

September 2025



Corey J Beitler's

"Distelfink Airlines"

An Online Aviation Newsletter

National Warplane Museum- Geneseo Airshow



Airbus Helicopters H130 T2 (Eurocopter EC130 T2)

SPAD XIII Fighter Old-Timer Bi-Plane Radio

John Jenkins Designs Focke-Wulf Fw 190 A-8/R-11 "White 9"

Nieuport 28C.1

Fairchild Republic A-10C Thunderbolt II

A Friday Evening With World War I Aviation

A restored World War II era Vultee BT-13A Valiant belonging to the National Warplane Museum in flight during the 2025 Geneseo Airshow held in mid-July. The Valiant was built for basic training, a level of flight training between primary and advanced, and served in that role with the U.S. Army Air Forces and U.S. Navy (where it was designated the SNV) throughout World War II.

FROM THE EDITOR'S DESK

Geneseo Airshow, A-10 Farewell, Nieuport 28C.1, WW1 Aircraft, Fw 190 Model

Greetings Everyone:

Welcome to the September edition of "Distelfink Airlines". The summer is quickly wrapping up, and we are moving into autumn and the final months of the 2025 airshow season. There are a lot of great airshows and other aviation events still on the calendar, and I hope to get to several more airshows and aviation events before the season ends and cover them in the newsletter.

The featured content for this edition of "Distelfink Airlines" is a photo feature about the National Warplane Museum's Geneseo Airshow held in mid-July. This airshow is a stellar event, featuring a huge lineup of restored World War II aircraft each year. This year, one of the highlights of the event was an appearance by "Tora, Tora, Tora". A part of the Commemorative Air Force, "Tora, Tora, Tora" flies replicas of World War II Japanese aircraft and performs a recreation of the Japanese attack on Pearl Harbor at airshows, complete with narration and pyrotechnics. This amazing airshow routine and history lesson is a favorite of all airshow enthusiasts, and it was great to see "Tora, Tora, Tora" perform at Geneseo this year. Unfortunately, this year's Geneseo Airshow was not without its challenges. On Sunday afternoon, a severe thunderstorm formed right over the airfield and forced the cancellation of the end of the airshow on Sunday. Despite this cancellation, the Geneseo Airshow was still a great time with several terrific photo opportunities. I took many more photos than I could ever include in this newsletter. The feature contains a selection of photographs from Saturday and Sunday, highlighting the different aircraft in attendance and key performers from the airshow portion of the event.

Also featured in this edition of the newsletter is a look at the Fairchild Republic A-10C Thunderbolt II in the "Aircraft of Special Interest" section. As many are probably well aware, the U.S. Air Force is retiring substantial numbers of the A-10 from its inventory. Although there is debate in the U.S. Congress about a full retirement, many units are still losing their aircraft. One of those units is the nearby 175th Wing of the Maryland Air National Guard. The 175th Air Wing and their A-10s have been a common sight throughout the region at airshows and aviation events for many years. As the 175th Wing prepares to end A-10 operations in September, I hope to have a few more small articles for the newsletter as the 175th Wing bids farewell to the beloved "Hog".

The "Aircraft of the National Air and Space Museum" takes a trip back to World War I with a feature about the Nieuport 28C.1 in the museum's collection. The Nieuport 28C.1 was the first fighter used in combat by four American squadrons during the war. The museum's example of the fighter was once owned by the founder of the Old Rhinebeck Aerodrome, Cole Palen, and flown in airshows at that museum for several years. The "One Last Thing" section features some more World War I aircraft. These aircraft are from the Golden Age Air Museum collection and flew recently as part of a special Friday evening airshow display during an August event at the museum.

The "Aviation Models" section of the newsletter features a newly-released model from toy soldier manufacturer John Jenkins Designs of the Focke-Wulf Fw 190 fighter aircraft from World War II. This model is an outstanding replica of the German fighter and represents a night fighter variant used to intercept British bombers targeting German cities in nighttime bombing raids.

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:

Aviation Sightings:

Airbus Helicopters H130 T2 (Eurocopter EC130 T2)

An example of the upgraded variant of the H130/EC130 single-engine light utility helicopter used by aerial tour operators, law enforcement agencies, and providers of emergency air medical services worldwide.

Aviation Memorabilia:

SPAD XIII Fighter Old-Timer Bi-Plane Radio

During the early 1970s, WACO-Japan made this interesting novelty radio that featured a detailed metal replica of the famous World War I fighter.

Aircraft Models:

John Jenkins Designs Focke-Wulf Fw 190 A-5/R-11 "White 9"

The toy soldier company's new aircraft model is an excellent representation of a night fighter variant of one of Germany's most famous World War II fighter and attack aircraft.

Special Feature:

National Warplane Museum-Geneseo Airshow

The airshow, one of the largest to take place annually on a grass airfield and nicknamed "The Greatest Show on Turf", was held by the National Warplane Museum in mid-July at their home airfield just outside the town of Geneseo in Western New York.

Aircraft Of The National Air And Space Museum:

Nieuport 28C.1

An example of the French World War I fighter aircraft that was used in combat by four American squadrons during the spring and summer of 1918.

Aircraft Of Special Interest:

Fairchild Republic A-10C Thunderbolt II

The only attack aircraft designed solely for the mission of close air support of friendly ground forces to serve with the U.S. Air Force.

One Last Thing:

A Friday Evening With World War I Aviation

During the Golden Age Air Museum's annual R/C Model Meet, the museum demonstrated four full-scale aircraft from its collection representing the World War I era in a Friday evening display.

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Airbus Helicopters H130 T2 (Eurocopter EC130 T2)



An Airbus Helicopters H130 T2 (Eurocopter EC130 T2) operated by LifeNet of New York prepares to land at the National Warplane Museum's Geneseo Airshow in July. The H130/EC130 is one of the most successful single-engine helicopters in the emergency medical services industry. The helicopter's large cabin provides accommodations for two stretchers, two emergency medical technicians, and a cargo area for storing equipment such as baggage, oxygen bottles, and air compressors.

The Airbus Helicopters H130 (formerly Eurocopter EC130) is a single-engine light utility helicopter launched and produced by the Eurocopter Group, later rebranded as Airbus Helicopters. The EC130 was developed from the earlier Eurocopter AS350 Écureuil, with one of the primary changes being the incorporation of a Fenestron anti-torque device instead of a conventional tail rotor. Aerial tour operators, law enforcement agencies, and providers of emergency air medical services worldwide operate the H130/EC130.

The design and development of the H130/EC130 began in the early 1980s as an improvement to the Aerospatiale AS350. The test program lasted several years, and a prototype AS350 Z was used for test flights with a Fenestron anti-torque device and modified air intake. The development of the rotorcraft continued into the 1990s, with Eurocopter making further modifications to the design, including the introduction of a dual hydraulic system and a wider main cabin for increased internal space. Intended for operations by aerial tour companies, several were consulted for input during the EC130's design and development. The EC130 entered service with launch operator Blue Hawaiian Helicopters in 2001. Since entering operational service, over 700 H130/EC130s have been built by Eurocopter and Airbus Helicopters. Introduced in 2021, the upgraded EC130 T2 variant has a more powerful engine, an improved air conditioning system, an active vibration control system, and a full-flat floor in the cabin.

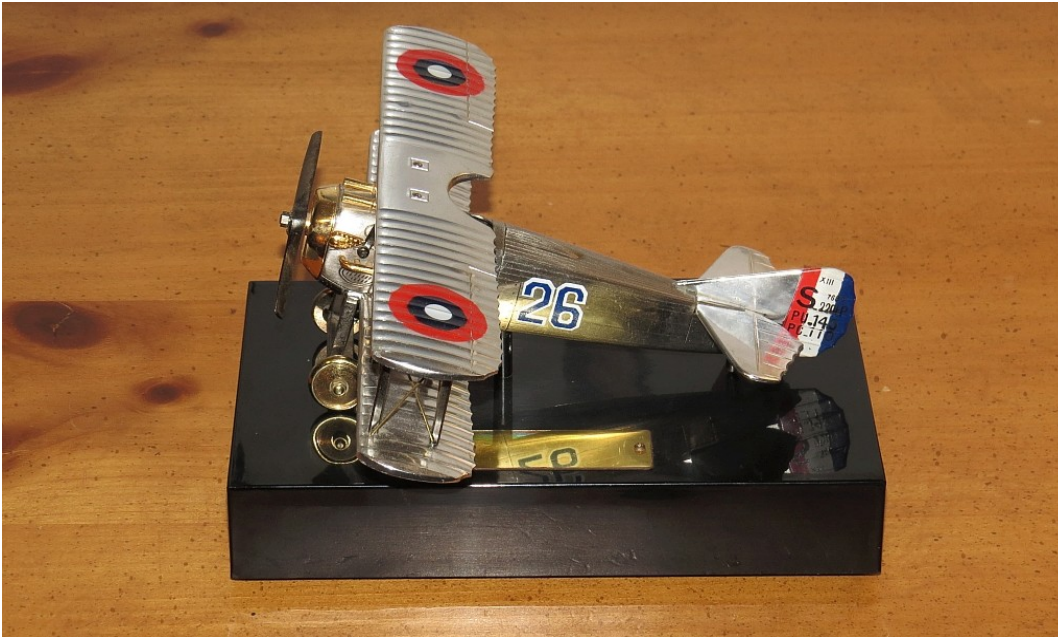
The H130/EC130 is designed with numerous safety features, including flight data recorders, crash-worthy seats, and redundant flight control systems. The cockpit has straightforward instrumentation and features aids such as Vehicle and Engine Multifunction Displays (VEMD) to reduce pilot workload. The Turbomeca Arriel 2D turboshaft engine and the three-bladed Starflex main rotor improve fuel efficiency. The large cabin can accommodate seven seated passengers or a pair of stretchers, two emergency medical technicians, and their medical equipment.

