June 2025

Corey J Beitler's

"Distelfink Airlines"

An Online Aviation Newsletter

Central PA Air Show

Pitcairn PA-8 Super Mailwing

Hubley Metal Toy Copter

Ertl 1/48 Scale Grumman JRF Goose

North American P-51C Mustang Excalibur III

Douglas World Cruiser (DWC)

Aircraft: The Definitive Visual History Book

The U.S. Navy Blue Angels fly in their signature diamond formation during the 2024 Central PA Air Show held at the Harrisburg International Airport in Middletown, Pennsylvania, on May 24th and May 25th. The airshow was the first visit to Central Pennsylvania for the U.S. Navy Blue Angels Flight Demonstration Squadron since 1987.

FROM THE EDITOR'S DESK

PA Air Show, DWC, P-51C Excalibur III, PA-8 Super Mailwing, Hubley Toy Copter

Greetings Everyone:

The June edition of "Distelfink Airlines" is here. Airshow season is now in full swing, with several great events coming up in the Mid-Atlantic and the Northeast regions of the United States. Locally, the annual Mid-Atlantic Air Museum's World War II Weekend and the OC Air Show in Ocean City, Maryland, are coming up in early July. The Golden Age Air Museum also has its annual Biplanes & Bands Fly-In/Cruise-In coming up in early June as well. These events will offer aviation enthusiasts in the region the opportunity to see a wide variety of aircraft in the air through the early part of June.

The featured content for this edition is coverage of the Central PA Air Show, held Memorial Day Weekend at the Harrisburg International Airport in Middletown, Pennsylvania. This airshow was the first held at the airport in over three decades and was the third destination of the 2025 Air Dot Show Tour. The airshow was excellent for an inaugural edition, with a homecoming for F-16 Viper Demo Team commander and pilot Maj. Taylor "FEMA" Hiester, who grew up in Robesonia in nearby Berks Country, and a headline performance by the U.S. Navy Blue Angels. Although the weather was a bit questionable for the weekend, the airshow was a huge success. Tickets for both days of the event sold out, and the attendance exceeded the expectations of airshow officials. My coverage of the airshow is a photo feature highlighting some of the action in the skies and some of the static display aircraft at the event. I want to thank Chris Dirato, the PR representative for the Air Dot Show Tour, for affording me the opportunity to cover the event as credentialed media. I look forward to working with the Air Dot Show Tour at some future airshows later this year.

The "Aircraft Of Special Interest" section has a look at the Douglas World Cruiser (DWC). Four of these airplanes were built for the U.S. Army Air Service's planned attempt at the first aerial circumnavigation of the world. Despite encountering every type of hardship and numerous mechanical issues along the way, two of the DWCs completed the trip. These two aircraft survive today, one of them displayed in the National Air and Space Museum in Washington, DC, and the other in the Museum of Flying in Santa Monica, California.

The "Aircraft Of The National Air And Space Museum" section features the North American P-51 Mustang "Excalibur III". Sold as surplus to A. Paul Mantz, a movie and stunt pilot, after World War II, this P-51 was modified and used to win several air races and set new speed records during the late 1940s and early 1950s.

"Aviation Sightings" has a feature about the Pitcairn PA-8 Super Mailwing, an airplane used to carry airmail during the 1930s. The PA-8 featured in this section is on display at the Harold F. Pitcairn Wings of Freedom Aviation Museum in Horsham, PA.

Finally, the "Aviation Memorabilia" section has a metal toy helicopter from the toy manufacturer Hubley. This toy helicopter was produced in the 1950s and was based on the Piasecki HUP Retriever, a small utility and search-and-rescue helicopter used by the U.S. Navy in the 1950s. This toy helicopter was part of my grandfather's collection of toy and model airplanes for many years.

Thank you for supporting "Distelfink Airlines" and my aviation photojournalism efforts throughout the year. Please continue to share the newsletter with anyone interested in reading it!

Regards,
-Corey

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What's Inside:

Pitcairn PA-8 Super Mailwing

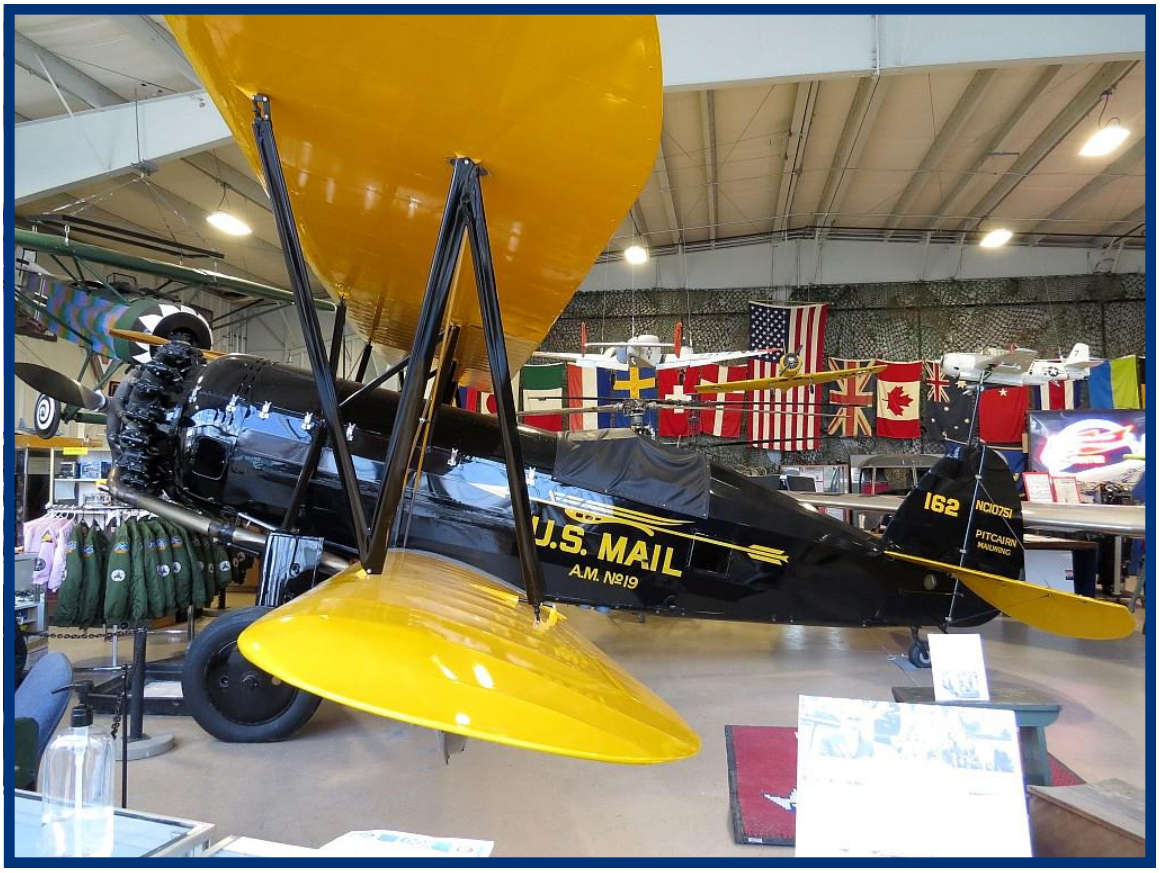
A Pitcairn PA-8 Super Mailwing on display at the Harold F. Pitcairn Wings of Freedom Aviation Museum in Horsham, Pennsylvania. The PA-8 was the last variant of a series of airmail and three-seat sport biplanes built in small numbers by the Pitcairn Aircraft Company in Willow Grove, Pennsylvania, from 1927 to 1931.

The Pitcairn Mailwing family is a series of American airmail and three-seat sport, single-engine, open-cockpit, biplane aircraft. The Pitcairn Mailwing family of aircraft was built by the Pitcairn Aircraft Company, an aircraft manufacturing company founded by aviation pioneer Harold F. Pitcairn in Willow Grove, Pennsylvania.

