October 2025

Corey J Beitler's

"Distelfink Airlines"

An Online Aviation Newsletter

An A-10 Comes Home To Hagerstown

Fairchild XNQ-1/T-31

"BP Aviation Tanker" Promotional Collectible Toy Truck

"Legends In Flight" 1/48 Scale Blériot XI

Vought F4U-1D Corsair

BAE Systems Hawk T.1A

Curtiss R3C-2 Racer: 1925 Schneider Trophy Winner

Maj. Taylor "Snarf" Price performs a flyby of the crowd gathered at the Hagerstown Aviation Museum for the "A-10 Homecoming" event held at the museum on September 22, 2025. As part of the 175th Wing of the Maryland Air National Guard's deactivation, the unit donated a Fairchild Republic A-10 C Thunderbolt II, #79-0087, to the museum for permanent display in its collection.

FROM THE EDITOR'S DESK

A-10 Homecoming, Curtiss R3C-2, Vought F4U-1D Corsair, Fairchild XNQ-1/T-31

Greetings Everyone:

Welcome to the October edition of "Distelfink Airlines". The airshow and aviation event season is drawing to a close, and there are just a few events remaining on my schedule for this year in the month of October. It has been a great season of airshows, aviation events, and museum events, and although inclement weather canceled travel plans to a few events, the season was overall a success. "Distelfink Airlines" continues to do well as an aviation publication, with the newsletter setting new records for daily and monthly readers in September. I hope the growth of the newsletter's readership this year is a good sign for 2026.

The featured content for this edition of "Distelfink Airlines" is an article about the "A-10 Homecoming" event held recently at the Hagerstown Aviation Museum. On September 22, 2025, the museum received an example of a Fairchild Republic A-10C Thunderbolt II attack aircraft as a donation to its aircraft collection. The A-10C was flown to the museum by Maj. Taylor "Snarf" Price from the 104th Fighter Squadron, a unit of the 175th Fighter Wing of the Maryland Air National Guard. The 175th Wing was recently deactivated, as the unit lost its flying mission this year and is transitioning to a cyber warfare operations unit. Throughout this year, the 175th Wing has been divesting their A-10 aircraft to long-term storage or to other units. The unit's deactivation provided the Hagerstown Aviation Museum with the opportunity to acquire an A-10 for the museum collection. The A-10C donated to the museum, #79-0087, is a combat veteran of conflicts in Iraq and Afghanistan, and was hand-picked for the museum by the 175th Wing due to these accolades. The story "An A-10 Comes Home To Hagerstown" features a history of the design and development of the A-10 Thunderbolt II and highlights of the museum's "A-10 Homecoming" event. I want to thank the Hagerstown Aviation Museum, Hagerstown Aviation Museum President John Seburn, the 104th Fighter Squadron and 175th Wing of the Maryland Air National Guard, and Maj. Taylor "Snarf" Price for putting together such a great event to honor the A-10's history at the museum.

Also featured in this edition is a look at the Curtiss R3C-2. This sleek biplane, piloted by U.S. Army Lt. James H. Doolittle, won the 1925 Schneider Trophy Race for seaplanes and flying boats. This month marks the 100th anniversary of the R3C-2 in the Schneider Trophy. The R3C-2 currently hangs in the National Air and Space Museum's flagship building on the National Mall in Washington, D.C., in the "Pioneers of Flight" gallery. The pictures of the R3C-2 are from a visit to the museum a few years ago. The gallery has since been renovated with a new layout and visual graphics, but the R3C-2 remains on display in the exhibit.

The "Aircraft of the National Air and Space Museum" section features the Vought F4U-1D Corsair in the National Air and Space Museum collection. The Corsair is on display at the Steven F. Udvar-Hazy Center in Chantilly, Virginia. The Corsair hangs in such a way, near the building's main entrance, that it appears to visitors as if the Corsair is ready to land on an aircraft carrier deck.

Finally, "Aviation Sightings" features the Fairchild XNQ-1/T-31. This aircraft was a proposed trainer built by Fairchild Aircraft in the 1940s. Despite showing promise during flight testing, Fairchild was never awarded a production contract for the XNQ-1/T-31. The sole surviving example on display at the Hagerstown Aviation Museum is the second prototype built for testing and evaluation.

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:

Fairchild XNQ-1/T-31

The surviving example of the prototype Fairchild XNQ-1/T-31 on display at the Hagerstown Aviation Museum. Fairchild designed the XNQ-1/T-31 as a primary training aircraft in the 1940s. The XNQ-1/T-31 showed great potential and attracted the interest of both the U.S. Navy and the U.S. Air Force in the late 1940s and early 1950s. Unfortunately, despite extensive testing in service trials, the XNQ-1/T-31 was rejected by both the U.S. Navy and the U.S. Air Force in favor of other aircraft, and it never entered full production.

The Fairchild XNQ was an American training aircraft designed for the U.S. Navy during the 1940s as a replacement for the primary training aircraft then in service. The XNQ featured a controllable-pitch propeller, flaps, electrically operated retractable landing gear, and all-metal skin with fabric-covered control surfaces. The XNQ had a large bubble canopy, which provided the instructor and student pilot, seated in tandem seating, with excellent visibility. The cockpit instruments were arranged to match the layout found in contemporary jet fighters that were entering service in the mid-to-late 1940s.

Two prototypes, designated XNQ-1s, were built for the U.S. Navy. Fairchild test pilot Richard Henson flew the first of the two prototypes on its initial test flight on October 7, 1946. The two prototypes were delivered to the U.S. Navy for service trials in 1947 and tested extensively, but were rejected due to problems with exhaust fumes entering the cockpit. Initially designed for a 320-horsepower Lycoming R-680-13 radial engine, this prototype received numerous engine changes and modifications before a horizontally opposed 350-horsepower Lycoming GSO-580 engine was installed. This XNQ-1 prototype was destroyed in a crash in 1950.

