar calibration aircraft. While operating in this role, the B-29 was assigned to the Griffiss Air Force Base in New York. When stationed at Griffiss, the B-29 flew as part of the 1st and 2nd Radar Calibration Squadrons. The squadrons named their aircraft after the characters of Disney's *Snow White and the Seven Dwarfs*, and B-29 #44-69972 became *Doc.*

The B-29 Superfortress had a streamlined fuselage. This streamlined fuselage, combined with four powerful engines, gave the B-29 excellent high-altitude performance. The shape of the fuselage was also necessary because the B-29 was pressurized, the first bomber to be equipped with this feature. Experience building the B-29 during World War II helped Boeing design several successful commercial aircraft in the post-war years.

A close up of "Doc's" nose art. When B-29 Superfortress #44-69972 served with the 1st and 2nd Radar Calibration Squadrons, the squadrons named their aircraft after the seven dwarfs characters in Disney's Snow White and the Seven Dwarfs. This nose art, badly faded, was still on the B-29 when Tom Mazzolini recovered it from the Mojave Desert in 1998.

"Doc" shines in the early morning sunshine while parked on the ramp at the Lehigh Valley International Airport during the Allentown tour stop. "Doc" was in poor shape when found by Tony Mazzolini and his restoration team. The B-29 had sat in the Mojave Desert for years as a target for testing weapons systems. During that time, parts of the aircraft had gone missing, and the elements had taken their toll on what was left of the airframe.

Restoring "Doc" and returning the B-29 to this condition was no easy task for the restoration team. Rare components and parts had to be located. Other components and parts on the B-29 were either rebuilt, or fabricated from scratch. The restoration of "Doc" took volunteers more than 450,000 hours during a period lasting over 15 years.

In 1955, *Doc* was modified again and became a TB-29, a B-29 used to tow targets. *Doc* was moved to the Yuma County Airport in Arizona for this role. After serving as a target tug for a year, *Doc* was retired by the U.S. Air Force in 1956. The B-29 was sent to the Naval Weapons Station China Lake for use as a target in testing missiles and other weapons systems. *Doc* sat for years in the Mojave Desert, rotting away until being discovered in 1987 by Tony Mazzolini.

Mazzolini worked for 12 years with numerous officials in the U.S. Government to take possession of *Doc* and develop a plan to rescue and restore the airplane. In 1998, Mazzolini and his team towed *Doc* out of the Mojave Desert. In 2000, *Doc* was transported to Wichita on flatbed trailers so the long restoration process could begin.

The restoration of *Doc* would take hundreds of volunteers over 450,000 hours during an over 15-year period. The restoration proceeded slowly and fell behind schedule as money was raised to complete the project, and rare components were sourced, fabricated, or rebuilt. In 2013, a group of Wichita aviation enthusiasts and business leaders formed Doc's Friends, a non-profit organization to manage the restoration project and see it through to completion.

During the restoration process, a decision was made to change *Doc's* engines. The initial versions of the Wright R-3350 engine used on the B-29 Superfortress were notoriously unreliable and prone to failure. Later versions of this engine had the initial design problems solved and had improved reliability. The improved versions of the R-3350 were used successfully on many commercial and military aircraft in the late 1940s and early 1950s.

Doc's restoration team decided on a hybrid engine to power the B-29. The engine is a cross between the Curtiss-Wright R-3350-95W and R-3350-26D radial engines. The rebuilding and combination of these two engines gives *Doc* the power of the R-3350-95W engine but the durability of the R-3350-26WD engine. These engines were chosen for *Doc* because the parts for them are still widely available.

"Doc" departs the Lehigh Valley International Airport for the start of a warbird experience flight. Doc's Friends did a fantastic job restoring the B-29 Superfortress and returning it to airworthy condition.