This helicopter is a 2015 EC130 T2 owned by Air Methods Inc. and operated by LifeNet of New York. LifeNet of New York operates ten helicopters and one fixed-wing aircraft, providing 24/7/365 air medical transport services throughout New York, Pennsylvania, Vermont, and Massachusetts.





SPAD XIII Fighter Old-Timer Bi-Plane Radio



During the 1970s, WACO-Japan made this transistor radio featuring a detailed metal replica of the SPAD XIII fighter from World War I. The radio is located in the black plastic encasement, which doubles as a display stand for the model. This radio was part of a series of novelty transistor radios made by WACO-Japan in the early 1970s featuring detailed replicas of vintage automobiles, ships, aircraft, and historical artifacts.

Introduced in the mid-1950s, transistor radios changed the way people listened to music and other broadcasts. Before the invention of the transistor in 1947, portable radios used vacuum tubes, which were fragile, expensive to manufacture, and required heavy batteries for power. The transistor revolutionized consumer electronics, including radios, by allowing devices to be manufactured in convenient sizes that fit on desks and shelves, as well as in pockets and purses. Initially called “Solid State” radios to reflect that they were made with the new technology, transistor radios became the most popular electronic communication devices by the 1960s and 1970s.

As transistor radios became smaller and the technology became more reliable, they featured more elaborate designs and styling. Several electronics companies began manufacturing transistor radios as novelty items, with the radios doubling as décor and collector’s items. Novelty radios were also manufactured as advertising and promotional items for customers of well-known brands or companies. Most of these novelty radios were manufactured by electronics companies in Japan. One such company was WACO-Japan, a company that produced radios, toys, and other handheld electronic devices. During the 1970s, WACO-Japan produced a series of “Old-Timer” transistor radios that featured replicas of historic automobiles, ships, aircraft, and even a late 1800s steam fire engine.

The SPAD XIII Fighter Old-Timer Bi-Plane Radio was made by WACO-Japan in the early 1970s. The radio features an all-metal replica of a SPAD XIII World War I fighter airplane in the markings of American ace Frank Luke Jr., who was credited with 19 aerial victories during World War I. The SPAD XIII was one of the most capable fighter aircraft built during World War I. Introduced in 1917, the SPAD XIII was widely used by American squadrons during the last year of the war and praised for its high speed, sturdy construction, and excellent armament. The radio is enclosed in a black plastic casing, which doubles as a display base for the model of the SPAD XIII. The radio receives broadcasts on the AM frequency band and is powered by a 9-volt battery. A plaque on the radio casing was removable, allowing for engraving with a personal message or name.

This example of the SPAD XIII Fighter Old-Timer Bi-Plane Radio originally belonged to my grandfather. He displayed it for many years in his home among his collections of model airplanes and aviation memorabilia. The radio is in working condition and can still receive local AM radio station broadcasts.





The radio featured a beautifully detailed model of the SPAD XIII fighter made entirely of metal. The model was removable from the radio, and many people kept the model as a display piece after the radio failed. Unfortunately, the wing rigging is made of thin metal wire and is often found bent or broken on these models.



The radio was enclosed in a black plastic encasement. One side of the encasement has an on/off switch, and the other a tuning dial. The compartment for the 9-volt battery is located on the bottom. A plastic post on top of the encasement is inserted into the model of the SPAD XIII to hold it in position.



John Jenkins Designs Focke-Wulf Fw 190 A-5/R-11 “White 9”



This outstanding 1/30 scale model of a Focke-Wulf Fw 190 A-5/R-11 night fighter is a new release from the toy soldier manufacturer John Jenkins Designs as part of the company's "Second World War: Knights of the Skies" product line. The model replicates the Fw 190 A-5/R-11 "White 9" flown by accomplished night fighter pilot Oberfeldwebel Gunther Migge when he was based at Werneuchen as part of 1./NJGr. 10 in 1944.

The Focke-Wulf Fw 190 is a German single-seat, single-engine fighter aircraft introduced in 1941 and used throughout World War II. The Fw 190 had the distinction of being the only German fighter aircraft used during the war that was powered by a radial engine. Along with its well-known counterpart, the Messerschmitt Bf 109, the Fw 190 became the backbone of the Jagdwaffe (Fighter Force) of the Luftwaffe. In addition to its use as a day fighter, the Fw 190 was used as a fighter-bomber, night fighter, and ground-attack aircraft.

In 1937, the Reich Air Ministry issued a contract to the Focke-Wulf Airplane Company for a single-engine fighter to supplement the Messerschmitt Bf 109, which was just entering service as the standard day fighter in the Luftwaffe. A team at Focke-Wulf, led by Professor Kurt Tank, submitted two proposals for the new fighter. The first proposal used the same Daimler-Benz DB 601 liquid-cooled, inline engine found in the Messerschmitt Bf 109, and the second proposal used a BMW 139 air-cooled, radial engine. With the production of the DB 601 engine allocated to the Bf 109 and the twin-engine

Messerschmitt Bf 110 heavy fighter, the Reich Air Ministry selected the second proposal for development, despite the Ministry's and the Luftwaffe's preference for aircraft designs with liquid-cooled engines. The new aircraft was designated the Fw 190, and the prototype flew for the first time on June 1, 1939. The prototype Fw 190 flew well, but cockpit and engine temperatures were high. The problem was discovered to be the tight engine cowling that reduced drag but choked airflow to the engine.

As Professor Kurt Tank and his team worked to solve the overheating issues, the first Fw 190s entered service with JG 26 (Jagdeschwader or Fighter Wing) in France in August 1941. In September, these Fw 190s and their pilots began tangling with Royal Air Force (RAF) Supermarine Spitfires sent on fighter sweeps over France. The new Fw 190 proved to be superior to all the Allied fighters it encountered in every performance attribute except turning radius. Until the Spitfire IX was introduced in late 1942, the Allies had no fighter equal in performance to the Fw 190.



As the war progressed, the Focke-Wulf improved the Fw 190 to compete with newer Allied fighters. A notable production variant of the Fw 190 was the A-5 subtype. On this variant, Tank and his design team moved the engine forward 15 inches (38 cm) on the airframe. This design change finally solved the overheating issues that plagued earlier variants of the fighter. The A-5 subtype of the Fw 190 was used against unescorted U.S. heavy bomber raids into Germany in 1943, inflicting significant losses on the bombers. The A-7 and A-8 subtypes of the Fw 190 incorporated heavier armament designed to be devastating to large enemy bombers, with the A-8 being the most-produced fighter subtype of the Fw 190. As the war progressed, the need for Fw 190s also grew. Eventually, five Focke-Wulf plants were involved in building Fw 190s, with manufacturers Ago, Arado, and Fiesler also building examples of the fighter under license.

Later in the war, the Luftwaffe struggled to develop and design improved variants of the Fw 190 due to shortages of strategic materials. The A-8 subtype's heavier armament reduced its top speed, making it vulnerable to Allied fighters in combat. The Fw 190 B and C variants never made it beyond the prototype stage. The Fw

190 D, introduced in 1944, incorporated a powerful Junkers Jumo 210 liquid-cooled engine, but arrived too late to change the Luftwaffe's fortunes in the skies.