The second XNQ-1 prototype retained its original engine but had a larger stabilizer. The U.S. Air Force showed interest in the aircraft as a replacement for the aging North American T-6 Texan trainer, which had been in service since World War II. In 1949, the U.S. Air Force selected the aircraft, designated the T-31, as its new primary trainer, and Fairchild was awarded a production contract for 100 T-31s. In this role, it was expected that the T-31 would be used for teaching student pilots aerobatic maneuvers, including spins and rolls. Unfortunately, after several months, the U.S. Air Force rescinded the production order and instead chose the Beechcraft T-34 Mentor as its new trainer. Despite excitement about the design and its potential, the XNQ/T-31 never went into production. The surviving prototype was handed over to the Civil Air Patrol and was eventually sold to a private owner.

The second XNQ-1 spent many years in private ownership and was maintained in airworthy condition. In August 2024, Ann and Don Pellegreno donated the airplane to the Hagerstown Aviation Museum.


NAVY
N5726


NAVY
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"BP Aviation Tanker" Promotional Collectible Toy Truck

In 1996, BP sold this promotional collectible toy truck in its service stations and employee stores. The "BP Aviation Tanker" is a replica of an airport tanker truck used to refuel aircraft at large airports. BP used the toy truck to promote their Air BP division, which sells aviation fuel and lubricants at airport locations worldwide.

Air BP is the specialized aviation division of BP, the British multinational oil and gas company that is headquartered in London, England, and is one of the oil and gas "superpower" companies in terms of production and revenue. Air BP is headquartered in Middlesex County, England, and is one of the world's largest suppliers of aviation fuels and lubricants for both turbine and piston-powered aircraft. Approximately eight billion US gallons of aviation products are sold to worldwide customers annually by Air BP. Air BP services are available at over 600 airport locations in 55 countries worldwide, serving airlines, commercial, corporate, and general aviation operators.

In the late 1990s, BP produced a series of promotional collectible toy trucks that were available to purchase at its service stations and employee stores. These collectible toy trucks were similar to other promotional toy tanker trucks available at the time from other gas and petroleum companies such as Hess, Texaco, Exxon, Shell, and Sunoco. The trucks were made of plastic and often featured rolling wheels, opening doors or hatches, working lights, and authentic sounds. Sometimes, these trucks also featured a concealed coin bank. Most of the promotional collectible toy trucks offered by the companies were replicas of over-the-road commercial tanker trucks.

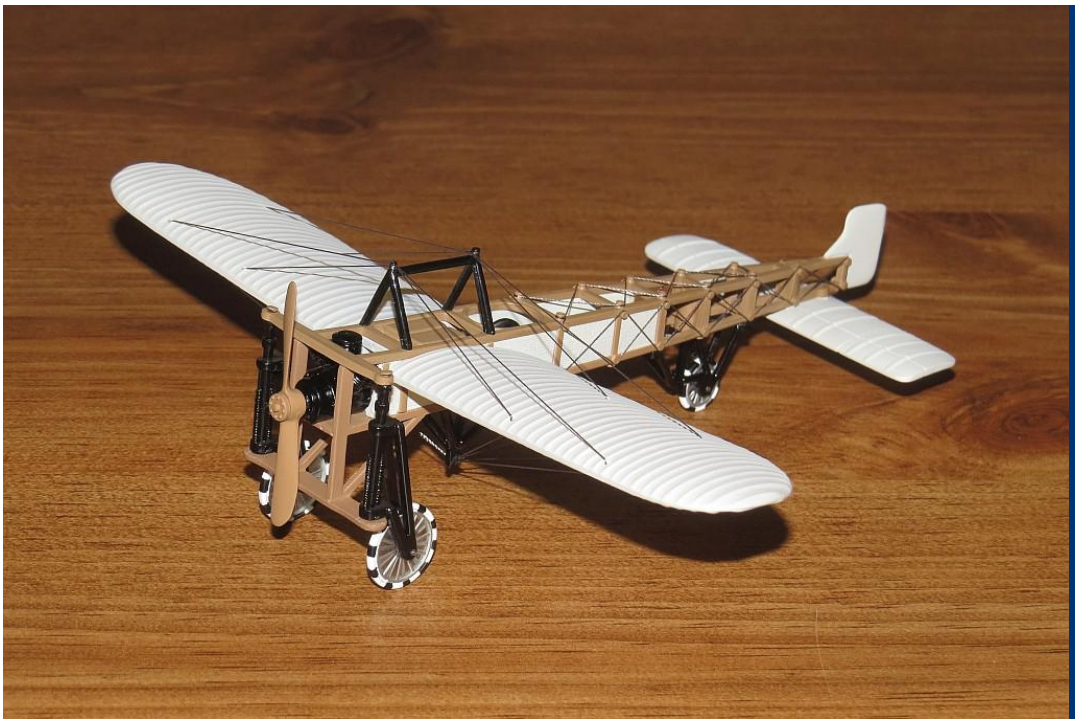
In 1996, BP released the "BP Aviation Tanker" as the sixth vehicle in its series of promotional collectible toy trucks. The "BP Aviation Tanker" is a replica of a tanker truck used to fuel aircraft at large airports. Some of the features of these specialized tanker trucks include a tank that can hold up to 10,000 gallons (37,854 L) of aviation fuel, a platform that allows ground crew personnel to reach fueling receptacles on aircraft, and a low-profile chassis so the truck can maneuver under the wings of aircraft. Due to the size and expense of these vehicles, they are typically only found at airports and military installations where large aircraft are refueled. Smaller airports typically purchase commercially available tanker trucks modified for airport use to meet their refueling needs, as they are more affordable and can maneuver more easily around smaller aircraft.