Designed by Agnew E. Larson, the Pitcairn Mailwings were developed to carry airmail for the U.S. Post Office Department. The Mailwings were built using simple, robust construction techniques, including steel tubing, built-up spruce and plywood ribs, and wooden formers. The landing gear was designed so the airplane could operate off rough and short runways. The undercarriage legs were fitted with shock absorbers, and the main wheels were equipped with disc brakes. The Pitcairn Aircraft Company built the biplane as the Mailwing, with a fireproof, metal-lined mail and baggage container installed in the front cockpit, and the Sport Mailwing, with comfortable, side-by-side seating for two people installed in the front cockpit. All variants of the Pitcairn Mailwing looked similar, with the significant changes being a more powerful engine installed on the later variants along with several fuselage extensions so a larger mail and baggage compartment could be installed in the forward cockpit.

The PA-5, the first variant of the Pitcairn Mailwing, entered service in 1927 and gained a positive reputation for its gentle handling characteristics. The PA-5 was followed by the PA-6 variant in 1928. The PA-7, introduced in 1929, and the PA-8, introduced in 1930, were called Super Mailwings. These variants of the biplane had a longer fuselage for a larger mail and baggage compartment and were equipped with a more powerful engine. Production of the Pitcairn Mailwings and Sport Mailwings ended in 1931 after 106 examples of all variants had been built. The Mailwings were used extensively to fly airmail until the end of dedicated airmail routes in 1934.

This Pitcairn PA-8 Super Mailwing was built in 1931 for Eastern Air Transport. After the airplane was retired from airmail service, it changed hands several times before being bought by Harold Pitcairn's son, Stephen, in 1992. After a complete restoration, the Pitcairn family flew the aircraft to airshows and fly-ins until 2012, when they donated it to the Harold F. Pitcairn Wings of Freedom Aviation Museum in Horsham, Pennsylvania.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Hubley Metal Toy Copter

The Metal Toy Copter was one of several die-cast toy aircraft made by the Hubley Manufacturing Company during the 1950s. The toy helicopter is based on the Piasecki HUP Retriever, a utility and search-and-rescue helicopter that served with the U.S. Navy during the 1950s and early 1960s. The Metal Toy Copter was made in several color schemes, including a yellow "Forest Ranger" version. This dark blue example is the first version of the toy helicopter, a rare find today in complete and in good condition.

The Hubley Manufacturing Company was an American producer of a wide range of toys, model kits, doorstops, and bookends. Founded in 1894 by John Hubley in Lancaster, Pennsylvania, Hubley's first toys appeared in 1904. Initially made from cast iron, these toys included themes such as horse-drawn vehicles, breeds of dogs, motorcycles, and tractors. In the late 1930s, Hubley shifted to producing toys made of zinc alloy, and die-cast vehicles became the mainstay of Hubley's toy business. To compete with rival toy manufacturer Tootsietoy, Hubley began branding their die-cast vehicles as "Kiddie Toys". Hubley continued in the toy business until the late 1960s when the company was bought out by Gabriel Industries. Gabriel Industries continued to produce many of Hubley's die-cast toy vehicles but gradually phased out the Hubley name in favor of their own on toy packaging.

As part of their wide selection of die-cast vehicles, Hubley produced several toy aircraft. These toy aircraft included replicas of the Curtiss P-40 Warhawk and Lockheed P-38 Lighting World War II fighters. Hubley's toy aircraft featured moving parts such as rotating propellers, rolling wheels, and in some cases, folding wings and retractable landing gear. The toy aircraft were often painted in bright colors and were sold individually, as well as in playsets with other Hubley die-cast vehicles.

The Metal Toy Copter was one of Hubley's die-cast toy aircraft. The toy helicopter was based on the Piasecki HUP Retriever, a small utility helicopter operated by the U.S. Navy during the 1950s and early 1960s. The HUP Retriever was the U.S. Navy's first practical search-and-rescue helicopter, as its small size and folding rotor blades made it ideal for aircraft carrier operations. In addition to the U.S. Navy, variants of the HUP Retriever were operated by the U.S. Army as the H-25 Mule and by several foreign navies. Hubley's Metal Toy Helicopter featured rolling wheels, a transparent cockpit, and rotating rotor blades, which folded just like those on the actual helicopter. The toy helicopter was released in several variations, including a version painted yellow and decorated with stickers to depict it as a "Forest Ranger" helicopter.

This example of the Metal Toy Copter is the first version of the toy helicopter. This version was painted dark blue and came in a closed box with artwork depicting the rotorcraft performing a rescue operation at sea. Later versions of the toy helicopter were sold in an open-style box sealed in shrink wrap with no artwork.

To save on packaging costs, Hubley designed the Metal Toy Copter's rotor blades to fold, just like those on the Piasecki HUP Retriever helicopter. A metal tab locks the rotor blades in place when they are opened. The first version of the Metal Toy Copter is the only version of the toy to have the engine exhaust vent painted silver.

The first version of Hubley's Metal Toy Copter came in a box with a colorful illustration depicting the helicopter rescuing two downed pilots from the ocean. Surviving examples of this box are rare, as it was quickly replaced with an open-style box sealed with shrink wrap that was cheaper to manufacture.

Ertl 1/48 Scale Grumman JRF Goose

Ertl produced this 1/48 scale die-cast model of a Grumman JRF Goose in 2000. The Goose is a twin-engine amphibian that has been used for a variety of civilian and military roles for over 80 years. This model of a Goose is painted as a U.S. Navy JRF variant used during World War II. The model also doubles as a collectible bank, and has a secret coin compartment in its fuselage.

Affectionately nicknamed the "Goose", the G-21 amphibian was Grumman's first monoplane and twin-engine design and its first aircraft to be produced for commercial airline service. This remarkable amphibian has served for over 80 years in a variety of civilian and military roles that have confirmed the strength, versatility, and durability of the design.

In the early 1930s, ten wealthy New York businessmen and aviators led by Wilton Lloyd-Smith were seeking a replacement for the Loening Air Yacht, an amphibious biplane they used to commute from their Long Island homes to their offices in Manhattan. In 1936, they approached Grover Loening about designing a replacement for the Air Yacht, but he declined to work on the project. Loening suggested the group contact the Grumman Engineering Corporation with the proposal. The company had offices and a production facility nearby on Long Island in Bethpage. Loening had consulted for this company and helped finance its initial operations. The company's founder, Leroy Grumman, accepted the project and immediately went to work with designers William Schwendler and Ralston Stalb to build the new aircraft.

The new design was a stubby but elegant aircraft. The aircraft, designated the G-21, was an all-metal, high-winged monoplane powered by two 450-horsepower Pratt & Whitney Wasp Jr. nine-cylinder, air-cooled radial engines mounted on the wings. The fuselage served as the aircraft's hull and had a cabin designed to accommodate four to six passengers. The cabin had provisions to be equipped with a galley and lavatory if the operator desired. So the G-21 could operate from both water and land, the airplane featured hand-cranked retractable landing gear.

The G-21 completed its first test flight on May 29, 1937, from Grumman's Bethpage, New York factory. Flight trials went smoothly, and after lengthening the hull and adding outer wing floats to improve handling performance on the water, the G-21 was ready for production. The performance of the G-21 was notable for its time, having a cruise speed of 180 miles per hour (289 km/h) and an operating range of 800 miles (1287 km).

Just five weeks after its maiden flight, the first 12 G-21s were delivered to customers Wilton Lloyd-Smith and department store heir Marshall Field III. Soon, other wealthy businessmen throughout the world ordered the G-21 due to its excellent flight performance and luxurious passenger cabin. Some of these wealthy businessmen included Colonel McCormick of the Chicago Tribune and C.W. Deeds of United Aircraft.