In 2015, the restoration team successfully completed startups and test runs on all four of *Doc's* engines. By May 2016, *Doc* was ready for and completed low-speed taxi tests as final preparations were made for the B-29's return to flight. These tests were the first time since 1956 that *Doc* moved under its own power and allowed the restoration team to be able to test the brakes and steering. After receiving an airworthiness certificate from the Federal Aviation Administration (FAA), *Doc* was ready for a test flight. *Doc's* first test flight occurred on July 11, 2016. The restoration team then spent the remainder of 2016 addressing minor technical issues with *Doc* and conducting additional test flights. In 2017, *Doc* flew its first airshow and tour season, attending eight airshows in four states, including the world-famous EAA Airventure in Oshkosh, Wisconsin.

After the restoration of *Doc* was completed, the next step for Doc's Friends was to build the B-29 a permanent home. The organization envisioned a large hangar where *Doc* would be safe from the weather, and the team could perform maintenance on the B-29 in the airshow and tour off-seasons. Doc's Friends also wanted to incorporate an education and visitors center into the hangar where the public could learn about *Doc* and the history of the B-29 Superfortress.

Doc's Friends broke ground on the 42,000-square-foot hangar in September 2017. Major construction on the new facility began the following March. Because the priority was to build a structure to protect the *Doc* from the elements when the aircraft was not on tour, the hangar was built first. The hangar was completed in November 2018. Work then proceeded to finish the Education and Visitors Center. In January 2019, the B-29 *Doc* Hangar, Education & Visitors Center was dedicated and officially opened to the public. Since its opening, the B-29 *Doc* Hangar, Education & Visitors Center has welcomed thousands of aviation and World War II history enthusiasts through its doors. The facility has also held several private events, including seven high school proms and a dance recital.

From the start of the restoration process, the goal was to restore "Doc" to flyable condition and tour with the aircraft nationwide while also making airshow appearances. Since 2017, "Doc" has visited dozens of cities and has made several airshow appearances throughout the United States. In this photo, "Doc" is turning for a final approach to the Lehigh Valley International Airport during the Allentown tour stop.

At every tour stop on the Doc: History Restored Tour, warbird flight experiences are available on "Doc". These warbird flight experiences offer aviation enthusiasts the chance to ride in "Doc" and experience what flying in a B-29 Superfortress would have been like during World War II. Some people who purchase a ride are doing so to honor a family member who flew on the B-29 and connect with the role they had during the war.

"Doc" shines while on approach for landing at the Lehigh Valley International Airport during last month's Allentown tour stop. By touring nationwide with the B-29 Superfortress, Doc's Friends reaches more people with the aircraft than they would just by visiting airshows. Another benefit of the tour stop events is that people visiting the aircraft get a much more intimate experience seeing "Doc" at these locations, being able to be up close and go inside the bomber.

"Doc" departs from the Lehigh Valley International Airport on one of its warbird experience flights during the Allentown tour stop. Throughout the tour stop visit, aviation enthusiasts set up at public access areas around the airport, hoping to catch some glimpses and pictures of this beautiful B-29 Superfortress in flight. During this takeoff, building clouds created a dynamic background.

The restored B-29 Superfortress "Doc" on approach to the Lehigh Valley International Airport following a warbird experience flight. Despite some inclement weather on Friday and Sunday of the tour stop visit, the flight crew of "Doc" was able to fly all the scheduled warbird experience flights, making the aviation enthusiasts who bought tickets for them very happy.

A large line of people wait to see the inside of the cockpit of the restored B-29 Superfortress "Doc" during its recent visit to Allentown as part of its nationwide Doc: History Restored Tour. The restored World War II bomber received an excellent reception during its Allentown stop, as thousands of people came out to the airport to tour the bomber and warbird experience flights were sold out throughout the visit.

Today, *Doc* continues to fly across the nation on its annual *Doc: History Restored Tour*. The tour takes place from early April to September and provides people the opportunity to learn about the B-29 and its history, see the aircraft up close, and take a ride in it as part of a warbird experience flight program. The total amount of the proceeds from the ride flights, ground tour fees, merchandise sales, and donations go towards *Doc's* operating and maintenance costs, which are substantial. It costs about $5,000 an hour to fly *Doc*, with significant costs being fuel, oil, maintenance, spare parts, and insurance.