The "BP Aviation Tanker" featured an authentic Air BP paint scheme, working lights, realistic sounds, and a friction motor. Unfortunately, the "BP Aviation Tanker" did not sell well, and it only attracted limited interest among toy collectors in a market already saturated with similar promotional collectible toy trucks. As a result, examples of the "BP Aviation Tanker" can be found today on the secondary market for reasonable prices.

The "BP Aviation Tanker" is a simple replica of a specialized tanker truck used to refuel aircraft. The toy truck features authentic details, including a platform on the vehicle used by ground crew members to refuel aircraft and a low-profile chassis so the tanker can maneuver under the wings of aircraft parked on the tarmac.

The "BP Aviation Tanker" featured some excellent "kid-friendly" functions. These functions included working lights, realistic sounds such as a back-up warning, and an air horn. The lights and sounds are powered by two AA-size batteries in a compartment located on the underside of the truck.

"Legends In Flight" 1/48 Scale Blériot XI



This excellent 1/48 scale die-cast and plastic model of a Blériot XI was made by Hallmark Cards Inc. as part of their "Legends In Flight" series of collectible model airplanes, which was produced from 1999 to 2001. The Blériot XI, an example of which was the first aircraft to fly across the English Channel in 1909, is one of the well-known aircraft of the early years of aviation.

The Blériot XI is a significant French aircraft from the pioneer era of aviation. French aviation pioneer Louis Blériot used the first example to make the first flight across the English Channel in a heavier-than-air aircraft on July 25, 1909. The airplane was built in single and two-seat versions, powered by several different engines, and widely used for competition flying and training purposes before the start of World War I. Military versions of the Blériot XI were purchased by several countries and used as trainers and reconnaissance aircraft in the early stages of World War I.

The Blériot XI was a development of the earlier Blériot VII, which Louis Blériot had flown successfully in 1908. The airplane was designed by Raymond Saulnier, with input from Blériot. Similar to its predecessor, the Blériot XI was a tractor-configuration monoplane, with a partially-covered box-girder fuselage constructed from ash with cross-wire bracing. The airplane utilized wing-warping for lateral control, similar to other aircraft designs of the era. The tail surfaces consisted of a small all-moving rudder mounted on the rear of the fuselage and a horizontal tailplane mounted under the lower longerons. The bracing and wing warping wires were mounted to a dorsal, five-component "house-roof" shaped cabane consisting of a pair of inverted V-struts connected by a longitudinal steel tube, and an inverted four-sided pyramidal ventral cabane, also constructed of steel tubing, below. Early in the aircraft's development, it had a small teardrop-shaped fin mounted on the dorsal cabane.

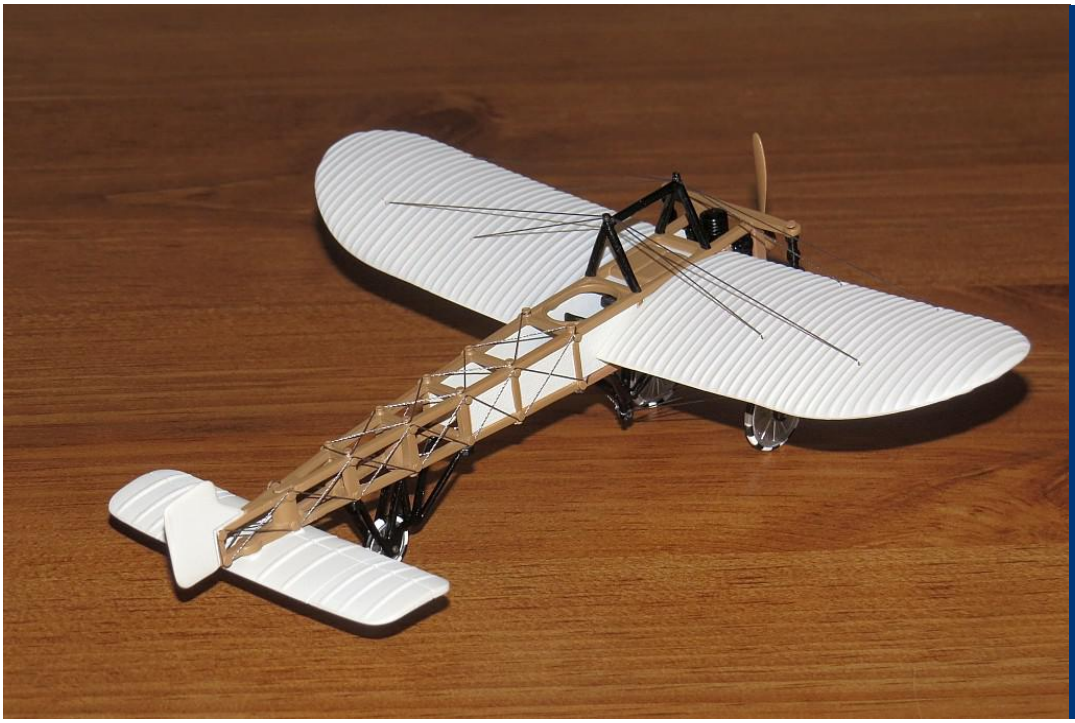
The engine was mounted directly in front of the wing's leading edge. The initial engine chosen to power the Blériot XI was a 35-horsepower, seven-cylinder R.E.P. engine driving a wooden four-bladed propeller. The landing gear was mounted in castering trailing arms, which could slide up and down steel tubes, with this movement controlled by bungee cords. This simple and ingenious design added a form of shock absorbers to the landing gear, allowing the aircraft to perform crosswind landings more easily. A tailwheel was fitted to the rear fuselage, which featured a similar castering arrangement and design.