The Fw 190 was effective in all theaters of operation but excelled on the Eastern Front, where its wide-track landing gear and air-cooled radial engine were ideally suited to the harsh climate conditions and colder temperatures. Operations on the Eastern Front led to the development of several variants of the Fw 190 F fighter-bomber, which carried over 790 pounds (360kg) of armor plating and could be armed with bombs, rockets, and even torpedoes for use against enemy shipping. The F-8 was the most produced subtype of the Fw 190 F.

The Fw 190 proved to be a versatile aircraft, performing effectively as a fighter and a bomber. The Fw 190 was unofficially nicknamed Wurger (English: Shrike) by its pilots and ground crews. Allied pilots nicknamed the Fw 190 the "Butcher Bird". Unfortunately, the German aircraft industry could not build enough Fw 190s to meet the demands of the Luftwaffe. Germany's declining war position, including fuel shortages and the loss of experienced pilots, only worsened the Luftwaffe's situation. By war's end, Focke-Wulf and its contractors had built 20,000 Fw 190s of all variants.



The John Jenkins Focke-Wulf Fw 190 A-5/R-11 night fighter has several working parts that add a sense of realism to the model. Some of these working parts include a spinning propeller, an opening canopy revealing a detailed cockpit, and opening and closing flaps. The model also features antenna arrays representing the Neptun J3 radar system and flame dampers over the exhaust stacks, accurately portraying specific design aspects of the Fw 190 A-5/R-11 night fighter.





The application of the paint and markings on the John Jenkins Focke-Wulf Fw 190 A-5/R-11 night fighter "White 9" is another outstanding aspect of this model. The model features an excellent mottling camouflage pattern that uses accurate colors and matches historical photos of the actual aircraft. John Jenkins Designs also added weathering throughout the model's panel lines and exhaust stains near the engine, giving the model the effect of being an aircraft used in combat.

This 1/30 scale model of the Fw 190 is manufactured by the toy soldier company John Jenkins Designs. It is part of the company's "Second World War: Knights of the Skies" product line of World War II aircraft models and figures depicting ground crew and pilots. The model is product-coded ACE-211, and a new August 2025 release from the company. This Fw 190 model is the first new aircraft model produced by the company in several years. The model is primarily made of resin, with plastic and photo-etched metal being used for some parts. The model comes fully painted and features interchangeable landing gear parts, a spinning propeller, movable canopy, opening and closing flaps, and a working crew step.

The new Fw-190 model represents "White 9", an Fw 190 A-8/R-11 night fighter equipped with the FuG 218 Neptun J3 radar system, and was fitted with flare damper fins over the exhaust stacks. This particular Fw 190 was flown by Oberfeldwebel Gunther Migge as part of 1./NJGr. 10 based at Werneuchen in 1944. Migge and 1./NJgr. 10 were tasked with defending important German cities from nighttime Allied bombing raids and flew Fw 190s from January to July 1944. Migge was an accomplished night fighter pilot, achieving several kills with this aircraft.

John Jenkins Designs did an incredible job replicating the Fw 190 A-8/R-11 "White 9". The model is painted in an accurate mottling camouflage pattern and squadron markings, matching several wartime photos that are available of the actual aircraft. The paint application is well-executed, with no noticeable flaws or defects. Subtle weathering to the model's paint, including exhaust staining near the engine, gives the Fw 190 night fighter a sense of realism.

John Jenkins Designs also did an excellent job engineering the design of the parts for this model. The delicate antenna array pieces for the Neptun J3 radar system come already attached to the model, so there's no risk they get bent or break trying to attach them to the model. The interchangeable landing gear parts are attached to the model using concealed magnets combined with a locking tab that inserts into the wing. The use of hidden magnets for the landing gear parts eliminates the need for peg-style plastic tabs on the landing gear parts that can break over time. The external fuel tank and propeller are also well-engineered pieces on this model. These pieces use metal rods that insert into the model, which fit more securely and are more durable than those made of plastic or resin.



Finally, John Jenkins Designs deserves significant credit for releasing such a unique model of the Fw 190. There have been dozens of models of this famous German World War II fighter aircraft released by model manufacturers over the years, but very few of a night fighter version of the Fw 190. This model of the Fw 190 tells an often forgotten story of the Luftwaffe during World War II and their desperate efforts to defend against nightly attacks on German cities by Allied bombers.

Although an excellent model, this latest release of the Fw 190 by John Jenkins Designs has some minor issues. The model, due to its photo-etched parts and radar antenna arrays, is fragile. Caution must be used when inserting the propeller, landing gear, and external fuel tank so as not to break any of the antennas. Another small issue is the functioning parts on the model. The propeller spins freely, but the sliding canopy is difficult to move and position correctly in the open position. There is a risk of breakage if it is moved with too much force. The flaps open and close easily and are incredibly detailed, but it is challenging to keep them positioned as if they were open.

The other issue with this model is that it does not include a display stand. Several years ago, John Jenkins

Designs sold clear acrylic display stands for their aircraft models so they could be displayed on a shelf as if they were flying. Unfortunately, these display stands have been discontinued and are no longer available from any John Jenkins Designs dealer. Unless you already have one of these display stands in your collection, there is no way to display the Fw 190 in flight. This makes parts that come with the model, to display it with the landing gear retracted, useless at this time. Hopefully, in the future, John Jenkins Designs will consider re-releasing the display stands for collectors, so they have the option to display these models in flight.

The John Jenkins Designs Fw 190 A-8/R-11 "White 9" night fighter is an excellent model with an incredible amount of detail. The model features a museum-quality paint scheme, and several working parts offer an impressive amount of detail and realism. The Fw 190 A-8/R-11 "White 9" also makes an excellent companion piece to the previously-released ACE-262NF, the John Jenkins Designs Messerschmitt Me-262B-1a/U1 "Red 12" night fighter model. Both models are wonderful display pieces for any model airplane collection, and help tell the story of the Luftwaffe's efforts to defend the night skies of the Third Reich during World War II.



The Fw 190 A-5/A-11 night fighter makes an excellent companion piece to the Messerschmitt Me-262B-1A/U1 night fighter model previously released by John Jenkins Designs. The two models are wonderfully detailed and feature several moving parts, allowing for a wide range of display possibilities in a model airplane collection or diorama. Both models also represent examples of aircraft used by the Luftwaffe to defend the German skies against nighttime Allied bombing raids during World War II.



National Warplane Museum- Geneseo Airshow



Commonly known as “The Greatest Show on Turf”, the annual airshow drew thousands of people to see aircraft from all eras of aviation history take to the skies at the museum located in Western New York near the town of Geneseo.

The National Warplane Museum’s Douglas C-47 Skytrain “Whiskey 7” performs a flight demonstration during the 2025 Geneseo Airshow. “Whiskey 7” is a D-Day veteran, having flown as the lead plane of the second wave of paratroopers dropped that day. During the operation, “Whiskey 7” dropped paratroopers from the 82nd Airborne Division’s 505th Parachute Infantry Regiment.





“Tora, Tora, Tora”, an airshow team that flies replicas of World War II Japanese aircraft and demonstrates a recreation of the Japanese attack on Pearl Harbor, flies high above the Geneseo Airshow at the conclusion of their airshow performance. The team, which is part of the Commemorative Air Force, has been flying its airshow demonstration for airshow audiences for over 50 years.

The National Warplane Museum, located in Geneseo, New York, held its annual Geneseo Airshow on July 11, 12, and 13. The airshow, held at the museum’s grass airfield just outside of the town of Genseso, is often referred to as “The Greatest Show on Turf”. With a large selection of restored World War II aircraft in attendance and flying at the event each year, the airshow is one of the largest held on a grass airfield in the United States. In addition to the airshow flight demonstrations, the event also featured World War II reenactors and vehicles and access to the National Warplane Museum buildings and exhibits.

This year, the Geneseo Airshow featured a rare appearance from the “Tora, Tora, Tora”. Flying replicas of World War II Japanese aircraft, the airshow team performs a reenactment of the Japanese attack on Pearl Harbor, with pyrotechnics and narration adding to the realism of this living history display. Also appearing at the airshow was the Jack Aces Formation Aerobatic Team flying three P-51 Mustangs. The airshow also featured several World War II aircraft in

attendance, including a rare visit by a restored Curtiss SB2C-5 Helldiver operated by the Commemorative Air Force’s West Texas Wing. Appearing for the first time at the Geneseo Airshow was “Beach City Baby”, a rare Douglas C-53 Skytrooper operated by Vintage Wings Inc. Highlighting solo aerobatic demonstrations at the airshow were Thom Richard flying a General Motors FM-2 Wildcat, John “Skipper” Hyle flying his North American Harvard, and Rick Volker flying his SIAI-Marchetti SF-260. The Geneseo Airshow also included appearances by the U.S. Air Force’s F-35 Lightning II Demonstration Team and the U.S. Navy’s Rhino Demonstration Team, which showcased the capabilities of the Boeing F/A-18F Super Hornet multirole aircraft. These teams staged for the airshow from the nearby Rochester International Airport.