Doc also makes appearances at various airshows throughout the United States as either a static display exhibit or by flying an airshow demonstration. The mission of Doc's Friends is to Honor, Connect, & Educate through the B-29 tour stops and airshow appearances. The organization strives to honor the men and women who sacrificed so much for the freedom of others, including those who designed, built, and flew the B-29 during and after World War II. Another mission of the organization is to connect people with the rich heritage of the B-29 and allow aviation enthusiasts to experience the thrill of a B-29 up close. Finally, the organization strives to educate today's and future generations on the contributions of the Greatest Generation during wartime.

The B-29 Superfortress *Doc* arrived at the Lehigh Valley International Airport for its Allentown tour stop on the afternoon of May 6 after a flight from the Newport News/Williamsburg Airport in Virginia. The visit to Allentown is one of 16 tour stops or airshow appearances *Doc* is making in 2024 as part of its *Doc: History Restored Tour*. The rumble of *Doc's* radial engines made the B-29's presence known as it entered the landing pattern at the airport. After arriving at the airport, the B-29 was parked, and the flight crew and tour team departed for some much-needed time off before *Doc's* tour days and ride flights at Allentown later in the week. Ground and cockpit tours were offered on Thursday, Friday, Saturday, and Sunday, and warbird experience flights were offered on Saturday and Sunday.

The B-29 Superfortress had two bomb bays. The two bomb bays combined could carry a maximum bomb load of 20,000 pounds. Unlike the rest of the aircraft, the bomb bays were not pressurized. in this photo above In this photo, replicas of a 500-pound bomb and a 250-pound bomb are hanging in one of "Doc's" bomb bays. The silver pipe you can see just a portion of in this photo is the access tube that the crew used to move between the front and rear of the aircraft.

The *Doc: History Restored Tour* received an excellent reception in Allentown. A steady stream of people of all ages lined up for ground and cockpit tours each day of the Allentown visit. Despite the rainy weather on Friday and again on Sunday, people still made the trip to the Lehigh Valley International Airport to visit the B-29 *Doc*. On Thursday morning, local media had the opportunity to tour *Doc* and interview the flight crew and tour team. The *Doc: History Restored Tour* merchandise team was also busy and by the end of the tour stop, had almost sold entirely out of T-shirts, patches, posters, and magnets.

For those who decided to tour *Doc* on the ground, the restored B-29 Superfotress offered plenty to see. From the outside of the aircraft, people could view *Doc's* four engines, massive tail, and tail gun turret. Popular stopping points for pictures were next to the nose of the B-29 with *Doc's* colorful dwarf nose art illustration or next to the massive propellers. *Doc's* flight crew and support team were also on hand to answer visitor questions.

Touring the inside of *Doc* allowed people to see some of the key parts of the B-29 Superfortress. The tour began with a look inside one of the two bomb bays on the B-29. Reproductions of each type of bomb that the B-29 could carry hang in the bomb bay, so that people can appreciate the different sizes of each type. The bomb bay also has a surprise in the form of a spare tire for *Doc's* main landing gear. *Doc's* flight crew explained the tire is carried in case one needs to be changed on location so they do not have to wait to have one shipped to them. A spare nosewheel tire is also carried for the same reason.

The tour of the inside of *Doc* ends behind the cockpit. From this spot, the pilot, copilot, flight engineer, navigator, and bombardier positions are viewable. The amount of instrumentation for each crew position is impressive. Also visible from the cockpit is the crew access tube, which was used for crew movement between the front and rear of the B-29. This tube, just wide enough for an average-sized man to climb through, was needed because the B-29 was pressurized, but the bomb bays were not.

The highlight of a ground tour of "Doc" is being able to climb inside the aircraft and see the cockpit. This view of the cockpit shows the pilot and copilot positions. The bombardier would have sat in front of the pilots in the nose of the aircraft. The Norden bombsight is visible in the nose between the pilot and copilot instrument panels.