The Blériot XI was first shown at the Paris Aero Salon in December 1908 and flown for the first time at Issy-les-Moulineaux on January 23, 1909. The engine was found to be extremely unreliable. At the suggestion of his mechanic, Ferdinand Collin, Blériot connected with Alessandro Anzani, a successful motorcycle racer who built his own engines. On May 27, 1909, a 25-horsepower, three-cylinder Anzani fan-engine was fitted to the Blériot XI. The four-blade propeller was also replaced with an *Intergrale* propeller designed by French aeronautical engineer Lucien Chauviére. The *Intergrale* propeller was a scimitar two-blade propeller made from laminated walnut wood. This propeller was the first European propeller to rival the efficiency of the propellers designed by the Wright Brothers, and was a notable advancement in the development of French aviation.

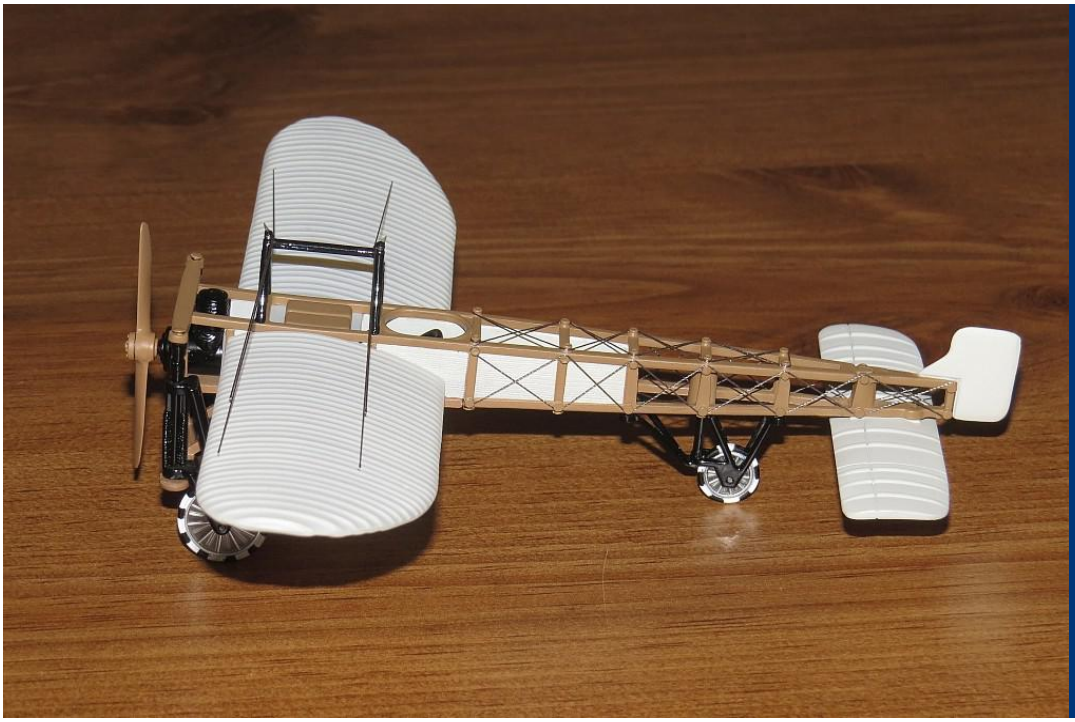
Louis Blériot also made some other changes to the Blériot XI. The wingspan was increased slightly, and the small cabane fin, which had been part of the original design of the airplane, was removed. The new engine and propeller significantly improved the Blériot XI's flight performance. On June 26, 1909, Blériot made a flight with the airplane lasting 36 minutes and 55 seconds. On July 13, Blériot won the Aero Club de France's first Prix du Voyage competition with a 26-mile (42km) flight between Etampes and Orléans.

The Blériot XI became an icon of the pioneer era of aviation when, on July 25, 1909, Louis Blériot crossed the English Channel from Calais to Dover, winning a £1,000 prize awarded by the *Daily Mail.* Taking off at sunrise and without the aid of a compass, Blériot flew east of his intended route but spotted the English coast. Battling strong winds, Blériot made a rough landing, nearly collapsing the landing gear and shattering a propeller blade, but was unhurt. The flight had taken just over 36 minutes, and made Blériot a celebrity overnight. The aircraft never flew again, eventually ending up in the collection of the *Musée des Arts et Méiers* in Paris.

After the successful crossing of the English Channel, orders for Blériot's aircraft soared. By September, he had received orders for over 100 examples. In December 1909, Blériot gave up competition flying after an accident, instead hiring pilots to fly his aircraft in competitions and demonstration flights. Alfred LeBlanc, who had managed logistics for Blériot's cross-channel flight, became one of his chief instructors at a flying school founded by Blériot to teach pilots how to fly his airplanes.



The Hallmark Cards Inc. Blériot XI has several intricate details that give the model a sense of realism. The model features realistic wire bracing and a simulated box-girder fuselage and the unique dorsal and ventral cabane assemblies that resemble those found on the real aircraft.



The Blériot XI model has a simple but accurate paint scheme featuring brown paint for the simulated wooden sections of the airplane, a linen color for the fabric-covered surfaces, and black for metal parts of the aircraft such as the landing gear and engine. The colors used on the model match several surviving examples of Blériot XIs preserved in aviation museums.

The Blériot XI remained in production until the outbreak of World War I. The aircraft was used by many aviation pioneers in races and competitions, winning several of them. Later versions of the aircraft were available with different engines and in one and two-seat models. Minor changes were also made to the design of the elevators, and the tailwheel was replaced with a skid in later models. Military versions of the Blériot XI served as trainers and observation aircraft. Several British, French, and Italian squadrons operated Blériot XIs in these roles in the early stages of World War I.