Despite warm summer temperatures, high humidity levels, and heavy thunderstorms which forced the airshow to be cut short on Sunday, the Geneseo Airshow was well-attended both days of the event. The following photographs feature some of the airshow highlights from the 2025 Geneseo Airshow.



Flying began early at the airshow with some training and liaison aircraft taking to the skies to start things off, including this restored de Havilland D.H. 82 Tiger Moth. The Tiger Moth served as the primary training aircraft for the Royal Air Force throughout World War II. In addition to the Royal Air Force, the Tiger Moth was used as a primary trainer by the British Commonwealth countries, including the Royal Canadian Air Force, the Royal New Zealand Air Force, and the Royal Australian Air Force.



A casual viewer would think this is a Piper L-21 Super Cub, the military variant of the Piper PA-18 Super Cub light utility aircraft that was introduced by Piper Aircraft in 1949. However, this is actually a Wag-Aero Cuby Super Sport, a replica of the Piper Super Cub available in kit form to amateur homebuilders. This aircraft was built as a replica of an L-21B Super Cub. In addition to use with the U.S. military, over 500 L-21Bs were provided to other nations for use as utility and training aircraft.





This Boeing Stearman is a regular visitor and flyer at the Geneseo Airshow. The Boeing Stearman was built as a primary trainer before and during World War II. During the war, the Stearman was used by the U.S. Navy, U.S. Army Air Forces, U.S. Marine Corps, and the U.S. Coast Guard. The Stearman was also used by the Royal Canadian Air Force. During World War II, the U.S. Army Air Forces gave 300 Stearmans to the Royal Canadian Air Force under Lend-Lease for training purposes.

For many aviation enthusiasts, no World War II airshow is complete without a restored North American P-51 Mustang in attendance and flying. The 2025 Geneseo Airshow was fortunate to have Scott Yoak attend with his restored P-51 Mustang "Quicksilver". Scott Yoak attends several airshows each year with "Quicksilver". Yoak performs an aerobatic demonstration with the P-51 that showcases the performance and maneuvering capabilities of one of World War II's most famous fighters.



Scott Yoak performs a photo pass with his North American P-51D Mustang "Quicksilver". Entering service in mid-1944, the P-51D variant finally provided the U.S. Army Air Forces with a fighter capable of escorting bomber formations all the way to Germany and back. In addition to its role as a long-range escort fighter, the P-51 was also used for ground attack and photo reconnaissance missions. The P-51, designated the F-51, also saw service in the Korean War in the ground-attack role.



The 2025 Geneseo Airshow featured an excellent demonstration of a restored General Motors FM-2 Wildcat fighter flown by renowned warbird pilot Thom Richard. Richard is a well-known figure in the airshow industry, flying warbirds such as the North American P-51 Mustang and Curtiss P-40 Warhawk. Initially designed by Grumman, the Wildcat was license-built during World War II by General Motors. The FM-2 was a more powerful and improved variant of the Wildcat built by the company.





The Wildcat was the only effective fighter available to the U.S. Navy at the start of World War II to combat the Japanese Mitsubishi A6M Zero. Early versions of the Wildcat played a key role in the Battle of Midway and the Battle of Guadalcanal. When the Wildcat was superseded on larger aircraft carriers by the F6F Hellcat, it continued to serve on smaller escort carriers. Later versions of the Wildcat, like the FM-2, were noted for their excellent maneuverability and rugged construction.

The 2025 Geneseo Airshow was supposed to feature a performance from Trevor Rafferty in his bright red and white Pitts Model 12 aerobatic biplane. Unfortunately, a minor incident during take-off for his performance meant Rafferty was forced to scratch from the airshow so he could check the Pitts Model 12 for damage. The Pitts Model 12 is a high-performance biplane and one of the last aircraft designed by Curtis Pitts. Since its introduction in 1996, 59 examples of the Pitts Model 12 have been completed.



The Commemorative Air Force Airbase Georgia attended the 2025 Geneseo Airshow with their Goodyear FG-1D Corsair, with John Currenti serving as the pilot. Early problems with Corsair operations from aircraft carrier flight decks due to its stiff landing gear slowed its entry into service. Once those problems were remedied, the Corsair became one of the most formidable naval fighter-bombers in the Pacific theater. Over 12,700 Corsairs were built in several variants from 1942 to 1953.



The National Warplane Museum flew several aircraft in its collection during the 2025 Geneseo Airshow, including this Vultee BT-13A Valiant. The Valiant was a basic training aircraft, designed for student pilots to fly after completing primary flight training. The Valiant required student pilots to learn and master the operation of flaps, a radio, and operate a controllable-pitch propeller. The Valiant was faster and more powerful than primary training aircraft such as the Boeing Stearman.





The North American T-6 Texan was a single-engine advanced training aircraft used from World War II into the 1970s. During its long career, the aircraft was known by many designations in service, including the AT-6 in U.S. Army Air Forces service, the T-6 in U.S. Air Force service, the SNJ in U.S. Navy service, and the Harvard when in service with the British Commonwealth countries. Over 15,000 T-6s were built, and restored examples remain popular as warbirds and airshow aerobatic aircraft.

The National Warplane Museum's Douglas C-47 Skytrain "Whiskey 7" had a busy weekend at the Geneseo Airshow. In addition to flying as part of the flying display of transport aircraft, the C-47 also served as the jump ship for the parachutists during the airshow's opening ceremonies. The C-47 was one of the workhorse transport aircraft used during World War II. General Dwight Eisenhower believed that the C-47 was one of the key weapons used by the Allies to help them win the war.



One of the highlights at the Geneseo Airshow in 2025 was the appearance of the Jack Aces Formation Aerobatics Team. The team, consisting of pilots Louis Horschel, Ariel Luedi, and Marco Rusconi, flies three restored World War II-era P-51 Mustangs in an aerobatic routine. The routine highlights the performance of one of World War II's most famous fighter aircraft. The Jack Aces pilots all have extensive experience flying restored World War II aircraft and formation aerobatics at airshows.



Louis Horschel and Ariel Luedi fly in formation during the performance of the Jack Aces Formation Aerobatics Team on Saturday afternoon at the Geneseo Airshow. Horschel and Luedi fly TF-51 Mustangs, a two-seat conversion of the P-51D Mustang designed for aerobatics and for flight training. Many of the TF-51 conversions were completed by Cavalier Aircraft Corporation in the 1960s. The TF-51 Mustangs also have a taller tail than the standard P-51D Mustang and have a different style canopy.





One of the highlights of this year's Geneseo Airshow was the performance by the "Tora, Tora, Tora". The airshow team, which is a part of the Commemorative Air Force, recreates the Japanese attack on Pearl Harbor using replica Japanese aircraft, pyrotechnics, and historical narration. "Tora, Tora, Tora" began performing their airshow demonstration in 1972. This aircraft is one of the team's replica Nakajima B5N2 "Kate" torpedo bombers taking off for the demonstration on Saturday afternoon.

A replica Mitsubishi A6M2 "Zero" fighter in action with the "Tora, Tora, Tora" airshow team at the Geneseo Airshow on Saturday. The replica aircraft used by the team were built for the 1970 war film of the same name using surplus North American T-6/Harvard advanced trainers. The airplanes were modified with different canopies, landing gear fairings, cowlings, fuselage plugs, and smoke systems to make them look as authentic as possible to the World War II Japanese aircraft they were representing.



Two of the “Tora, Tora, Tora” Naka-jima B5N2 “Kate” replicas in action during the team’s demonstration on Saturday afternoon. The B5N “Kate” was the standard carrier-based torpedo bomber used by the Imperial Japanese Navy for most of World War II. The “Kate” could also serve as a high-level bomber. Considered the world’s best torpedo bomber at the start of World War II, the B5N was widely used during the attack on Pearl Harbor and did devastating damage to U.S. ships during the raid.



One of the “Tora, Tora, Tora” team’s aircraft has been painted in the markings of a U.S. Army Air Corps Curtiss P-36 Hawk fighter. During the Japanese attack on Pearl Harbor, very few American pilots were able to get airborne to defend against the Japanese air raid. These American pilots mostly flew outdated Curtiss P-36 Hawks, although some flew the newer Curtiss P-40 Warhawks. Despite being massively outnumbered, the American pilots did manage to shoot down some Japanese aircraft.