During World War II, a flight engineer station was included on many larger bombers and transport aircraft. The flight engineer monitored the health of the aircraft's engines and other critical systems. The flight engineer did not fly the airplane but worked closely with the pilot and copilot to monitor and control aircraft systems. This is the flight engineer's station on "Doc".

"Doc" departs on a warbird experience flight at the Lehigh Valley International Airport on Tuesday, May 21. The response for ride flights was so positive during the Allentown stop that the Doc: History Restored Tour returned to Allentown for two extra days of warbird experience flights.

"Doc" returns to the Lehigh Valley International Airport following a warbird experience flight. These flights are expensive, but for many people who take the opportunity to fly on "Doc", it is the experience of a lifetime. The proceeds from these flights help Doc's Friends fund maintenance and operating expenses for "Doc", ensuring the B-29 remains airworthy for years to come.

In addition to the ground and cockpit tours, warbird experience flights were also available aboard *Doc* during its visit to Allentown. These rides last about 30 minutes, and people can buy different seat positions on the aircraft, which vary in pricing. These ride flights sold out soon after *Doc* arrived in Allentown. The response for rides was so positive from the Allentown tour stop that after an appearance at the First State Airshow at Dover Air Force Base on May 17-19, *Doc* returned to the Lehigh Valley International Airport on May 20-21 to offer additional warbird experience flights to the Allentown area. These ride flights also sold out, making the Allentown visit one of the most successful tour stops ever for the *Doc: History Restored Tour*.

In addition to touring the B-29 on the ground, many wanted to see *Doc* in flight. During the warbird experience flight days, people staked out spots at various businesses and public access areas around the Lehigh Valley International Airport to capture glimpses of *Doc* in flight or taking off and landing at the airport. Some of these people came from as far away as New Jersey to see *Doc* and appreciate aviation and World War II history.

The B-29 Superfortress was the largest aircraft to see service during World War II and one of the most advanced bombers in the world when it was introduced into service. Although it only served in the Pacific theatre, the B-29 played a pivotal role in ending World War II. The number of people who visited the Lehigh Valley International Airport for the *Doc: History Restored Tour* demonstrates that interest in aviation and World War II history remains high. For some visitors to *Doc*, it was connecting with a relative who served in World War II. For others, it was educating their children about our past. Many visitors were aviation enthusiasts, wanting to see a rare airworthy example of a B-29. Although interest levels in *Doc* varied for each visitor, one thing was clear, the response to the tour stop from the public in the Allentown and Lehigh Valley region shows that Doc's Friends will be plenty busy on the *Doc: History Restored Tour* for several years to come.

After two successful tour stops at the Lehigh Valley International Airport, the restored B-29 Superfortress "Doc" departs the Lehigh Valley International Airport on May 22. The next stop on the Doc: History Restored Tour was a visit to Cincinnati, followed by an appearance at an airshow in Indiana.

Fairchild FC-2W2 "Stars and Stripes"

The Fairchild FC-2W2 "Stars and Stripes" was used as an aerial photography and surveying platform during Lt. Commander Richard E. Byrd's expedition to Antarctica in 1929-30. After restoration work was completed on behalf of the National Air and Space Museum by the Cradle of Aviation Museum in New York, the FC-2W2 was on loan to the Virginia Aviation Museum, where it was on display until 2016. The "Stars and Stripes" has since been returned to the National Air and Space Museum and is now on display in the museum's Steven F. Udvar-Hazy Center.

In 1927, Lt. Commander (later Admiral) Richard E Byrd decided to mount an expedition to Antarctica for scientific research. More importantly, Byrd wanted to be the first person to fly over the South Pole. Two aircraft were selected for use during the expedition. A Ford Tri-Motor christened the *Floyd Bennett* was chosen to fly the historic flight over the South Pole. For the expedition's aerial photography and surveying missions, Byrd selected a Fairchild FC-2W2 cabin monoplane. This Fairchild FC-2W2 christened the *Stars and Stripes*, was a sturdy and practical addition to the expedition's aircraft fleet and provided a steady platform for thousands of aerial photographs taken of the unexplored terrain of Antarctica.