Today, several Blériot XIs, including the one used by Louis Blériot to cross the English Channel, are preserved in aviation museums worldwide. Two authentic Blériot XIs, one in the United Kingdom and another in the United States, are believed to be the oldest flyable aircraft in the world. Flying and non-flying replicas of the Blériot XI have also been built for aviation museums worldwide.

This 1/48 scale die-cast and plastic model of a Blériot XI was made by Hallmark Cards Inc. as part of its "Legends In Flight" product line of die-cast and plastic model airplanes. This series of model airplanes was sold by Hallmark Cards Inc. from 1999 to 2001 in Hallmark retail stores in the United States and Canada. The series featured historic aircraft in numbered editions, in scales ranging from 1/48 to 1/100, to fit a standard-sized box used for all the models. Unfortunately, at the time the "Legends In Flight" aircraft were released, the series received criticism for the lack of detail on some models and its premium price point. As a result of poor sales, Hallmark Cards Inc. discontinued the "Legends In Flight" series after three years. The Blériot XI, one of the more unusual aircraft types in the series, was issued as part of the year 2000 "Legends In Flight" releases.

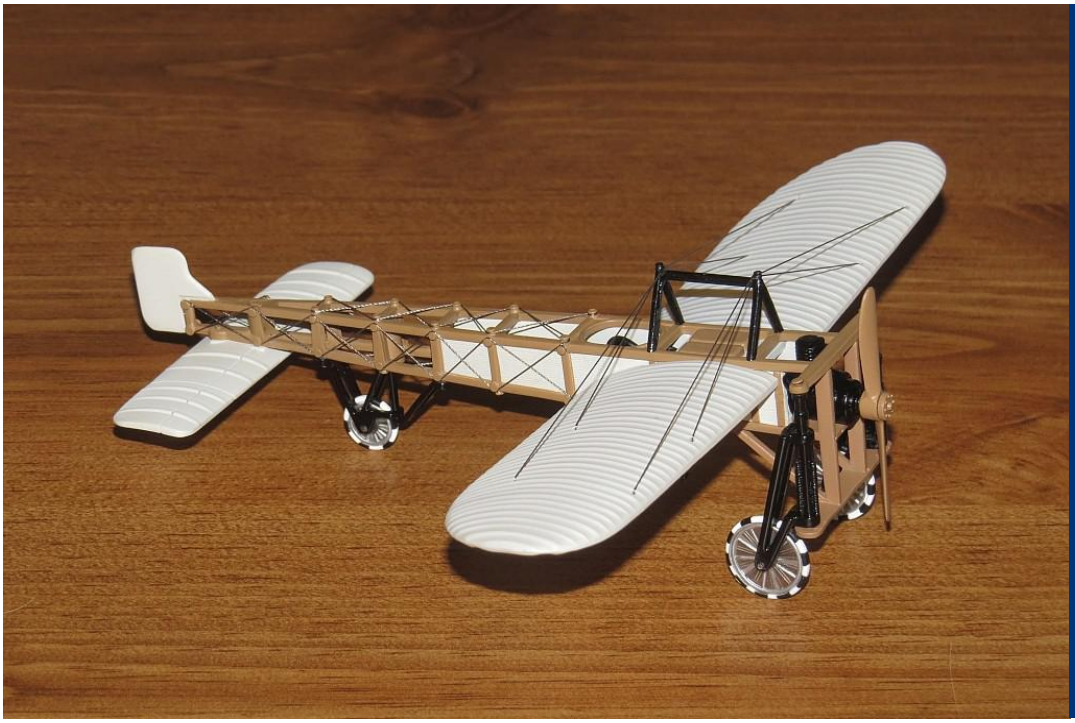
Hallmark Cards Inc. did an excellent job recreating the Blériot XI in model form. The model features impressive details, including wings with rib texture, rolling wheels with realistically painted tires, real wire bracing for the wings and fuselage, and a rotating propeller. The model also features many distinctive attributes of the original aircraft, including the three-cylinder engine, the box-girder fuselage with its wire bracing, the uniquely designed cabane strut structures on the top and bottom of the Blériot XI, and the castering trailing arms for the landing gear. Finally, the model features a realistic paint scheme that closely matches many of the surviving Blériot XIs that are on display in aviation museums.

Hallmark Cards Inc. also deserves significant credit for releasing such an unusual model. The Blériot XI is a well-known aircraft of the pioneer era, but it is more familiar in Europe, as Louis Blériot was from France. In the United States, the Wright Flyer is the most well-known of the pioneer era airplanes. The Blériot XI is a significant historic airplane in early aviation, and very few assembled, ready-to-display, die-cast, or plastic models of it have been available to model airplane collectors. For those interested in pioneer or early aviation, this Blériot XI is a must-have in a model airplane collection.

This model does have a few noteworthy shortcomings. The Blériot XI does not come with a display stand. Including a display stand with this model would have been a nice addition, so the Blériot XI could be displayed more easily on a desk, bookshelf, or in a model airplane collection. Instead, the model must be displayed on its landing gear, which takes up more space and raises the risk of the model rolling off a desk or bookshelf, falling, and breaking. In the case of the Blériot XI, a display stand would also elevate the model to a higher viewing angle, allowing for a better view of the detailed tires, wheels, and landing gear, which Hallmark did an impressive job of capturing in impressive authenticity and accurate colors on the model.

Finally, the Blériot XI is a fragile model. The model is lightweight and has wheels that roll freely. It can quickly roll off an uneven shelf and fall to the floor. The cabane structure and bracing wires on this model, although replicated with impressive detail, are delicate and require handling the Blériot XI with care. A finger or a dust cloth can easily get caught in the wires, pulling them loose or breaking them entirely. The Blériot XI's small marts and delicate nature mean it is a model only for adult collectors and is not a toy.