The popularity of the G-21 spread as it became well-known in the aviation community, where it became commonly known by its name, the "Goose". Orders for the G-21 came to Grumman from airlines and foreign operators worldwide. Grumman could barely keep up with the production of the G-21 to fill orders. The start of World War II and Grumman being forced to concentrate on military contracts prevented the G-21 from being adopted by airline operators on a larger scale.

In 1938, the Royal Canadian Air Force became the first military operator of the Goose when it ordered nine examples of the amphibian. Orders soon followed from the U.S. Navy, U.S. Army, U.S. Coast Guard, Peruvian Navy, and the Portuguese Navy. With the exception of minor changes, such as the installation of military equipment and basic cabin seating, these Gooses were relatively unchanged from the civilian variants of the aircraft. During World War II, the U.S. Navy and U.S. Coast Guard operated 169 "Gooses", designated JRFs, in utility, transport, search and rescue, and anti-submarine roles. Eventually, the air forces and navies of 11 different countries worldwide operated the Goose in a variety of roles. Grumman ended production of the G-21 in 1945 after 345 examples had been delivered.

After World War II, most G-21s were phased out of military service, and many were sold as surplus. With its ability to fly from almost anywhere, the Goose saw widespread service with small airlines in the Caribbean, California, and Alaska. Antilles Air Boats was noteworthy for flying the Goose throughout the Caribbean from their base in St. Croix in the Virgin Islands. Avalon Air, later Catalina Airlines, was another operator of the type, flying a number of Grumman Gooses as part of their aircraft fleet in California. Examples of the Goose are still operated today as bush aircraft, carrying passengers and freight to remote locations inaccessible to other forms of transportation. Most of the surviving G-21s have had their original radial engines and two-blade propellers replaced with turboprop powerplants and three-blade propellers for improved performance.

This angle of Ertl's 1/48 scale Grumman JRF Goose model shows some of the distinctive features of the Goose's design that have made it such a versatile aircraft for over 80 years. The conventional landing gear that retracts into the fuselage and hull that allows the Goose to operate from land runways is replicated in detail on the model. The fuselage hull and outer wing floats give the Goose excellent handling characteristics when operating off the surface of a body of water are also present on the model.

Although Ertl's Grumman JRF Goose is an excellent little model, it does have some shortcomings. Ertl's paint scheme for the model is inaccurate, and the gray-blue color used on the metal parts of the model does not match the color used on the plastic parts, such as the engine cowlings. The open slot for the coin bank portion of the model is also located on top of the rear fuselage instead of somewhere it could have been concealed, such as by using a hinged piece for the cockpit that opened to reveal the coin slot underneath it.

Ertl is a manufacturer of die-cast and plastic toy and model vehicles. The company is well-known for its die-cast toys and models of tractors and agricultural equipment. Ertl has produced die-cast toys and models of muscle cars, race cars, trucks, and aircraft throughout its history as a toy and model manufacturer. Some of Ertl's most popular die-cast vehicle toy lines included the American Muscle line of die-cast muscle cars in 1/18 scale, the Force One line to toy die-cast aircraft, and the Farm Country line of farm and agricultural toy vehicles and playsets. The company has also produced metal and plastic model kits. In the past, Ertl has held licensing agreements to produce die-cast vehicles as tie-ins to films and television shows. Ertl has also marketed its products toward corporate clients and has produced collectible vehicle banks that could be ordered by businesses and organizations as promotional products for employees and customers.

This 1/48 scale model of a Grumman G-21 Goose is one of the die-cast aircraft produced by Ertl and has a secondary function as a collectible bank. This Grumman Goose die-cast model/collectible bank was made in several different paint schemes over the years. Most of the paint schemes were corporate colors for promotional purposes for companies such as Texaco and ACE Hardware Stores. This version of the Grumman Goose model/collectible bank was released in 2000 by Ertl as part of an "Aviation Classics" product line and is painted in the color scheme of a JRF variant operated by the U.S. Navy late in World War II. The model is made predominantly of die-cast metal, with some smaller parts, such as the propellers, made of plastic. The model features rotating propellers and rolling wheels.

Ertl's model of the Grumman JRF Goose is a charming replica of the amphibious aircraft. As mentioned previously, the model doubles as a coin bank. The bank's compartment is cleverly concealed within the fuselage and is accessible by lifting a hinged door on the underside on the model. Ertl did an excellent job maintaining an accurate shape for the model while integrating a coin bank into its design. The model has the correct shape of the Goose and has notable features of the actual aircraft, such as the engines mounted high on the wing, the fuselage, which doubles as a hull, and the outer wing floats that were designed to stabilize the Goose on the surface of the water. Ertl's model also features recessed panel lines, which help add detail to some structures on the Goose, such as the control surfaces.

Ertl did an excellent job capturing some of the finer details of the Goose within their model. The landing gear is correctly molded in the extended position and has a maze of struts similar to the original aircraft. The model's Pratt & Whitney Wasp Junior radial engines are also accurately replicated on the model. Ertl did an exceptional job with the engine fronts, capturing them accurately with plastic molded parts and then highlighting the detail of these parts using silver paint. The model also has a high-quality paint finish. The gloss sea blue and light gray-blue paint scheme stands out on the model when it is displayed on any bookshelf or desk.

As with any model, Ertl's Grumman JRF Goose had some things that could have been improved upon when it was released over 20 years ago. The paint finish, although high quality and attractive, is inaccurate. The paint colors do not match how the U.S. Navy painted most of their JRFs during World War II. The gray-blue color of the cowlings, which are molded plastic, does not match the gray-blue color used on the fuselage. Ertl also missed including a U.S. marking on the lower right wing of the model that should be present. Finally, most Grumman JRF Goose aircraft operated by the U.S. Navy had their U.S. markings on the nose section instead of the fuselage sides as depicted on the model. The nose placement of the U.S. marking was common practice for amphibious aircraft and flying boats during the war.

Another unfortunate aspect of this model is the position of the coin slot. At the top of the rear fuselage, the coin slot in this location gives away it is a collectible bank. This model might have been more popular with die-cast aircraft collectors if Ertl had redesigned it so the coin slot was hidden, perhaps under the cockpit, making it a hinged piece that opened to reveal a coin slot. Finally, a display stand with the model's name would have been a nice addition for collectors.

This die-cast model of a Grumman JRF Goose is an interesting addition to any die-cast model airplane collection. This model is still available through secondary sellers at reasonable prices and is the only die-cast model of the Goose available in 1/48 scale. Although it does have some inaccuracies in its paint colors and markings and is a simpler casting with basic details compared to more modern die-cast aircraft, Ertl's Grumman JRF Goose is a decent model of the famous amphibian. The Goose's unique shape and design features make it a conversation piece in any collection and an excellent display model for any aviation enthusiast.

Ertl's 1/48 scale Grumman JRF Goose is an interesting model despite its shortcomings. The model is a die-cast version of an unusual but iconic aircraft and is the perfect size for display on any bookshelf or desk.

Central PA Air Show

The airshow, the first held at the Harrisburg International Airport in over three decades, featured aerial demonstrations headlined by the U.S. Navy Blue Angels and a homecoming for F-16 Viper Demo Team commander and pilot Maj. Taylor "FEMA" Hiester.

Maj. Taylor "FEMA" Hiester puts the Lockheed Martin F-16 Fighting Falcon assigned to the F-16 Viper Demo Team through its paces during the 2025 Central PA Air Show held at the Harrisburg International Airport. Although officially named the "Fighting Falcon", the F-16 is also known as the "Viper" among its pilots and maintainers.

The 2025 Central PA Air Show at the Harrisburg International Airport featured a demonstration of one of Penn State Life Lion Critical Care's Airbus H155/EC-155 B1 medical helicopters. Life Lion's medical helicopters are a common sight throughout Central Pennsylvania, and the organization offers 24/7 EMS and 911 response to several Central Pennsylvania counties.