In 1922, Sherman Fairchild developed a practical aerial camera, the Fairchild K-3B. This camera became the U.S. Army's standard camera for aerial photography. Fairchild began seeking a civilian market for his camera and established the Fairchild Aerial Surveys Corporation for aerial photography and mapping services. Needing an aircraft for his aerial photography and survey work, Fairchild designed and built his own, the Fairchild Cabin Monoplane, FC-1. The FC-1 had an enclosed cockpit for the pilot and a cabin capable of carrying up to five passengers or photographers and their camera equipment. Windows in the front, sides, and even the floor, provided visibility for the photographers. An innovative feature of the FC-1 was its wings, which could fold back along the fuselage to allow for easier movement and storage of the aircraft on the ground. The FC-1 was followed by the FC-2, which had a more powerful Wright Whirlwind J-5 engine that produced 200 horsepower.

At the request of bush pilots, Fairchild redesigned the FC-2. The new aircraft, the FC-2W had a more powerful Pratt & Whitney Wasp engine that produced 400 horsepower and a wingspan six feet longer than the FC-2. These features increased the aircraft's speed, payload, and range. Although developed for aerial photography work, the FC-2W was an immediate hit with bush pilots and utility operators. The next model of Fairchild's monoplane, the FC-2W2, had a longer fuselage and larger ailerons. The longer fuselage offered increased payload capacity or seating for up to six passengers.

In 1928, Byrd's FC-2W2 was pulled directly off Fairchild's production line and modified for its Antarctic expedition work. The cabin was modified to carry a pilot, navigator, radio operator, fuel tanks, writing desk, cameras, and survival gear. Pittsburgh businessman and Fairchild investor George Hahn paid for the aircraft and its expensive camera equipment. The Fairchild FC-2W2 was delivered to Byrd in August 1928 with the name *Stars and Stripes*. After delivery, the aircraft was flown to Naval Air Station Hampton Roads in Virginia, where it was disassembled, crated, and loaded aboard a Norwegian whaling ship for transport to Antarctica.

The *Stars and Stripes* made its first flight in Antarctica on January 15, 1929. Throughout the flying seasons of 1929 and 1930, the *Stars and Stripes* flew aerial mapping and reconnaissance missions. When Byrd left in 1930, the expedition buried the *Stars and Stripes* in a snow hangar. When Byrd returned in 1933, the *Stars and* Stripes was located and returned to flying condition in 1934. By the time the expedition left in 1935, the *Stars and Stripes* had flown 187 hours in Antarctica.

The *Stars and Stripes* was sold to Alton Walker, who restored it and then barnstormed with it in the United States. Walker replaced the cabin fuel tanks with passenger seats and offered rides for 50 cents per person. He logged 304 hours in the aircraft and gave thousands of people rides before selling it to Fairchild Aerial Services (FAS) in Los Angeles. FAS used the aircraft for two aerial surveys in Guatemala and throughout the United States for 1,534 hours of flight time. In July 1942, the *Stars and Stripes* was retired and cannibalized for parts.

FAS sold the *Stars and Stripes* and two other Fairchild aircraft in 1954. In 1957, Fairchild Aircraft purchased the parts back, intending to restore the *Stars and Stripes*. After evaluating its condition, Fairchild decided not to pursue the restoration. The National Air and Space Museum offered to take the parts of the *Stars and Stripes* in 1961. From 1982 to 1989, the Cradle of Aviation Museum restored the *Stars and Stripes*, using as many original replacement parts as possible. Today, the *Stars and Stripes* is on display in the National Air and Space Museum's Steven F. Udvar-Hazy Center.

Northrop Grumman E-2D Advanced Hawkeye (2007)

The Northrop Grumman E-2D Advanced Hawkeye is an upgraded variant of the Grumman E-2 Hawkeye twin-turboprop, all-weather, carrier-capable tactical airborne early warning (AEW) aircraft designed and developed during the late 1950s and early 1960s for the U.S. Navy. The E-2 Hawkeye was the first aircraft developed specifically for the AEW mission as opposed to adapting an existing airframe for the role. The E-2's radar and radio communications suite has been upgraded in new variants due to advances in electronic integrated circuits and systems. The E-2D is the fourth major version of the Hawkeye and first flew in 2007. In production since 1960, the Hawkeye has had the longest production run of any carrier-based aircraft. This E-2D Advanced Hawkeye belongs to U.S. Navy Squadron VAW-121 "Blue Tails".