The Hallmark Cards Inc. 1/48 scale Blériot XI is an excellent classic model with a well-applied paint scheme and an impressive amount of detail. The model is one of the best of the "Legends In Flight" series and represents one of the most significant aircraft designed and flown on one of the most important history-making flights during the early days of aviation. Despite being produced and sold over 20 years ago, the "Legends In Flight" Blériot XI can still be found on the secondary market in mint condition for reasonable prices. This beautiful Blériot XI model in 1/48 scale will be a great addition and conversation piece to any die-cast model airplane collection.



The Blériot XI made by Hallmark Cards Inc. was a unique addition to their "Legends In Flight" series of collectible model airplanes and is an excellent model of one of the iconic aircraft of the early days of aviation. The intricate details of the model, such as the bracing wires, box-girder fuselage, and simulated fabric-covered wings, highlight the fragile nature of the actual Blériot XI, and how challenging a flight across the English Channel would have been in such an airplane.

An A-10 Comes Home To Hagerstown

The Hagerstown Aviation Museum recently had the opportunity to add to its collection an example of the only production-built aircraft designed exclusively for close air support to serve with the U.S. Air Force.

Maj. Taylor "Snarf" Price banks his A-10C Thunderbolt II, #79-0087, on a flyover of the Hagerstown Aviation Museum during the "A-10 Homecoming" event on September 22, 2025. The flight to the museum by Maj. Price in this A-10C was the final official flight for the 175th Wing of the Maryland Air National Guard, as the unit held its official deactivation ceremony the following day.

Maj. Taylor "Snarf" Price flies over the Hagerstown Aviation Museum as he arrives at the Hagerstown Regional Airport in A-10C Thunderbolt II #79-0087 on September 22, 2025. Maj. Price performed several missed approaches with the A-10C before landing, granting the gathered crowd an opportunity to see and hear the beloved "Warthog" in flight one final time.

The Hagerstown Aviation Museum is an aviation museum located at the Hagerstown Regional Airport in Hagerstown, Maryland. The museum was founded in 2005 and focuses its mission on the history of the Fairchild Aircraft Corporation, including the aircraft it designed and built. The Hagerstown Aviation Museum currently has the largest collection of Fairchild aircraft preserved in one location worldwide.

The idea for the Hagerstown Aviation Museum took shape in 1995 when a group of individuals wanted to honor the Fairchild Aircraft Corporation and the impact it made on the Hagerstown community. Richard Henson, Kent Mitchell, John Seburn, and Kurtis Meyers were instrumental in the formation of the original concept for the museum. After several delays, the museum opened in the Discovery Center in downtown Hagerstown on July 14, 2005. The museum slowly began acquiring aircraft and artifacts as funding allowed, including examples of the C-82 Packet and C-123 Provider, two military cargo aircraft produced by Fairchild at Hagerstown. In 2020, the museum moved to the airport in the former Fairchild Aircraft Flight Test Hangar. The museum had a grand opening at this new facility on September 14, 2024.

On September 22, 2025, the Hagerstown Aviation Museum welcomed a new airplane into its collection. A Fairchild Republic A-10C Thunderbolt II, #79-0087, was flown by Maj. Taylor "Snarf" Price from the 175th Wing, 104th Fighter Squadron, of the Maryland Air National Guard to the museum for permanent display. The 175th Wing recently deactivated as a flying unit and is transitioning to a cyber operations unit. As a result of this mission change, the 175th Wing retired its A-10 Thunderbolt II attack aircraft. The unit's deactivation and end of its flying mission provided the Hagerstown Aviation Museum, with cooperation from the U.S. Air Force and the National Museum of the U.S. Air Force, the opportunity to acquire an example of the A-10 Thunderbolt II for the museum collection. With this acquisition, the Hagerstown Aviation Museum has in its collection an example of the only production-built aircraft designed exclusively for close air support (CAS) to serve with the U.S. Air Force.

The A-10 Thunderbolt II's story begins in the 1950s, when the development of attack aircraft in the United States stagnated. The development of combat aircraft was focused on high-speed designs capable of carrying nuclear weapons. As a result, when the United States entered the Vietnam War, its main attack aircraft was the Douglas A-1 Skyraider. Although an excellent ground-attack platform, the Skyraider had been designed and developed at the end of World War II, and was slow, vulnerable to ground fire, and unable to carry enough ordnance and firepower to support ground forces effectively. During the Vietnam War, the U.S. Navy and the U.S. Air Force lost a combined total of 266 Skyraiders, proving the aircraft was obsolete.

Further studies completed in the 1960s by the U.S. Air Force, including some in collaboration with the U.S. Army, highlighted the need for a dedicated CAS aircraft. Top Pentagon officials were concerned about the United States and its NATO military allies having the ability to stop an armored advance by Soviet forces into Western Europe. This concern led to a change in military strategy in Europe, shifting focus away from stopping an armored advance with nuclear weapons using fighter-bombers and interdiction aircraft, and instead stopping it with anti-tank helicopters and CAS aircraft.

As a result of this strategy change, the U.S. Air Force issued requirements in 1966 for the A-X program, a specialized CAS aircraft. In 1970, the growing threat of an invasion of Western Europe from Soviet armored forces led to new requirements. The new CAS aircraft would be designed specifically around a new 30 mm (1.18 in) cannon being developed, capable of firing 4,000 rounds per minute. The A-X requirements also specified a maximum speed of 460 miles per hour (737 km/h), a takeoff distance of 4,000 feet (1,219 m), an external load of 16,000 pounds (7,257 kg), and a 285-mile (459 km) combat radius. Two companies, Northrop and Fairchild Republic, were chosen to build prototype aircraft, the YA-9 and YA-10. General Electric and Philco-Ford were selected to design and build the GAU-8/A cannon prototypes.