The Harrisburg International Airport in Middletown, Pennsylvania, hosted the inaugural edition of the Central PA Air Show on May 24 & 25, 2025. The airshow was the third destination on the 2025 Air Dot Show Tour, which is hosting airshows in eight destinations throughout the United States this year. The Central PA Air Show featured a mix of military and civilian performers. In addition to the aerial flight demonstrations, a small selection of civil and military aircraft were located throughout the event grounds on static display for people to view up close.

The headline performer of the 2025 Central PA Air Show was the U.S. Navy Blue Angels. The official flight demonstration squadron of the U.S. Navy, the Blue Angels are one of the world's oldest and most respected military flight demonstration teams. The Blue Angels visit to Central Pennsylvania was the team's first appearance in the area in over 30 years.

Another featured performer at the 2025 Central PA Air Show was the U.S. Air Force's F-16 Viper Demo Team. Led by Maj. Taylor "FEMA" Hiester, the airshow was a homecoming for the team's commander and pilot, who grew up in nearby Robesonia in Berks County. In addition to flying the F-16 Viper in a flight demonstration, Maj. Hiester also flew the jet in formation with Jim Beasley Jr. in his restored World War II-era North American P-51 Mustang in a display of the U.S. Air Force Heritage Flight.

The Central PA Air Show also featured performances from Scott "Scooter" Yoak in his restored World War II-era North American P-51 Mustang "Quicksilver", Mark Meredith in his Super Chipmunk "Chippy", world-renowned aerobatic pilot Michael Goulian, a demonstration of an Airbus Helicopters H155 operated by Penn State Life Lion Critical Care, and parachute jumps by the U.S. Military Academy West Point "Black Knights" Parachute Team.

The Central PA Air Show was a huge success, with both days of the event selling out and attended by tens of thousands of people. The photographs included within this feature showcase some of the airshow highlights of the 2025 Central PA Air Show.

Early arrivers to the Central PA Air Show had an opportunity at the Harrisburg International Airport to check out several aircraft displayed throughout the event grounds, including this U.S. Navy Boeing P-8A Poseidon. The P-8A is a maritime patrol and reconnaissance aircraft developed for the U.S. Navy. In addition to the U.S. Navy, the P-8 Poseidon is also in service with the Royal Air Force, the Royal Australian Air Force, the Royal Norwegian Air Force, the Royal New Zealand Air Force, and the Indian Navy.

The 193rd Special Operations Wing of the Pennsylvania Air National Guard is based at the Harrisburg International Airport and had one of their Lockheed Martin MC-130J Commando II aircraft on display and open for tours of the cockpit and cargo areas. The MC-130J Commando II is a derivative of the C-130J Hercules military transport aircraft designed for special operations missions, focusing on refueling, resupplying, and infiltration and exfiltration of special forces in hostile or sensitive areas.

Another static display aircraft at the airshow was this Fairchild Republic A-10C Thunderbolt II from the 104th Fighter Squadron of the 175th Wing of the Maryland Air National Guard. The A-10 entered service in 1972 and was designed for close air support of friendly infantry and armored forces. The avionics and weapons systems of the A-10 have been regularly updated during its service life. The A-10 has proved an asset in recent conflicts in the Middle East and Afghanistan.

Although the A-10 has been continuously upgraded since it entered service and the aircraft has performed well in recent military conflicts, the U.S. Air Force has begun phasing the attack jet out of service. As part of the eventual retirement of the A-10 from the U.S. Air Force inventory, the 175th Wing will divest the A-10s from the 104th Fighter Squadron later this year, making the Central PA Air Show possibly one of the last opportunities to see a 175th Wing A-10 on static display at an event.

The Lockheed Martin F-35 Lightning II is a family of single-seat, single-engine, supersonic stealth strike fighters. The F-35 is a multirole aircraft designed for air superiority and strike missions. The F-35 is also capable of performing electronic warfare and reconnaissance missions. The F-35 is built in three versions, the conventional takeoff and landing (CTOL) F-35A, the short-takeoff and vertical-landing (STOL) F-35B, and the catapult-assisted but arrested recovery (CATOBAR) F-35C. This is a U.S. Air Force F-35A.

The first variant of the F-35 Lightning II to enter service was the F-35B with the U.S. Marine Corps in 2015, followed by the F-35A with the U.S. Air Force in 2016. The F-35C was the last variant of the Lightning II to enter service with the U.S. Navy in 2019. The F-35 is expected to be the cornerstone of U.S. and NATO air power until 2070. This F-35A is operated by the 187th Fighter Wing of the Alabama Air National Guard. The unit is transitioning to the F-35A from the F-16 Fighting Falcon.

Airshow attendees at the 2025 Central PA Air Show line up to tour the inside of a Boeing KC-135R Stratotanker operated by the 171st Air Refueling Wing on static display at the event. The KC-135 is an aerial refueling tanker aircraft that entered service with the U.S. Air Force in 1957. The KC-135 was the U.S. Air Force's first jet-powered tanker refueling tanker. The KC-135 was used extensively during Operation Desert Storm and in recent U.S. military conflicts to extend the range of fighters and bombers.

Early attendees to the Central PA Air Show also had the opportunity to watch the U.S. Navy Blue Angels maintenance technicians perform safety checks on each Boeing F/A-18 Super Hornet flown by the team. Before each flight demonstration, the maintenance technicians fuel each aircraft and check its avionics and other critical systems. These maintenance checks ensure each aircraft is ready for the flight demonstration. In this photo, technicians are performing these checks on the #5 aircraft.

A member of the West Point "Black Knights" Parachute Team descends to during their demonstration on Sunday to open flight demonstration portion the Central PA Air Show. The modern parachutes used by the team are steerable, allowing the jumpers to land in tight spaces, such as baseball stadiums, to perform their demonstrations. These parachutes can also attain forward speeds of up to 20 miles per hour. This jumper has a smoke canister used as a visual aid attached to their leg.

A jumper from the West Point "Black Knights" Parachute Team prepares to land with the American flag as the national anthem is played to open the airshow. The steering lines attached to the parachute not only allow the jumper to turn right or left but also can be used to slow the descent speed of the parachute by tugging on both sets of steering lines simultaneously. Each of the jumpers carries a reserve parachute should the primary parachute become damaged or fail to open.

Michael Goulian performs on Sunday at the 2025 Central PA Air Show. This performance was a teaser demonstration before Goulian performed his full aerobatic demonstration later in the afternoon. Goulian has been a regular performer at events on the Air Dot Show Tour throughout the United States. Currently, Goulian flies an Extra 330SC. The Extra 330SC is a purpose-built, single-seat, aerobatic aircraft designed specifically for competition in unlimited category aerobatics competitions.

Michael Goulian taxis his Extra 330SC aerobatic aircraft to the staging area following his teaser performance Sunday at the 2025 Central PA Air Show. The Extra 330SC is a single-seat, low-wing aerobatic monoplane marketed toward pilots flying freestyle or unlimited-category competition aerobatics. The Extra 330SC is constructed of lightweight materials for increased maneuverability and performance, including a carbon fiber wing, carbon composite tail structure, and steel fuselage.

The Central PA Air Show also showcased flight demonstrations featuring vintage aircraft, including an aerobatic performance from Mark Meredith in his modified de Havilland Super Chipmunk he has affectionately named "Chippy". The Chipmunk was originally a two-seat, single-engine primary training aircraft used by several air forces worldwide immediately following World War II for military flight training. Today, the type remains popular with pilots for its excellent flying characteristics.

Mark Meredith flies his de Havilland Super Chipmunk "Chippy" at the Central PA Air Show. During his airshow routine, Meredith emphasizes old-school aerobatics in "Chippy" by performing graceful loops, rolls, barrel rolls, hammerhead turns, and spins. For Meredith's airshow performances, "Chippy" has been modified with a Lycoming Thunderbolt engine and a smoke system. Rebuilding and modifying "Chippy" for airshow performances took five years and over 5,000 hours of labor.