Northrop Grumman E-2D Advanced Hawkeye

Crew: 5 (Pilot, Copilot, Radar Officer (RO), Combat Information Center Officer (CICO), Aircraft Control Officer (ACO)

Length: 57 ft 8.75 in

Height: 18 ft 3.75 in

Wingspan: 80 ft 7 in

Wing Area: 700 sq ft

Powerplant: Allison T56-A-427A turboprops (x2)

Range: 1,462 nmi (ferry)

Cruise Speed: 295 mph

Maximum Speed: 400 mph

Empty/Maximum Takeoff Weights: 40,200 lb/57,500 lb

Service Ceiling: 34,700 ft

Eyes Of The Fleet

Mission

The E-2 Hawkeye's primary mission is to provide 24-hour airborne early warning and command and control capabilities for all aircraft-carrier battle groups in all weather conditions. Additional mission capabilities include controlling aircraft carrier fighter planes for air defense, controlling aircraft on strike missions, relaying radio communications, and controlling search and rescue missions for pilots or sailors lost at sea. The Hawkeye can also perform various electronic surveillance missions as directed and needed.

Radar

One of the distinguishing features of the E-2 Hawkeye is its 24-foot diameter rotating radar dome (rotodome) mounted above the fuselage. The Hawkeye is the only carrier-based aircraft to have one of these. The radar dome houses the primary antennas for the Hawkeye's radar and IFF (Identification Friend or Foe) systems. The E-2D uses electronic sensors and digital computer processing combined with its radar for early warning of enemy aircraft and anti-ship missile attacks and controlling the carrier's combat air patrol (CAP) fighters. It is believed the new AN/APY-9 radar installed on the improved E -2D Advanced Hawkeye can detect fighter-sized stealth aircraft by using advanced electronic scanning and high digital computing power via space/ time adaptive processing. This radar can see threats up to 270 nautical miles away.

Propellers

The early E-2 Hawkeyes had four-bladed propellers. In 2004, new eight-bladed propellers developed by Hamilton-Sundstrand were fitted to the E-2C variant, replacing the older four-blade units. The new eight-bladed propellers offered improved efficiency and reduced vibrations inside the aircraft. These new propellers were also easier to maintain, as individual blades can be removed for repairs instead of the entire prop and hub assembly. The propeller blades are constructed of carbon fiber with steel leading edge inserts and de-icing boots at the root of the blade. These eight-bladed propellers are installed on all new E-2D Hawkeyes.

Wings

One of the challenges in designing the Hawkeye was developing folding wings that prevented the wing panels from making contact with the radar dome mounted above the fuselage. A modified version of Grumman's Sto-Wing folding wing system was used on the Hawkeye. The wings fold back in line with the fuselage, giving the Hawkeye a much smaller footprint for storage on an aircraft carrier flight or hangar deck.

Powerplant

Since its introduction, the E-2 Hawkeye has been powered by the Allison/Rolls-Royce T56 turboprop engine. Updated versions of the T56 have been installed on new variants of the Hawkeye. The updated variants of the T56 offer improved fuel efficiency, reliability, and increased power. The E-2D variant uses the T56-A -427A version of this turboprop engine. For cost savings and quicker maintenance, the engines and the propellers are interchangeable and can be used on either side of the aircraft if one needs to be replaced. The unique sound of these engines has given the Hawkeye the nickname the "Hummer" in U.S. Navy service.