Maj. Taylor "Snarf" Price taxis A-10C Thunderbolt, #79-0087, at the Hagerstown Regional Airport after landing on September 22, 2025. An unusual-looking aircraft, the A-10 Thunderbolt II is often referred to by its nickname, the "Warthog", or simply, the "Hog" among its pilots, maintainers, and by aviation enthusiasts.

The Hagerstown Regional Airport provides a water cannon salute to Maj. Taylor "Snarf" Price and A-10 Thunderbolt II, #79-0087, as they arrive at the ramp of the Hagerstown Aviation Museum on September 22, 2025, during the museum's "A-10 Homecoming" ceremony.

The YA-9 and YA-10 prototypes were evaluated and tested by the U.S. Air Force. Two YA-10 prototypes were built by Fairchild's Republic division in Farmingdale, New York, for the evaluation process. Both aircraft met all the design requirements, with the U.S. Air Force selecting the YA-10 as the winner for the aircraft production contract in January 1973. General Electric was awarded the production contract for the GAU/8A Avenger cannon in June 1973.

Production of the A-10 was completed in two different locations. Fairchild's Republic division, based in Farmingdale, New York, built the fuselage and wings of the aircraft. These components were then shipped to Fairchild Aircraft in Hagerstown, Maryland, by truck. The Hagerstown facility mated the wings and fuselage, then completed final assembly of the airframes, painting, fuel flow checks, engine run checks, compass swings, company acceptance flights, and finally, delivery flights to the U.S. Air Force.

The first production A-10 flew in October 1975, and deliveries to the U.S. Air Force began in March 1976. By 1984, Fairchild Aircraft had delivered 715 A-10s to the U.S. Air Force, the production total including two prototypes and six aircraft used for pre-production evaluation purposes. The official name chosen for the A-10 was "Thunderbolt II", in honor of the famous fighter and ground-attack aircraft from World War II.

The A-10 is an unusual-looking aircraft, but it has several design innovations that make it ideal for operating in the CAS role. One of these innovations is the design of its wing. The straight wing with its large area and high wing aspect ratio gives the A-10 superior maneuverability at low speeds. The ailerons are also larger than on most aircraft, making up nearly fifty percent of the wing. The ailerons are also split, making them a deceleron. The wing was built using a honeycomb construction, which provides excellent strength in a lightweight structure. Skin panels on the wings were designed so they were not load-bearing, meaning damaged wing panels can be quickly repaired in the field, using makeshift materials if necessary.

Maj. Taylor "Snarf" Price taxis past the gathered crowd of aviation enthusiasts and special VIP guests on his way to park A-10 Thunderbolt II, #79-0087, on the ramp at the Hagerstown Aviation Museum on September 22, 2025. The Hagerstown Aviation Museum's "A-10 Homecoming" was attended by a few thousand people, making it an excellent opportunity for the museum to promote its mission and its extensive collection of Fairchild aircraft on display.

The A-10 is designed around the 30 mm GAU/8A Avenger cannon as its primary armament. The shells from this cannon can pierce the armor of any existing tank or armored vehicle. This weapon takes up most of the space in the A-10's nose section. The aircraft's nose landing gear is offset to the right, so the barrel of the cannon is on the A-10's centerline. The A-10 features 11 additional weapons pylon stations under its wings and fuselage. These can carry a variety of weapons and external stores, including bombs, air-to-air missiles, air-to-ground missiles, rockets, flare/chaff dispensers, targeting pods, and additional fuel tanks for extended range missions.

The A-10 Thunderbolt II is designed to operate in high-threat environments and survive direct hits from armor-piercing shells and high-explosive projectiles. The aircraft has double-redundant hydraulic flight control systems and a mechanical backup system. The cockpit and flight control system is protected by 1,200 pounds (540kg) of titanium armor, and the canopy and windscreen are capable of withstanding small arms fire. As an additional measure of protection, the A-10 carries flare and chaff dispensers. The main landing gear wheels protrude from the nacelles when retracted, making a belly landing easier to control and less damaging.

The unusual location of the A-10's two General Electric TF-34-GE-100 turbofan engines lessens the possibility of damage from foreign objects when operating from unprepared runways. The position of the engines also allows them to remain running as ground crews service the aircraft, reducing rearming and refueling times. The twin tail structure on the A-10 Thunderbolt II helps direct the exhaust of the engines over the tailplanes, concealing their heat signature from heat-seeking missiles. The engines are shielded from the airframe and fuel tanks by firewalls and fire extinguishers. To reduce the risk of damage to the fuel system, all four of the A-10's fuel tanks are located in the center of the aircraft and are self-sealing to restrict spillage and debris if damaged. Fuel system components are located inside the tanks to protect them from damage.

Finally, the A-10 is designed to operate in forward areas with minimal ground equipment. An unusual feature of the A-10 is that many of its parts are interchangeable between sides, including the tail sections, main landing gear, and engines. The sturdy landing gear and low-pressure tires allow the A-10 to take off and land from unused highways and short, unprepared runways. Refueling and rearming the A-10 can be completed in the field with minimal support vehicles and ground equipment.

The first unit to receive the A-10 was the 355th Tactical Training Wing based at Davis-Monthan Air Force Base in Arizona in 1976. In 1977, the 354th Tactical Fighter Wing at the Myrtle Beach Air Force Base in South Carolina became the first A-10 unit to achieve initial operating capability. As A-10s came off Fairchild's production lines, they were distributed to other squadrons stationed at bases at home and overseas. A-10s were initially unwelcome by pilots in the U.S. Air Force, as they did not want to switch from flying a sleek fighter to a slow attack aircraft. Eventually, squadrons flying the A-10 developed a unique affection for the attack jet, and it quickly gained the nicknames "Warthog" and "Hog" due to its ungainly appearance. Throughout its service career, the A-10 has served with active-duty U.S. Air Force squadrons, U.S. Air Force Reserve squadrons, and Air National Guard units.