For aviation enthusiasts who are fans of aviation history and World War II aircraft, the Central PA Air Show featured a flight demonstration from Scott Yoak with his beautifully restored North American P-51D Mustang "Quicksilver". For those who study World War II aircraft, the P-51 Mustang needs no introduction. The P-51 was one of the finest Allied fighter aircraft of the war, excelling in use as a long-range bomber escort in both the European and Pacific theaters of operation during the war.

Scott Yoak banks "Quicksilver" during his flight demonstration at the Central PA Air Show. Over 15,000 P-51s were built during World War II, and they were used by the air arms of several nations during and after World War II. The P-51 also saw combat with the U.S. military during the Korean War in the 1950s, where it was used as a specialized fighter-bomber. Today, less than 200 P-51s remain in airworthy condition, and a restored Mustang appearing at an airshow always draws a crowd.

A highlight of the 2025 Central PA Air Show was the demonstration of the F-16 Viper by the F-16 Viper Demonstration Team. The demonstration of the F-16 had special significance because the F-16 Viper Demo Team commander and pilot, Maj. Taylor "FEMA" Hiester, was raised in nearby Robesonia in Berks County. In many respects, the airshow was a homecoming for Maj. Hiester. In this photo, Maj. Hiester prepares to taxi the Lockheed Martin F-16C Viper out to the runway for take-off.

Maj. Taylor "FEMA" Hiester performs a high-speed pass during his demonstration of the F-16 Viper at the Central PA Air Show. Introduced into service in 1978, the F-16 has been one of the most successful modern fighter aircraft produced. Over 4,600 have been built since 1976, and upgraded variants of the F-16 are still in production today. F-16s serve in the air forces of 25 countries worldwide. In U.S. Air Force service, the current variant of the F-16 is the F-16C (single-seat) and F-16D (two-seat) introduced in 1984.

Maj. Taylor "FEMA" Hiester climbs in his F-16 Viper during the flight demonstration. In honor of the 50th anniversary of the F-16's first flight in 1974, a colorful paint scheme similar to the one used on the prototype was adopted by the F-16 Viper Demo Team last year. Initially designed as an air superiority fighter, the F-16 has evolved into an all-weather, multirole combat aircraft capable of operating as a fighter-bomber and reconnaissance aircraft. As of 2025, over 2,000 F-16s are operational worldwide.

Before concluding his demonstration, Maj. Taylor "FEMA" Hiester in the F-16 Viper joined in formation with Jim Beasley Jr. in his restored World War II-era P-51 Mustang to fly the U.S. Air Force Heritage Flight. The U.S. Heritage Flight honors U.S. Air Force history by putting past and present U.S. Air Force aircraft in formation together at airshows and aviation events throughout the United States. U.S. Air Force Heritage Flight performances began at airshows in the 1990s and remain popular today.

The sleek frontal profile of the F-16 is on display in this photo as Maj. Taylor "FEMA" Hiester returns to the ramp following his demonstration. The F-16 features several key components, including a bubble canopy for enhanced pilot visibility, a reclined ejection seat to mitigate the effects of G-forces on the pilot, and an advanced fly-by-wire flight control system. For armament, the F-16 has an internal M61 Vulcan cannon and 11 hardpoints for air-to-air and air-to-ground weapons, and other external stores.

Initially built and designed by General Dynamics, the F-16 is now built by Lockheed Martin. Newer variants of the F-16 feature more powerful engines, improved avionics, and weapons upgrades. Although officially known as the Fighting Falcon, the F-16 is unofficially known as the Viper by its pilots and maintainers. Maj. Taylor "FEMA" Hiester and the personnel assigned to the F-16 Viper Demo Team are part of the 20th Fighter Wing based at Shaw Air Force Base in South Carolina.

Descending with colored streamers that proudly showcase the black, gold, and white colors of the United States Military Academy, a jumper eyes the show center target at the New York International Airshow. In addition to performing at airshows, the West Point "Black Knights" Parachute Team also participates in parachute competitions against other teams, performing jumps into football and baseball games to promote the U.S. Military Academy and U.S. Army recruitment efforts.

Another jumper from the West Point "Black Knights" Parachute Team descends to the ground during the Central PA Air Show. Usually, jumps made by the "Black Knights" Parachute Team are performed by team members who are senior cadets at West Point. For the Central PA Air Show, the team instructors performed the airshow demonstration jumps due to the fact the senior cadets have graduated, and new team members coming to the "Black Knights" Parachute Team are on summer break.

The West Point "Black Knights" Parachute Team travels to demonstration sites on an Airbus Helicopters UH-72 Lakota. The UH-72 Lakota is a twin-engine, light utility helicopter that entered service with the U.S. Army in 2007. The UH-72 is used for non-combat and logistics missions for the U.S. Army, including disaster response and medical evacuation. Using the UH-72 in this role frees up frontline helicopters such as the UH-60 Black Hawk and other types for combat missions.

The UH-72 Lakota used by the West Point "Black Knights" Parachute Team is operated by the 2nd Aviation Detachment. Nicknamed the "Wings of West Point", the 2nd Aviation Detachment supports operations at the U.S. Military Academy, operating two UH-72s to fulfill this mission. The 2nd Aviation Detachment is based at the Stewart International Airport in Newburgh, New York. In this photo, the UH-72 crew is performing a flyby following the jump by the West Point "Black Knights" Parachute Team.

Michael Goulian rockets toward airshow center in his Extra 330SC aerobatic aircraft. Goulian has had a 30-year career as a professional aerobatic pilot. At age 27, Goulian became one of the youngest pilots ever to win the United States Unlimited Aerobatic Championship. Goulian has also been a three-time member of the U.S. National Unlimited Aerobatic Team. Throughout his career, Goulian has also won numerous awards for showmanship and excellence as an airshow performer.

Michael Goulian flies inverted in his Extra 330SC aerobatic aircraft during his full demonstration at the Central PA Air Show. Flying at airshows and competing in aerobatic competitions costs sustainable amounts of money. Michael Goulian, like many other civilian performers in the airshow industry, relies on sponsors to help cover travel and aircraft maintenance expenses. Goulian's Extra 330SC carries the colors and logos of PENFED Credit Union, one of his primary sponsors for the 2025 airshow season.

The Central PA Air Show also featured a demonstration of an Airbus Helicopters H155 medical helicopter operated by Penn State Life Lion Emergency Medical Services and Critical Care. Penn State Life Lion serves six medical centers in Central Pennsylvania. Penn State Life Lion operates four helicopters and averages over 1,100 flights a year. Since transporting its first patient flight in 1986, Penn State Life Lion has transported over 40,000 patients of all ages needing emergency medical care or critical care transport.

The Airbus Helicopters H155 (formerly Eurocopter EC155) is a long-range, medium-lift helicopter developed from the AS365 Dauphin family by Eurocopter. The twin-engine helicopter is marketed for passenger transport, offshore support, VIP transport, and casualty transport. The H155/ EC155 entered service in 1999. In the casualty transport role, the H155 can carry two patients on stretchers and four seated medical staff or four stretchers with two seated medical staff, plus all needed equipment.

The Central PA Air Show concluded each day with a performance by the U.S. Navy Blue Angels Flight Demonstration Squadron. The Blue Angels are the world's second-oldest formal aerobatic team, being formed by the U.S. Navy in 1946. The 2025 airshow season is the team's 79th season of flying aerial demonstrations. The 2025 season also marks the fifth season the team is using the twin-engine McDonnell Douglas/ Boeing F/A-18E/F Super Hornet as their demonstration aircraft.