Cockpit

The E-2D variant of the Hawkeye has an improved avionics suite and an all-glass cockpit, reducing crew workload. On the E-2D, there are provisions on the cockpit that allow the copilot to reconfigure his main cockpit display and act as a "4th Tactical Operator". This feature allows the copilot to access acquired radar, IFF, and Link 16 data. On the E-2D, a probe can be fitted above the cockpit to allow for air-to-air refueling. A future upgrade to the Hawkeye's cockpit may include an automatic landing system to aid the pilots in bad weather and night landings.

Corgi 1/144 Scale Tupolev Tu-4

This unusual 1/144 scale die-cast model of a Soviet Air Force Tupolev Tu-4 heavy bomber was manufactured by Corgi as part of their Aviation Archive collection of die-cast aircraft models in 2002. The Tupolev Tu-4 was essentially a reverse-engineered copy of the American B-29 Superfortress heavy bomber. The Tupolev Tu-4 served with the Soviet Air Force from the late 1940s to the mid-1960s but was plagued by technical problems throughout its service life and never reached the level of effectiveness envisioned by Soviet officials.

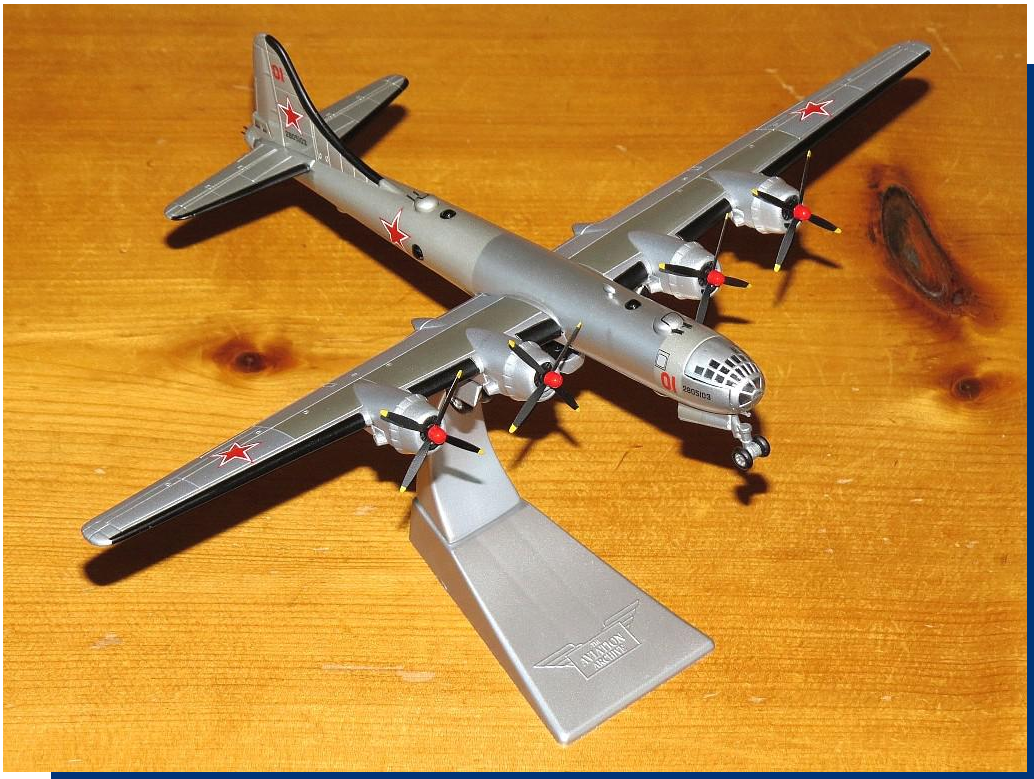
The Tupolev Tu-4 (NATO reporting name: Bull) is a four-engine strategic bomber that served in the Soviet Air Force from the late 1940s to the mid-1960s. It is a notable aircraft in the fact it was essentially a copy of an American Boeing B-29 Superfortress heavy bomber, having been reverse-engineered from B-29s that made emergency landings in the Soviet Union at the end of World War II and were seized by the Soviet government.