A new visitor to the Geneseo Airshow in 2025 was the Champaign Aviation Museum's restored North American B-25J Mitchell "Champaign Gal". "Champaign Gal" was one of three restored B-25 Mitchells to visit the Geneseo Airshow this year, with two of them flying in the bomber flight portion of the airshow. The Champaign Aviation Museum acquired this B-25 in 2008. "Champaign Gal" visits airshows, warbird gatherings, fly-ins, and aviation events throughout the United States.

"Champaign Gal" performs a flyby for the airshow crowd with its bomb bay doors open on Saturday afternoon at the 2025 Geneseo Airshow. "Champaign Gal" was built in 1944 and served with the U.S. Army Air Forces, later the U.S. Air Force, for 13 years as a trainer and transport. After being retired from military service, it was bought as surplus and used to fight wildfires in Canada and the United States. The B-25 was restored to its original wartime configuration in the late 1980s.



Modern military aircraft also took center stage at the Geneseo Airshow with demonstrations from teams by both the U.S. Navy and the U.S. Air Force. The U.S. Navy's Rhino Demonstration Team showcased the capabilities of the F/A-18 Super Hornet multi-role strike fighter. The Rhino Demonstration Team is part of VFA-106. VFA-106 is the Super Hornet East Coast Fleet Replacement Squadron and is responsible for training new aviators as well as demonstrating the F/A-18 Super Hornet at airshows.



The Rhino Demonstration Team demonstrates the F/A-18 Super Hornet's inverted flight capabilities at the 2025 Geneseo Airshow. The F/A-18 Super Hornet is a highly maneuverable, carrier-capable, twin-engine, multirole fighter built in single-seat (E variant) and two-seat (F variant) configurations. The Super Hornet entered service in 1997 and has been used extensively in recent U.S. military conflicts in the Middle East. The Super Hornet is commonly referred to as "Rhino" in U.S. Navy service.





The Tunison Foundation's Douglas C-47 Skytrain "Placid Lassie" is also a D-Day veteran aircraft. After serving in several key Allied airborne operations during World War II, "Placid Lassie" was sold as surplus and passed through several owners. "Placid Lassie" ended up abandoned and parked at an airport in the United Kingdom in the early 2000s. "Placid Lassie" was found and restored by businessman James Lyle in 2010. The Tunison Foundation began flying "Placid Lassie" on the airshow circuit in 2018.

Visiting the Geneseo Airshow for the first time this year was Vintage Wings Inc.'s Douglas C-53 Skytrooper "Beach City Baby". The C-53 Skytrooper was a Douglas DC-3 specifically designed for military service. The C-53 did not have the large cargo doors, reinforced floor, or strengthened landing gear of the C-47 Skytrain, which was designed specifically for military service. During World War II, C-53s were used for a variety of missions, including personnel transport, paratroop drops, and towing gliders.



In addition to the U.S. Navy's Rhino Demo Team, the Geneseo Airshow also featured an appearance from the U.S. Air Force's F-35A Demo Team. The F-35A Demo Team is part of the 388th Fighter Wing based at Hill Air Force Base in Utah. The mission of the team is to highlight the capabilities of the U.S. Air Force's most advanced fifth-generation stealth strike fighter. For the 2025 airshow season, the team's demonstration pilot and commander is Major Melanie "Mach" Kluesner.



The F-35A Lightning II entered service with the U.S. Air Force in 2016. Advanced features of the F-35A Lightning II include internal weapons bays designed to hide the heat signatures of the ordnance carried and preserve the stealth shaping of the airframe, and avionics and sensor fusion systems to improve the pilot's situational awareness. The F-35A also features a state-of-the-art helmet system that displays information on the pilot's visor, eliminating the need for a heads-up display (HUD).





One of the final displays on Saturday at the 2025 Geneseo Airshow was a performance of the U.S. Air Force Heritage Flight. The Heritage Flight is designed to showcase the history of the U.S. Air Force by displaying aircraft from the past and present together in a rare formation flight. For the Geneseo Airshow, Major Melanie "Mach" Kluesner flew the F-35A Lightning II with the restored North American P-51D Mustang "Bald Eagle" flown by Jim Beasley Jr., who is a longtime supporter of the program.

Jim Beasley Jr., in his P-51D Mustang "Bald Eagle", leads Major Melanie "Mach" Kluesner in the F-35A Lightning II during the U.S. Air Force Heritage Flight at the Geneseo Airshow. The U.S. Heritage Flight program began at select U.S. airshows in the early 1990s and has grown in popularity since. Civilian pilots participating in the Heritage Flight take part in an annual winter training program to practice flying in formation and with the U.S. Air Force demo team pilots and their fighter aircraft.



Flying started at the 2025 Geneseo Airshow early on Sunday morning with primary training and liaison aircraft taking to the skies first. Quentin Marty was once again in the skies with his restored Boeing Stearman, waving to the crowd during his flybys. The Stearman remains a popular vintage aircraft in the United States. Large numbers have been restored and are airworthy. Restored Stearmans are regular visitors to airshows, fly-ins, and other aviation events throughout the United States.



The National Warplane Museum maintains several historic aircraft in airworthy condition, including this Aeronca L-16A "Champ". The L-16 was the military version of the Aeronca Champion light utility aircraft. Introduced in 1945, over 10,000 "Champs" were built. The L-16 was used in the liaison role by the U.S. Army during the Korean War. This aircraft began life as a civilian 7-AC Champ but was converted into an L-16A during its restoration, complete with the correct greenhouse canopy windows.





A restored DH.82 Tiger Moth flying as part of the training and liaison aircraft group on Sunday at the Genseo Airshow. The Tiger Moth remained in military service as a primary training aircraft in most nations until the early 1950s. Once they were retired from military service, thousands of these little biplanes were offered as surplus. Today, the Tiger Moth remains a popular recreational airplane and is still sometimes used as a training aircraft for pilots training to fly other types of tail-wheel aircraft.

There was a threat of severe weather later in the day on Sunday, and this threat caused some pilots to depart for home early from the airshow on Sunday morning, including this PT-26 Cornell from the Commemorative Air Force's New York Wing. The PT-26 was a version of the PT-19 Cornell primary training aircraft with an enclosed cockpit. Most PT-26s built were sold to the Royal Canadian Air Force, where the enclosed cockpits were appreciated in the colder Canadian climate in the winter months.



Ed Vesely performs a low pass on Sunday at the Geneseo Airshow in the Commemorative Air Force West Texas Wing's Curtiss SB2C-5 Helldiver. Designed as a replacement for the Douglas SBD Dauntless, the larger and more powerful Helldiver was plagued with technical problems during its development, which delayed its entry into service until late 1943. The Helldiver had the distinction of being the last purpose-built dive bomber ever put into production and operational service for the U.S. Navy.



Ed Vesely performs a photo pass with the Commemorative Air Force West Texas Wing's Curtiss SB2C-5 Helldiver Sunday morning at the National Warplane Museum's Geneseo Airshow. Although the Helldiver was a tricky aircraft to fly and maintain, the aircraft compiled a useful war record in the last years of World War II. Notably, Helldivers were used in battles at the Marianas, Philippines, Taiwan, Iwo Jima, and Okinawa. Helldivers were also used in tactical attacks on the Ryukyu Islands in 1945.





Before departing for Georgia on Sunday morning at the Geneseo Airshow, John Currenti performed aerobatic demonstration with the Commemorative Air Force Airbase Georgia's Goodyear FG-1D Corsair. Initially designed and built by Vought, with many examples later license-built by Goodyear, the Corsair was one of the most capable carrier-based fighter-bombers of the war. Improved variants of the Corsair also saw service with U.S. Navy and Marine Corps squadrons during the Korean War.

Steven and Juliet Lindrooth depart the Geneseo Airshow Sunday morning in their restored North American T-6G painted in the colors of a U.S. Navy SNJ trainer. Designed as an advanced training aircraft, the T-6/SNJ/Harvard handled similarly to fighter aircraft and is capable of performing aerobatics. The Lindrooths fly this restored T-6G frequently, visiting airshows and aviation events throughout the Northeast United States. They are based at the Van Sant Airport in Pennsylvania.



Rick Volker flies his unusual SIAI-Marchetti SF-260 on Sunday afternoon at the 2025 Geneseo Airshow. Volker is an experienced airshow and warbird pilot, having flown famous World War II fighter aircraft, such as the North American Harvard, Hawker Hurricane, and Supermarine Spitfire, as part of the exclusive Canadian Heritage Flight Team. In addition to being an airshow pilot, Volker is also a practicing general dentist. Volker has been a regular performer at the Geneseo Airshow over the years.