The U.S. Navy Blue Angels perform the Echelon Pass In Review, one of the well-known and most popular maneuvers in the team's airshow demonstration routine. During these close formation maneuvers, the F/A-18E/Fs are flown as close as 18 inches apart. The F/A-18 Super Hornet is produced in two variants, the single-seat E and the two-seat F. In addition to the U.S. Navy, the F/A-18 Super Hornet is operated by the Royal Australian Air Force and has been ordered by the Kuwait Air Force.

U.S. Navy Blue Angels Lead and Opposing Solo Pilots, #5 Cdr. Thomas Zimmerman and #6 Lt. Connor O' Donnell perform the High Alpha Pass. This maneuver demonstrates the excellent slow-speed maneuverability of the F/A-18E/F Super Hornet. This slow-speed maneuverability is possible thanks to the Super Hornet's powerful General Electric F414 turbofan engines and enlarged leading edge extensions that provide improved vortex lifting characteristics in high angle of attack and pitching maneuvers.

The U.S. Navy Blue Angels complete the Diamond Burner 270 maneuver at Central PA Air Show in cloudy conditions during Sunday's flight demonstration. During this tight turning maneuver, the Blue Angels pilots in the diamond formation pull up to 7.5Gs while using full afterburners on the F/A-18 Super Hornet F414 engines. The pilots flying in the diamond formation are #1 Flight Leader, Cdr. Adam Bryan, #2 Right Wing, Cdr. Jack Keilty, #3 Left Wing, Maj. Brandon Wilkins, and #4 Slot, Lt Cdr. Wes Perkins.

The U.S. Navy Blue Angels line up in the six-ship Delta formation for one final flyby of the airshow crowd after a successful demonstration at Central PA Air Show on Sunday afrernoon. Achieving such precision flying each weekend at locations nationwide takes dedication and practice. The Blue Angels complete an extensive winter training season each year at NAF El Centro in California. The team also practices regularly between airshow visits at their home base of NAS Pensacola in Florida.

U.S. Navy Blue Angels #4, Slot, Lt Cdr. Wes Perkins, taxis back to the ramp in his Boeing F/A-18F Super Hornet following the team's flight demonstration at the Central PA Air Show on Sunday afternoon. The Central PA Air Show was a huge success for the Air Dot Show Tour and the Harrisburg International Airport. Tickets for the airshow were sold out for both days, and overall reception of the event was positive. The airport announced that the airshow will return on Memorial Day weekend in 2026.

North American P-51C Mustang *Excalibur III*

This North American P-51C Mustang was sold as military surplus to Hollywood movie and stunt pilot A. Paul Mantz in 1946. Mantz modified the Mustang to carry extra fuel for long-distance air racing and won the 1946 and 1947 cross-country Bendix Trophy Races. Mantz eventually sold the Mustang to Pan American Airways pilot Charles Blair. Blair named the Mustang "Excalibur III" and used it to fly a record-breaking flight across the North Pole and the polar regions from Norway to Alaska in 1951.

The North American Aviation P-51 Mustang is an American single-engine, single-seat fighter aircraft that was designed during World War II. With its long range and excellent performance, the Mustang became one of the iconic fighter aircraft of the war. In addition to its service during World War II, the Mustang also saw action during the Korean War as a fighter-bomber. Mustangs sold as surplus after World War II were used in postwar air races, where they battled with other World War II fighter aircraft, including Lockheed P-38 Lightings and Bell P-39 Airacobaras. Today, the P-51 remains one of the most well-known fighter aircraft from World War II. Restored examples of the Mustang are popular at airshows with aviation enthusiasts, and highly modified examples still compete in the National Championship Air Races each year.

The Mustang was designed in 1940 by a team headed by Edgar Schmued at North American Aviation. The firm was approached by the British Purchasing Commission to license-build Curtiss P-40 fighter aircraft for the Royal Air Force. Rather than build a design from another company, North American Aviation executives proposed designing and building a more modern fighter aircraft. The prototype P-51 was completed in September 1940, just 102 days after the British Purchasing Commission awarded a contract for the Mustang to North American Aviation. The prototype flew for the first time on October 26. 1940.

The Mustang was initially designed to use the Allison V-1710 12-cylinder, water-cooled, inline engine without a turbosupercharger. The lack of a turbosupercharger limited the engine and the Mustang's performance at high altitudes. As a result, the initial production examples of the P-51 Mustang sent to the Royal Air Force were used for low-level fighter-bomber and fighter sweep missions over the European continent. In 1942, a Royal Air Force development project replaced the Allison engine with a Rolls-Royce Merlin 65 12-cylinder, two-stage, intercooled, supercharged engine. The similar sizes of the two engines meant that very few design changes needed to be made to the Mustang's airframe to allow the installation of the Rolls-Royce engine.

Test flights of the Mustang fitted with the new engine revealed that the Rolls-Royce engine dramatically improved the fighter's performance above 15,000 feet (4,572 m) without sacrificing range. The results were so positive that after further testing in the United States, North American Aviation began installing the engine on Mustangs on the production line, resulting in the P-51B and C variants. The P-51B and C variants were the first Allied fighter aircraft able to compete with Luftwaffe fighters at high altitudes.

The definitive variant of the Mustang was the P-51D, which featured a bubble canopy and cut-down rear fuselage for improved pilot visibility. The P-51D was powered by a Packard V-1650-7 12-cylinder, water-cooled, inline engine, a license-built version of the Rolls-Royce Merlin 66. The P-51D was armed with six .50-inch (12.7 mm) machine guns in its wings and could also carry bombs or external fuel tanks on its underwing pylons. The P-51D had a top speed of 440 miles per hour (710 km/h) and a range of 1,650 miles (2,660 km) when fitted with external fuel tanks.

From late 1943 into 1945, P-51Bs and Cs (supplemented by P-51Ds from mid-1944) were used by the U.S. Army Air Force's Eighth Air Force to escort bombing raids by B-17 Flying Fortress and B-24 Liberator heavy bombers deep into Germany. Nicknamed "Little Friends" by the bomber crews, the P-51s finally provided the Eight Air Force with a fighter aircraft that had long enough range to escort the bombers to Germany and back, providing the bomber formations with much-needed fighter cover from Luftwaffe fighters.

The Royal Air Force's Second Tactical Air Force and the U.S. Army Air Force's Ninth Air Force used the P-51D as a fighter-bomber, helping ensure Allied air superiority over the European continent from 1944. These P-51Ds also attacked ground targets of opportunity, destroying enemy railroads, vehicles, and supply dumps. The P-51 was also used by Allied air forces in the North Africa, Mediterranean, Italian, and Pacific theaters during the war. Over 15,000 P-51s of all variants were built during World War II, and P-51 pilots claimed 4,950 enemy aircraft destroyed.

The P-51, designated the F-51 in the newly-formed U.S. Air Force, also served in the Korean War during the early 1950s. Initially used as a fighter, the F-51 was relegated to a specialized fighter-bomber role when jet fighters, such as the North American F-86 Sabre, were introduced into the conflict. Although the F-51 was retired in 1957 by the U.S. Air Force, the Mustang remained in service with the air forces of many other nations worldwide throughout the 1960s. The last Mustangs retired from military service were those operated by the Dominican Air Force, which withdrew their P-51s in 1984.

The P-51C Mustang *Excalibur III* had an uneventful operational life during World War II. After the war, it was sold as surplus to A. Paul Mantz, a Hollywood movie and stunt pilot. Painting the Mustang blood red and naming it *Blaze of Noon*, Mantz planned to enter the Bendix Trophy Race, a cross-country air race from the West Coast to Cleveland, Ohio, the site of the National Air Races. To increase the range of the P-51C and eliminate the need for extra fuel stops, Mantz removed all military equipment from the Mustang and modified the wings by sealing the interior, creating a "wet wing" that was, in essence, a large fuel tank that doubled the P-51C's range.