At the end of World War II, the Soviet Union saw the need to develop a strategic bomber fleet similar to that of the United States. Twice during the war, the United States refused to supply the Soviet Union with B-29s under Lend-Lease. Another opportunity for the Soviet Union to acquire the aircraft occurred at the end of World War II. On four separate occasions, B-29s made emergency landings in Soviet territory after bombing missions to Japan. The Soviet Union was neutral in the Pacific War, so the B-29s were seized and interred. Three of the four B-29s were deemed repairable and flown to Moscow, where they were delivered to Tupolev. Once at the Tupolev factory, one B-29 was dismantled and studied, the second used for flight testing, and the third kept standard as a reference.

Soviet Union Premier Joseph Stalin told Tupolev to copy the B-29 Superfortress in as little time as possible. The reverse engineering process involved over 900 factories and research institutes. Design changes included redesigning the gun turrets to accommodate Soviet defensive armament and using Soviet-built Shvetsov ASh-73 radial engines. The Tu-4 flew for the first time in 1947 and entered large-scale operational service in 1949.

Unfortunately, the reverse engineering of the B-29 into the Tu-4 did not go as planned. The Tu-4 was plagued by dreadful and prolonged technical problems, mostly related to its engines and propellers. Several Tu-4s ended up being used to test new weapons, reconnaissance systems, and communications suites. A few Tu-4s were sold to China in the late 1950s. By the time production ended in the 1960s, 847 Tu-4s had been built.

This 1/144 scale die-cast Tupolev Tu-4 was manufactured by Corgi in 2002. The model represents “Red 01”, a surviving Tu-4 displayed at the Central Air Force Museum in Monino, Russia. The model features interchangeable landing gear pieces, movable gun turrets, rotating propellers, and a display stand. The Corgi Tu-4 model is an interesting conversation piece for any collection and worth picking up on the secondary market.



Distelfink Airlines

Est. 2013

ABOUT DISTELFINK AIRLINES

My late grandfather, John Brey, and I at the 2007 Geneseo Airshow. This was one of the few times that we had our photo taken together at an airshow.

The story of "Distelfink Airlines" begins in the early 1990s when my late grandfather, John Brey, began building and flying remote control model aircraft in his retirement. He enjoyed the hobby and quickly amassed a large fleet of model airplanes, which filled his garage and woodworking shop. He gave a name to his fleet of aircraft, "Distelfink Airlines". For the symbol of his fleet, he chose the Pennsylvania Dutch/German hex sign featuring the "Distelfink", a colorful bird that is a symbol of good luck and happiness. This hex sign and symbol is very common on Pennsylvania Dutch/German barns in Eastern Pennsylvania and is an important part of our local culture. He had custom "Distelfink" decals made for all his airplanes and had T-shirts made with "Distelfink Airlines" printed on them. It wasn't long before curious people began asking about "Distelfink Airlines" and what it was. My grandfather told anyone who asked that "Distelfink Airlines" was a new startup airline that was going to be offering service between the Lehigh Valley International Airport and Philadelphia International Airport with more routes to come soon.

In addition to flying his model airplanes, my grandfather enjoyed attending airshows and we traveled to airshows together for almost 20 years. He also enjoyed local aviation history and was particularly fascinated by the history of the Consolidated TBY Sea Wolf, a torpedo bomber that was built locally in Allentown, Pennsylvania during World War II. He also remembered when famous aviator Amelia Earhart visited the Lehigh Valley in the early 1930s to raise funds for her failed attempt to become the first woman to fly around the world.

Established in 2013 in memory of my grandfather, "Distelfink Airlines" is an online aviation newsletter that carries on a tradition of sharing a love for aviation that my grandfather shared with me. This newsletter features photographs and writings on a variety of aviation topics. The logo that was chosen for "Distelfink Airlines" is the hex sign that my grandfather chose for his fleet of remote control model aircraft many years ago. This proud symbol of local Pennsylvania Dutch/German culture is joined by a pair of Consolidated TBY Sea Wolf torpedo bombers, the aircraft that was built locally in Allentown during World War II and is such an important part of our local aviation history. Thank you for reading "Distelfink Airlines" and sharing in the passion for aviation that my grandfather shared with me.