Rick Volker performs in his SIAI-Marchetti SF-260 at the Geneseo Airshow on Sunday afternoon. The SF-260 is an Italian light aircraft that has been marketed as a military trainer and aerobatics aircraft. During its production run, the SF-260 was sold primarily to military air arms as a trainer. The SF-260 has also been popular with smaller air forces, which armed the type for the close support role. In recent years, some SF-260s have found their way to the civilian market for use as aerobatic aircraft in airshows.





Providing a look at the maneuvers and aerobatics learned during flight training in World War II was John "Skipper" Hyle in his North American Harvard advanced trainer. Hyle is a regular at the Geneseo Airshow, performing an aerobatic routine at the event for several years with this aircraft or his restored Boeing Stearman. The Harvard was used by the Royal Canadian Air Force and several other Commonwealth nations as an advanced trainer during and immediately following World War II.

John "Skipper" Hyle climbs skyward in his restored North American Harvard during his aerobatic routine on Sunday at the Geneseo Airshow. Hyle's Harvard is painted in the unique color scheme used on Royal Canadian Air Force Harvards during World War II, which featured bright yellow combined with camouflaged sections. Late in World War II and during the 1950s, Canadian Harvards wore bright all-yellow paint schemes, clearly identifying them as trainers flown by student pilots.



Marco Rusconi takes to the sky in his North American P-51D Mustang "Cheryl Lynn" on Sunday afternoon at the Geneseo Airshow. Rusconi grew up in Italy and eventually moved to Canada. He enrolled in the Canadian Forces in 1997 and earned his RCAF pilot wings in 2004. Rusconi was fortunate enough to be selected to join the Canadian Forces Snowbirds and served as the #4 and the #7 pilot throughout the 2008-2011 airshow seasons. He is currently a test pilot for a major aircraft manufacturer.



The Jack Aces Formation Aerobatics Team performs a photo pass on Sunday afternoon at the Geneseo Airshow in their TF-51 and P-51 Mustangs. The team, led by Louis Horschel, who also serves as the manager for the U.S. Navy's "Legacy Flight" program, which pairs restored historic U.S. Navy warbirds with modern U.S. Navy combat aircraft. In addition to flying his TF-51, Horschel also flies his restored Goodyear FG-1 Corsair as part of Legacy Flights and in aerobatic routines at airshows nationwide.





One of the truly interesting aircraft at the airshow was this 1930 Fleet Model 2 owned and flown by Peter Triechler. This airplane was once owned by Robert Tyce, who operated K-T Flying Service at the John Rodgers Airport in Honolulu, Hawaii, which was training pilots in the Civilian Flight Training Program. On the morning of December 7, 1941, Tyce was preparing the Fleet for a day of flying when the Japanese attacked the airfield as part of the attack on Pearl Harbor. Tyce was hit by a bullet and killed.

Peter Triechler shows off the underside of his 1930 Fleet Model 2 during his flight demonstration at the 2025 Geneseo Airshow. Designed by Reuben Fleet, the Fleet Model 2 was the first airplane designed specifically for civilian pilot training programs. With a design that emphasized power and maneuverability, the Fleet Model 2 was acquired by flight schools across the country, gaining a positive reputation with flight instructors. Approximately 350 were produced for civilian and military use.



"Tora, Tora, Tora" was back in action Sunday afternoon at Geneseo with another recreation of the Japanese attack on Pearl Harbor. In this photo, one of the replica Mitsubishi A6M2 "Zero" fighters gets airborne. The "Zero" was a formidable fighter early in World War II, with phenomenal range and excellent maneuverability. The "Zero" came as a nasty surprise to Allied military commanders, who did not believe Japan was capable of building such a fighter aircraft.



One of the replica Nakajima B5N2 "Kate" torpedo bombers in action during the "Tora, Tora, Tora" performance on Sunday afternoon. When the Japanese replica aircraft were built for the 1970 film of the same name, they were painted different colors to represent aircraft from the Japanese aircraft carriers that were part of the raid. Some of the aircraft, like this "Kate", were fitted with fake ordnance so they would appear armed when the flying sequences of the movie were filmed.





One of the Nakajima B5N2 "Kate" replicas in action on Sunday at the airshow. In addition to the Attack on Pearl Harbor, the B5N "Kate" played a key role in early engagements in the Pacific theater, including the Battle of the Coral Sea, the Battle of Midway, and the Battle of Santa Cruz. The "Kate" was slow and lacked maneuverability, making it vulnerable to enemy fighters. When the Japanese lost air superiority later in the war, the B5Ns and their crews would suffer heavy losses.

In addition to the replica Japanese aircraft in the air, "Tora, Tora, Tora" also employs pyrotechnics and narration to enhance their airshow display. The ground pyrotechnics produce explosions and smoke that would be similar to what took place when the Japanese attacked Pearl Harbor. When the aircraft fly near this smoke, it can create some realistic photo opportunities. In this photo, one of the A6M2 "Zero" replicas flies past black smoke generated by the ground pyrotechnics.



Despite threatening weather in the form of thunderstorms and heavy rain popping up in the Geneseo area, the U.S. Navy's Rhino Demonstration Team was able to fly their Sunday performance at the Geneseo Airshow. The F/A-18F Super Hornet pulled a lot of vapor throughout its flight demonstration on Sunday afternoon thanks to the high humidity in the air. The noise of the F/A-18F's two General Electric F414 afterburning turbofan engines was also enjoyed by all in attendance.



Flying as part of the bomber flight demonstrations at the 2025 Geneseo Airshow was the North American B-25J Mitchell "Panchito" from the Delaware Aviation Museum. Introduced in 1941 and built in several variants, the B-25 was one of the most popular medium bombers used by the Allies during World War II. In addition to its use as a bomber during the war, variants of the B-25 were also used as a VIP transport, gunship, anti-submarine warfare aircraft, and reconnaissance aircraft.





"Panchito" performs a photo pass for the airshow crowd. The B-25 is famous for its use during the Doolittle Raid in early 1942. Led by Lt. Col. James Doolittle, 16 B-25s launched from the aircraft carrier U.S.S. Hornet to bomb Tokyo and other targets in a daring attack on the Japanese mainland. Although the raid caused minor damage and all the B-25s crash-landed in China or the Soviet Union, it raised morale in the United States after the devastating attack on Pearl Harbor just a few months before.

The National Warplane Museum's Douglas C-47 Skytrain "Whiskey 7" performs one final flyby in front of the airshow crowd on Sunday, just before a severe thunderstorm hits the airfield with heavy rain. This thunderstorm would cancel the airshow for the remainder of the afternoon, including the F-35A Demo Team's performance. Despite the weather cutting the Geneseo Airshow short on Sunday, the event was well-attended by spectators and featured a wide variety of aircraft in attendance.



Nieuport 28C.1



This Nieuport 28A on display in the National Air and Space Museum's Steven F. Udvar Hazy Center in Chantilly, Virginia, is restored as a Nieuport 28C.1 flown by American ace First Lieutenant James A. Meissner when he served with the 94th Aero Squadron in 1918. Arriving in Europe with no fighter aircraft of their own, four American squadrons adopted Nieuport 28s as an interim solution until superior SPAD S.XIIIs were available. As a result, the Nieuport 28 holds the distinction of being the first aircraft to see service with an operational American fighter squadron.

The notable French aircraft manufacturer Société Anonyme des Établissements Nieuport, later Société Nieuport, was founded in 1909 and gained prominence before World War I, building monoplane racing aircraft. The company's founders, Edouard de Niéport and his brother Charles, were both killed in aviation accidents before the war. The company's talented chief designer and engineer, Gustave Delage, joined the firm in 1914 and was responsible for the design of the highly successful wartime line of sesquiplane, V-strut, single-seat fighters, the most famous being the Nieuport 11 and Nieuport 17. The Nieuport 28 was built on the lineage of these successful aircraft with a continued design philosophy of a lightweight and highly maneuverable fighter aircraft powered by a rotary engine.

By the mid-1917, it had become clear that the Nieuport 17 was inferior to the new German fighter aircraft arriving on the front lines. In French squadrons, the Nieuport 17 was being replaced as quickly as possible with the new and superior SPAD S.VII fighter. It was clear to Gustave Delage that the V-strut design of the Nieuport 17

had reached its limit of development from a design and performance perspective.