The modifications had the desired results, as Mantz won the Bendix Trophy Race in 1946 and 1947. In 1947, Mantz also set coast-to-coast speed records in each direction flying the P-51C. In 1948, the P-51C was flown by hired pilot Linton Carney, who finished second in the Bendix Trophy Race. In 1949, the P-51C finished in third, flown by hired pilot Herman "Fish" Salmon.

After its last Bendix Trophy Race in 1949, Mantz decided to sell the P-51C Blaze of Noon. He sold the Mustang to Charles F. Blair, a pilot with Pan American Airways. Blair had established a reputation as an experienced pilot by setting numerous records in Pan American Airways flying boats crossing the Atlantic during World War II. Blair renamed the P-51C *Excalibur III* after the flying boat named *Excalibur* he flew for American Export Airways during the war. After purchasing the Mustang, Blair began planning for an attempt at setting a new solo, around-the-world, speed record.

The outbreak of the Korean War forced Blair to change his plans. After careful preparation, Blair flew *Excalibur III* from New York to London on January 31, 1951, in 7 hours and 48 minutes. This time beat the previous record by over an hour and still stands today for a reciprocating engine, propeller-driven aircraft.

The next flight for Blair and *Excalibur III* established their most significant record. Blair had developed a new method of navigation for flying in the polar regions, where magnetic compasses were unreliable. Blair believed that by plotting sun lines at predetermined locations and times, a reliable form of navigation was possible. Blair left Bardufoss, Norway, with *Excalibur III* on May 29, 1951, and headed north over the ice and snow to Fairbanks, Alaska via the North Pole. There were no landing sites, communications, or radio navigational aids available to Blair along this route. Exactly as planned, 10 hours and 27 minutes after departing Norway, Blair arrived in Fairbanks. Blair had financed the flight and planned every aspect of it himself.

For his accomplishment, Blair was awarded the Harmon International Trophy in 1952 by President Harry Truman. Even more important, Blair's flight in *Excalibur III* changed defense planning in the United States. Defense planners realized that flights across the North Pole could be conducted by enemy aircraft on a bombing raid against the United States, and steps were taken to warn against such an attack and prevent it. The historic flight of *Excalibur III* also carried the first intercontinental airmail across the North Pole.

After Charlie Blair's record flight in *Excalibur III*, he decided the only place for the historic airplane was in the collection of the Smithsonian Institution. At his suggestion, Pan American Airways bought *Excalibur III* from Blair. After purchasing the P-51C Mustang, Pan American Airways donated the airplane to the Smithsonian Institution on November 6, 1953. National Air and Space Museum curators completely restored the P-51C in 1977. After spending several years in storage, the P-51C *Excalibur III* was installed in the National Air and Space Museum's Steven F. Udvar-Hazy Center in Chantilly, Virginia, for public display.

Douglas World Cruiser (DWC) (1923)

The Douglas World Cruiser (DWC) was a single-engine, two-place, open-cockpit biplane developed by the Douglas Aircraft Company In response to a 1923 requirement from the U.S. Army Air Service for an aircraft suitable for an attempt at the first flight around the world in 1924. The DWC was a modified variant of the DT torpedo bomber that was already in production. Changes to the aircraft to make it suitable for the flight attempt included a strengthened structure, enlarged rudder and tailfin, cockpits placed closer together, and additional fuel tanks installed in the wings and fuselage to increase the total fuel capacity. One prototype DWC and four production aircraft were completed. Two aircraft, the DWCs "Chicago" and "New Orleans", completed the flight, the first aerial circumnavigation of the globe.

Douglas World Cruiser (DWC)

Crew: 2

Length: 35 ft 6 in (10.82 m) (landplane), 39 ft (12 m) (floatplane)

Height: 13 ft 7 in (4.14 m) (landplane), 15 ft 1 in (4.60 m) (floatplane)

Wingspan: 50 ft (15.24 m)

Wing Area: 707 sq ft (65.7 m^2)

Powerplant: Liberty L-12 V-12 water-cooled engine (x1)

Propeller: 2-bladed fixed-pitch wooden propeller

Range: 1,900 nmi (3,500 km) (landplane), 1,430 nmi (2,660 km) (floatplane)

Maximum Speed: 103 mph (166 km/h) (landplane), 100 mph (160 km/h) (floatplane) at sea level

Empty/Maximum Takeoff Weights: 4,380 lb/6,995 lb (1,987 kg/3,173 kg) (landplane)
5,180 lb/7,795 lb (2,350 kg/3,536 kg) (floatplane)

Service Ceiling: 10,000 ft (3,000 m) (landplane), 7,700 ft (2,300 m) (floatplane)

First Flight Around The World

Wings

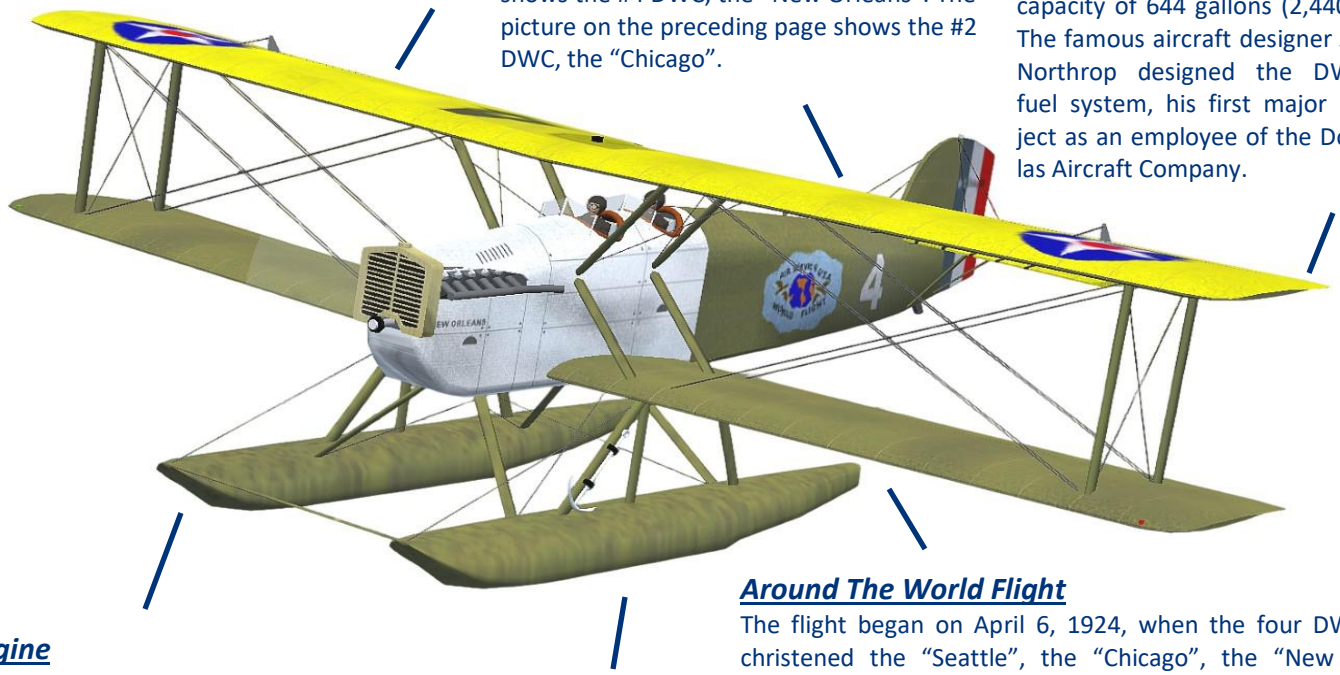
The large wings of the DWC were designed to fold back against the fuselage for compact storage when on a ship or in a small port or hangar. This was an innovative feature on an aircraft in the mid-1920s and would become standard for most aircraft operated on aircraft carriers in later years. The top wing of the DWC had a cutout in its structure above the cockpit to improve upward pilot visibility.