The Nieuport 28 featured several improvements over its predecessors. The new fighter adopted a twin machine gun armament and a new wing structure. For the first time, a Nieuport fighter was fitted with conventional two-spar wings. Ailerons were fitted to the lower wings only and controlled through torque tubes. To provide a streamlined profile, the fuselage was longer and slimmer. The fuselage was so narrow that the Nieuport 28's twin Vickers machine guns had to be mounted offset to port, with one gun mounted between the cabane struts and the other mounted just outboard of them. In an attempt to compete with the new SPAD S.VII, the Nieuport 28 was fitted with a larger and more powerful 160-horsepower Gnôme Monosoupape 9N nine-cylinder, air-cooled rotary engine. The use of this heavier and more powerful engine required the use of a lower wing with greater surface area, eliminating the possibility of using the sesquiplane, V-strut configuration found on earlier Nieuport fighters.



The first production variants of the Nieuport 28, the 28C.1, were available in early 1918. Unfortunately, by that time, the SPAD S.XIII was established as the standard French fighter and viewed as superior to the Nieuport 28. However, the SPAD S.XIII was in short supply, and newly arriving American squadrons had no fighter aircraft of their own. The American squadrons adopted the Nieuport 28 as an interim solution until the SPAD S.XIIIs could be provided to them.

A total of 287 Nieuport 28s were provided to the United States. Initial allotments of the aircraft went to the 94th and 95th Aero Squadrons in March 1918. Unfortunately, the Nieuport 28s sent to these squadrons were not armed, and the American squadrons had no spare guns to fit to the aircraft. Initially, the squadrons flew the Nieuport 28s on familiarization and training flights until the Vickers machine guns arrived for installation on the aircraft. Eventually, four American squadrons, the 27th, 94th, 95th, and 147th Aero Squadrons, would be equipped with Nieuport 28s. These squadrons flew the Nieuport 28s during various periods between March

and August 1918. Several well-known American pilots, including Eddie Rickenbacker, began their careers flying Nieuport 28s. Quentin Roosevelt, the grandson of former U.S. President Teddy Roosevelt, was shot down and killed flying a Nieuport 28. The Nieuport 28 also holds the distinction of being the first type to score an aerial victory with an American unit. The event took place on April 4, 1918, when Lieutenants Alan Winslow and Douglas Campbell of the 94th Aero Squadron each downed an enemy aircraft in a dogfight that occurred over their home airfield at Gengoult.

As they were the first two squadrons to operate the type, the 94th and 95th Aero Squadrons had the task of dealing with the Nieuport 28's teething problems. The rotary engine and fuel system were prone to catching fire. Solutions to these problems included field improvements to the fuel lines and increased familiarity for ground crews in the operation of the rotary engines. The definitive solution to the problem was not to completely fill the reserve fuel tank, but this solution came at the expense of limiting combat range.





A more serious issue with the Nieuport 28 was structural integrity. During a sharp pull from a steep dive, the plywood leading edge of the top wing could break away, taking the fabric with it. Otherwise pleased with the flying characteristics and performance of their Nieuport 28s, this structural integrity issue shook the confidence of the pilots of the 94th and 95th Aero Squadrons.

In July 1918, the 94th and 95th Aero Squadrons received SPAD S.XIIIs, and some of their surviving Nieuport 28s were passed to the 27th and 147th Aero Squadrons. By August 1918, all four American squadrons were equipped with the SPAD S.XIIIs. Most American pilots preferred the SPAD S.XIIIs, but the maneuverability of the Nieuport 28, which was superior to that of the SPAD S.XIII, was missed by some of the pilots. Twelve of these Nieuport 28s were transferred to the U.S. Navy, where they were used from 1919 to 1921 for shipboard launching trials from platforms mounted to the turrets of eight U.S. Navy battleships.

During late 1918, the U.S. Army placed an order for an additional 600 improved Nieuport 28s, designated the

Nieuport 28A. Intended for use as trainers, the Nieuport 28A had a redesigned center wing section and fuel system to correct the faults in the first production run. The Nieuport 28A had provisions to mount twin M1917/1918 Marlin guns mounted side-by-side under the center section of the aircraft. A total of 170 Nieuport 28As and parts to assemble another 100 aircraft were manufactured before the contract was canceled.

After the war's end, about 50 Nieuport 28As found their way to the United States. Smaller numbers of Nieuport 28s were also used by air arms worldwide, including those of Switzerland and Argentina. Surplus Nieuport 28s were used by civilian pilots for barnstorming and air races throughout the 1920s. These aircraft often had their wings clipped and had their twin wing struts replaced with a single I-strut. Surplus Nieuport 28s were also used in Hollywood films, playing World War I aircraft from both sides on the big screen. Movies featuring flying scenes with Nieuport 28s included *The Dawn Patrol* (1930), as well as its remake in 1938, *Ace of Aces* (1933), and *Men with Wings* (1938).



The National Air and Space Museum's Nieuport 28 is a Nieuport 28A. The aircraft was acquired by the National Air and Space Museum in 1986 from Cole Palen, the founder of the Old Rhinebeck Aerodrome aviation museum in Red Hook, New York. Palen acquired the Nieuport 28 in poor condition from Hollywood movie and stunt pilot A. Paul Mantz in 1957. After he restored the Nieuport 28, Palen flew it regularly in airshows at the Old Rhinebeck Aerodrome from 1958 until 1972, when he retired it. The Nieuport 28 was on loan from Palen to the Intrepid Air and Space Museum in New York City when the National Air and Space Museum acquired it.

Research by National Air and Space Museum curators revealed that this Nieuport 28A consists of parts from several different aircraft. Unfortunately, none of those parts has an officially documented service history. Curators only know with certainty that, given the serial numbers of the parts, this airplane is assembled from parts of several Nieuport 28As that were built and shipped to the United States after World War I.

Because there was no way to verify its official service

history, National Air and Space Museum curators decided to restore the Nieuport 28A as a Nieuport 28C.1, serial number #6144, flown by First Lieutenant James A. Meissner of the 94th Aero Squadron. Meissner experienced wing failures in a dive with #6144 twice, incredibly, landing safely both times. Meissner went on to command the 147th Aero Squadron and was awarded the Distinguished Service Cross with Oak Leaf Clusters and the Croix de Guerre during the war. Meissner is usually credited in sources with eight victories. His official tally in U.S. Air Force records stands at five and $\frac{2}{3}$ victories after the U.S. Air Force changed the way it credited victories in 1969. Meissner survived the war and left the U.S. Army Air Service in 1919.

The Nieuport 28C.1 is painted how it would have appeared after May 10, 1918. The fighter carries standard U.S. wing and tail markings of the period, wears the famous "hat in the ring" 94th Aero Squadron insignia, and is painted in the standard factory-applied French camouflage. The airplane hangs on display in the National Air and Space Museum's Steven F. Udvar-Hazy Center.



Fairchild Republic A-10C Thunderbolt II

(2007)



The Fairchild Republic A-10 Thunderbolt II, also known unofficially as the “Warthog” or simply the “Hog”, is a single-seat, twin-turbofan, straight-wing, subsonic attack aircraft developed for the U.S. Air Force. The A-10 first flew in 1972 and entered service in 1977. The A-10C, a modernized variant with improved avionics and weapons capabilities, entered service in 2007. The A-10 provides close air support (CAS) to friendly ground forces by attacking enemy armored vehicles, tanks, and ground forces. The A-10 is the only aircraft designed solely for CAS to serve in the U.S. Air Force. Its secondary missions include acting as an airborne forward air controller (FAC), directing other assets in attacks on enemy ground targets. In recent years, the A-10 has also been used to support combat rescue operations of friendly forces in enemy territory.