Survivors

The two DWCs that completed the flight, the “Chicago” and the “New Orleans”, survive. The “Chicago” is displayed at the National Air and Space Museum in Washington, DC. The “New Orleans” is on display in the Museum of Flying in Santa Monica, California. The wreckage of the “Seattle” was recovered and is displayed in the Alaska Aviation Museum. The illustration below shows the #4 DWC, the “New Orleans”. The picture on the preceding page shows the #2 DWC, the “Chicago”.

Design

The DWC was a rugged biplane built with a tubular steel fuselage and strengthened bracing. A significant consideration of the design was the ability to carry enough fuel to fly the distances required during the flight. Six fuel tanks were built into the aircraft’s fuselage and wings for a total capacity of 644 gallons (2,440 L). The famous aircraft designer Jack Northrop designed the DWC’s fuel system, his first major project as an employee of the Douglas Aircraft Company.



Engine

The DWCs were powered by a Liberty L-12 V-12 engine that generated 420 horsepower and drove a two-blade, fixed-pitch, wooden propeller. Two different radiators were used for the engine, with a larger version utilized for tropical climates. The engine had separate tanks for oil and water. Similar to other aero engines in the 1920s, the Liberty L-12 had a limited service life. The U.S. Army Air Service ordered 15 extra Liberty L-12 engines for the DWCs for the flight. Each DWC went through several engine changes as the aircraft completed the flight.

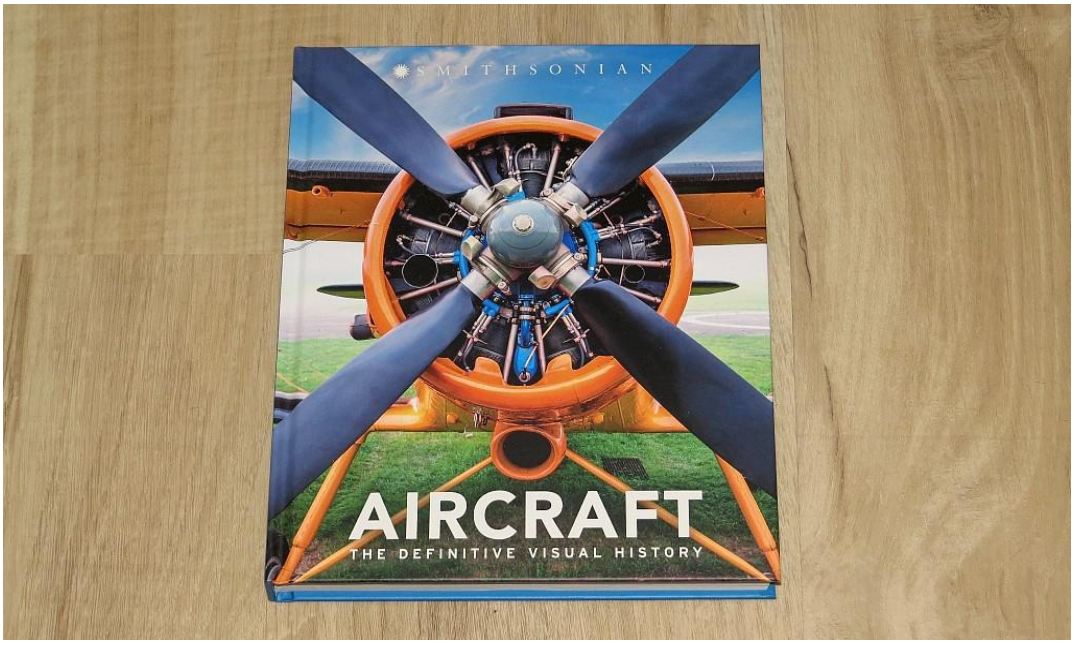
Landing Gear

The DWCs were built with interchangeable landing gear, and the airplane could be flown as a landplane or a seaplane. The large floats slightly degraded the DWC’s top speed, service ceiling, and range. An anchor was attached to one of the struts of the left float so the DWC could be secured in place when on the water. Extra sets of conventional landing gear and floats were sent ahead of the flight so the landing gear configurations could be exchanged as needed as the aircraft completed their journey around the globe.

Around The World Flight

The flight began on April 6, 1924, when the four DWCs, christened the “Seattle”, the “Chicago”, the “New Orleans”, and the “Boston”, departed Sand Point, Washington. The “Seattle” crashed and was destroyed in Alaska, but the other three aircraft continued west across Asia and Europe. The flight relied heavily on logistics, including prepositioned caches of fuel, spare parts, and engines maintained by U.S. Navy and U.S. Coast Guard personnel. The “Boston" was lost when it was forced down in the Atlantic, damaged beyond repair, and later sank near the Faroe Islands. The remaining two aircraft continued across the Atlantic to Nova Scotia, where they were met by the prototype DWC, now christened the “Boston II”. The “Boston II” continued with the other two surviving aircraft on a ceremonial flight across the United States to Seattle, Washington, to conclude the flight. The surviving aircraft, the “Chicago”, and the “New Orleans”, completed the flight on September 24, 1924. The flight made 74 stops and covered a distance of 27,553 miles (44,341 km). Time in flight was 371 hours and 11 minutes. Careful planning and extensive logistical support made the flight a success.

Aircraft: The Definitive Visual History Book



Aircraft: The Definitive Visual History is an aviation-themed reference title published by British multinational publishing company DK in cooperation with the Smithsonian Institution. The 320-page hardcover book features information on over 800 different aircraft presented In easy-to-read, colorful, and engaging layouts. The book is an excellent quick reference for any aviation enthusiast.

Dorling Kindersley Limited (branded as DK) is a British multinational publishing company specializing in illustrated reference books for adults and children. Established in 1974, the company is part of Penguin Random House, a subsidiary of German media conglomerate Bertelsmann. DK publishes titles in several genres, including travel, history, transportation, geography, science, space, nature, sports, gardening, cooking, and parenting. DK works with licensing partners such as Disney, Lego, DC Comics, Masterchef, and the Smithsonian Institution for many of its titles. Most of the company's titles are published with "DK" credited as the author as they are produced by a team of editors, designers, and cartographers who work with freelance authors and illustrators.

Recently, DK issued an updated edition of one of its popular aviation-themed titles. *Aircraft: The Definitive Visual History* is an aviation reference title published in cooperation with the Smithsonian Institution. Initially printed in 2021, this new edition of the title featuring updated and revised information was published in late 2024. The latest edition of the title is published in hardcover, similar to previous editions, but does not include a dust jacket. The absence of a dust jacket is a growing trend in the publishing industry for hardcover books to promote sustainable environmental initiatives and meet lower retail price points for customers.

Aircraft: The Definitive Visual History is an excellent reference title for any aviation enthusiast. The book contains 320 pages of information on over 800 different types of aircraft and includes excellent two-page spreads cataloging famous aircraft from each period of aviation history. The book also includes features on specific airplanes that significantly influenced aviation history and aircraft development, such as the Supermarine Spitfire fighter and the Concorde supersonic airliner. Notable aircraft manufacturers Boeing and Airbus are also featured in the book. *Aircraft: The Definitive Visual History's* layout takes readers on a visual tour of the history of civil and military aviation with rare and historic photographs, colorful illustrations, and engaging text.

Aircraft: The Definitive Visual History is now available in the Book Annex section of many Barnes & Noble bookstores in the United States. It is also available online at www.barnesandnoble.com. The book has an MSRP of $40.00, but Barnes & Noble is selling the title for $20.00. At this price point, *Aircraft: The Definitive Visual History* is an incredible value and an excellent addition to the library of any aviation enthusiast.


30 BEFORE 1920
Single-Seat Fighters
31


Piper J3 Cub
G-NCUB


Great Manufacturers
Boeing

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.