Fairchild Republic A-10C Thunderbolt II

Crew: 1

Length: 53 ft 4 in (16.26 m)

Height: 14 ft 8 in (4.47 m)

Wingspan: 57 ft 6 in (17.53 m)

Wing Area: 506 sq ft (47.0 m²)

Powerplant: General Electric TF-34-GE-100A turbofans (x2)

Range: 250 nmi (463 km) (Combat Range), 2,240 nmi (4,150 km) (Ferry Range)

Maximum Speed: 439 mph (706 km/h)

Cruise Speed: 340 mph (560 km/h)

Empty/Gross/Maximum Takeoff Weights: 24,959/30,384/46,000 lb (11,321/13,782/20,865 kg)

Service Ceiling: 45,000 ft (13,700 m)

Armament: 30 mm (1.18 in) GAU-8/A Avenger rotary cannon (x1), up to 16,000 lb (7,260 kg) of guided and unguided bombs, air-to-air missiles, air-to-ground missiles, rocket pods, chaff/flare dispensers, electronic targeting pods or external fuel tanks on 11 pylons (x8 underwing, x3 under fuselage)



Saying Farewell To The “Hog”

Engines & Tail Structure

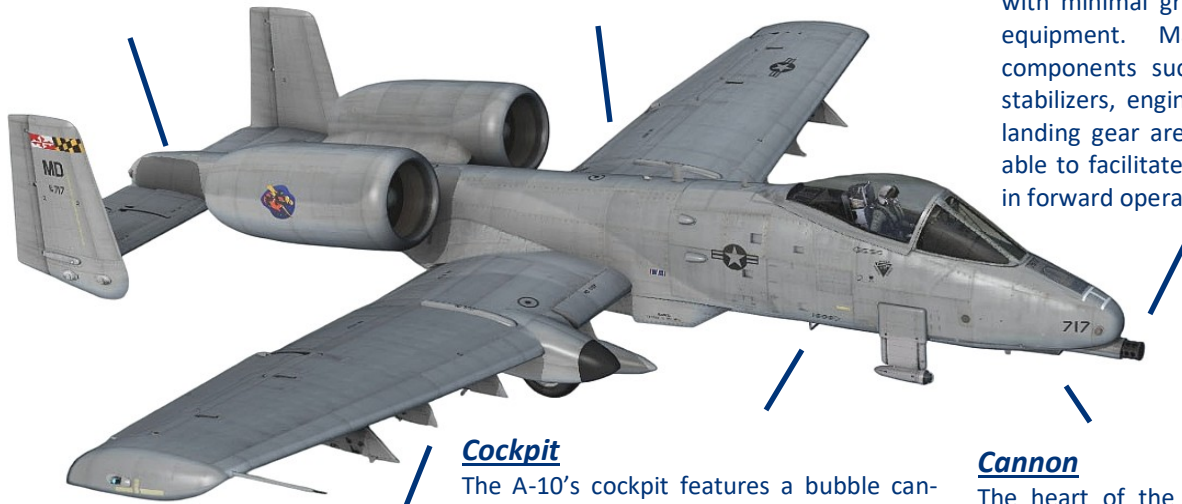
A pair of General Electric TF-34-GE-100A turbofan engines powers the A-10 Thunderbolt II. The unusual placement of the engines prevents the ingestion of foreign debris when the A-10 is operating from rough or unprepared airstrips close to the battlefield in forward operating areas. The high 6:1 bypass ratio of the engine helps it maintain a low infrared signature. The twin tail structure of the A-10 helps direct the hot engine exhaust over the tailplanes, reducing the A-10's infrared signature and the threat of strikes from heat-seeking missiles.

Wings

The A-10 was designed with a straight wing that has a large surface area. The high-aspect ratio of the wing and large ailerons give the A-10 exceptional maneuverability at low speeds. The wing holds the majority of the A-10's weapon load. There are eight weapon pylons on the underside of the wings. These pylons can carry a variety of air-to-ground and air-to-air missiles, guided and unguided bombs, rocket pods, flare/chaff dispensers, electronic countermeasures and targeting pods, and external fuel tanks. Unfortunately, the wings have been a maintenance issue for the A-10 fleet throughout its service life due to fatigue cracks forming where the wing joins the fuselage. In recent years, Boeing has been contracted to build new sets of wings to keep the A-10 fleet flying.

Survivability

The A-10 is a simple aircraft designed to operate in forward areas and survive direct hits from armor-piercing and high-explosive shells in a high-threat environment. The aircraft has double-redundant hydraulic systems and a backup mechanical system. Over 1,200 pounds (544 kg) of titanium armor protects the aircraft's avionics and hydraulic systems, and the fuel tanks are self-sealing. The A-10 can also be rearmed and refueled with minimal ground support equipment. Major aircraft components such as vertical stabilizers, engines, and main landing gear are interchangeable to facilitate quick repairs in forward operating areas.



104th Fighter Squadron

The 104th Fighter Squadron, assigned to the 175th Wing of the Maryland Air National Guard, has operated the A-10 Thunderbolt II since 1979. During its long history with the A-10, the 104th Fighter Squadron has deployed overseas several times to support U.S. combat operations worldwide, including in Iraq and Afghanistan. In 2024, the U.S. Air Force announced the 175th Wing would end A-10 flight operations in September 2025. The wing is being assigned a new, non-flying cyber mission. The U.S. Air Force planned to entirely phase out the A-10 from its inventory in 2026, but the imminent retirement of the attack aircraft has met resistance from members of the U.S. Congress, who may block some A-10 retirements in defense spending legislation.

Cockpit

The A-10's cockpit features a bubble canopy that gives the pilot excellent visibility of the combat environment. The pilot is protected by the same titanium armor that protects the A-10's avionics and hydraulic systems. The A-10's canopy and windshield are designed to withstand small-arms fire. The A-10's cockpit has been continuously upgraded since the aircraft's introduction into service in 1977. The upgraded avionics currently in the A-10's cockpit provide the pilot with two multifunction displays, a modern communications system, an improved fire control system, and all-weather combat capability. The A-10 flight control system is a hands-on throttle-and-stick configuration, combining the control stick of the F-16 Fighting Falcon with the throttle from the F-15 Eagle.

Cannon

The heart of the A-10's armament is the 30 mm (1.12 in) General Electric GAU-8/A Avenger cannon, located in the nose of the aircraft under the cockpit. The A-10 was designed and built around carrying this powerful cannon, which was designed for the anti-tank role. The cannon fires depleted aluminum shells at a rate of 3,900 rounds per minute. The cannon's magazine has a capacity of 1,300 rounds, but typically carries 1,174 rounds. The shells from this cannon can pierce the armor of any existing tank in the world and devastate enemy troop formations and supply dumps.



A Friday Evening With World War I Aviation



*Golden Age Air Museum President Paul Dougherty flies the museum's 1917 Curtiss JN-4D "Jenny" during the annual R/C Model Meet at the museum on Friday, August 15. **Next Page:** The full-scale aircraft demonstrations on Friday evening also included the museum's SPAD S.XIII flown by Neil Baughman, the Fokker Dr.I Triplane flown by Paul Dougherty, and the Sopwith Pup flown by Mike Damiani.*

The Golden Age Air Museum in Bethel, Pennsylvania, recently held its annual R/C Model Meet on August 13-16. Hosted by the Tri-County Sky Barons, the event features R/C pilots from several states flying scale models representing aircraft dating from the Pioneer Era to World War II. As part of this event, the Golden Age Air Museum performs flight demonstrations of select full-scale aircraft from its collection on Friday evening. This year, the flight demonstrations featured four aircraft from the museum collection representing the World War I era.

The first aircraft to perform a flight demonstration was the museum's 1917 Curtiss JN-4D "Jenny" with Golden Age Air Museum President Paul Dougherty at the controls. The "Jenny" was designed as a trainer and used extensively to train pilots during World War I. After the war ended, hundreds of surplus "Jennys" were utilized for air-mail and barnstorming work throughout the country. The museum's 1917 JN-4D is one of a handful of "Jennys" that survive in airworthy condition and was once owned by Hollywood and barnstorming pilot Earl S. Daugherty.

Following the "Jenny" flight demonstration, three replicas of famous World War I fighter aircraft took to the sky. These aircraft were the 1916 Sopwith Pup piloted by Mike Damiani and painted in the colors of Canadian ace James Glen, the 1918 Fokker Dr.I Triplane piloted by Paul Dougherty and painted in the colors of German ace Lothar von Richthofen, and the 1918 SPAD S.XIII piloted by Neil Baughman and painted in the colors of American ace Charles Biddle. All three of these aircraft are beautiful replicas built by the volunteer staff at the Golden Age Air Museum with historically researched colors and markings. Of special note is the Fokker Dr.I Triplane, which is powered by an original World War I era Le Rhone rotary engine. The Triplane is perhaps the most well-known of the World War I aircraft demonstrated due to its association with Manfred von Richthofen, the famous German ace better known as "The Red Baron". The three World War I fighters in the museum collection are also an excellent representation of the evolution of fighter aircraft designs throughout the war.

Partly cloudy skies, warm temperatures, and calm winds allowed the pilots to fly each aircraft for several passes over the airfield, giving the nearly 100 R/C modelers and other spectators on site an opportunity to see and photograph these rare World War I aircraft in the skies. Additional information about the Golden Age Air Museum, its aircraft collection, and public event calendar can be found at the museum's website: www.goldenageair.org.







**Distelfink
Airlines**

Est.
2013



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.

ABOUT

DISTELFINK AIRLINES

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.

"Distelfink Airlines" is an online newsletter featuring the aviation photography and writings of Corey J. Beitler. Contributions from guest photographers and writers are sometimes featured and are used only with prior permission. Public domain and/or copyright free images are utilized for some articles. All text and images are copyright to the original owners and may not be reproduced or reused without permission.