Although designed for use against Soviet armored formations in a war in Europe, the end of the Cold War meant that the A-10 never got to fight in the type of conflict for which it was designed. Instead, the A-10's first use in combat came during the 1991 Gulf War, where it was used to knock out Iraqi tanks, armored vehicles, and troop formations. The A-10 even shot down enemy helicopters using air-to-air missiles. The A-10 was used extensively in conflicts in the Balkans and Afghanistan and in the Iraq War. Recently, A-10s have deployed to the Middle East for continued combat operations against the Islamic State. The A-10 has been consistently praised by commanders in recent military conflicts for its firepower and high rate of serviceability.

Maj. Taylor "Snarf" Price takes a few minutes to reflect in the cockpit of A-10 Thunderbolt II, #79-0087, after his flight with the aircraft to the Hagerstown Aviation Museum. The flight to deliver the A-10 to the museum was Maj. Price's last flight as an A-10 pilot with the 104th Fighter Squadron and 175th Wing of the Maryland Air National Guard.

The A-10 has been regularly upgraded and modernized since its entry into service. The most significant upgrade was a modernization program from 2005 to 2011, the Precision Engagement program. This program upgraded 365 A-10s and OA-10s to the A-10C standard. This upgrade provided all-weather combat capability, an improved fire control system, the capability to use precision-guided bombs and missiles, and cockpit upgrades, including two new multifunction display screens.

As the A-10's capabilities grew with avionics, communications, and weapons systems upgrades, the attack jet was utilized for additional roles. In the mid -1980s, A-10s were adapted for use as airborne forward air controllers (FAC) and designated OA-10s. In this role, the OA-10 directs other aircraft to attack ground targets by marking them with rockets that produce white smoke. More recently, A-10s have been used as close support aircraft for combat rescue missions. On these missions, A-10s help locate missing or trapped friendly forces in enemy territory, then provide cover fire to protect a rescue operation. The A-10 was used extensively in this role with great success in combat operations in Afghanistan.

The A-10 Thunderbolt II was also used to test various camouflage schemes for U.S. Air Force aircraft. When the A-10 entered service in the 1970s, it was painted in a camouflage scheme consisting of different shades of green, as these colors blended in best over forested environments in Europe. Over the years, many additional test camouflage schemes were applied to A-10s, including patterns of tan, brown, and sand colors for operations in desert environments, and patterns of green, gray, and white colors for operations in the Arctic. Eventually, a low-visibility gray scheme was chosen, similar to other U.S. Air Force aircraft, as it was felt these colors blended in best with the sky, where the A-10 is most vulnerable. A unique feature of the A-10's paint scheme is a fake canopy that is often painted on the underside of the aircraft's nose to confuse the enemy forces as to which side of the A-10 they are seeing.

Maj. Taylor "Snarf" Price poses for a picture with other A -10 pilots and ground crew personnel from the 175th Wing during the "A-10 Homecoming" event on September 22, 2025, at the Hagerstown Aviation Museum. Maj. Price's flight to the museum with the A -10 was the 175th Wing's last official operational flight as an active unit.

This photo shows the General Electric TF-34 engines and the tail section of the A-10 Thunderbolt II. The engines are mounted high on the airframe to prevent ingestion of foreign debris when using unprepared runways. The tail section of the A-10 is designed to deflect the exhaust of the engines, limiting the effectiveness of enemy heat-seeking missiles to target the A-10's heat signature.

Early in the A-10's development, Fairchild proposed a two-seat version of the aircraft for missions at night and in adverse weather conditions (N/AW). The second crew member would have been a weapons system officer operating navigation, electronic countermeasures, and target acquisition equipment. One YA-10B was converted from one of the A-10 pre-production aircraft. The YA-10B failed to attract any interest from the U.S. Air Force, as the rapid advancement of other night attack technologies during the 1980s made the YA-10B's capabilities obsolete. The U.S. Air Force ordered a two-seat version of the A-10 for training in 1981, but the contract was canceled due to budget cuts.

The A-10 Thunderbolt II has also had some design issues. The aircraft's original wing structure and skin were subject to fatigue cracking earlier than expected, especially on A-10s with high flight hours. This led to a program contracted to Boeing to build redesigned and strengthened wings and install them on the surviving A-10 fleet. The new wings have improved mission readiness and reliability for the A-10 and will keep the fleet flying until 2035 if necessary, but at significant expense. The U.S. Air Force has also acknowledged that the A-10's General Electric T-34 engines are underpowered. Although a new engine program for the A-10 was proposed, it has never been completed due to cost concerns.

Throughout its service life, the A-10 has survived numerous attempts to retire it and replace it with other aircraft for the CAS mission. Unfortunately, in recent years, as maintenance costs rise for the aging airframes, the limited specialized role of the A-10 has led it to become a target for renewed efforts to retire it from service. Currently, the U.S. Air Force has proposed plans to retire the approximately 200 A-10s remaining in its inventory by the end of 2026. The proposal has faced questions and pushback from members of the U.S. Congress, who must approve the funding and want detailed plans from the U.S. Air Force on how it plans to support the CAS mission using aircraft other than the A-10, such as the F-35 Lightning II and F-16 Fighting Falcon.

The A-10 Thunderbolt II was designed around the General Electric GAU-8/A Avenger 30 mm cannon. This gun can shoot up to 4,000 rounds per minute, and its shells can penetrate the armor of any existing tank or armored vehicle. In addition to the cannon, the A-10 can also carry a variety of air-to-air and air-to-ground weapons on 11 pylons located under the wings and fuselage.

The 104th Fighter Squadron, a unit of the 175th Wing of the Maryland Air National Guard, began flying the A-10 Thunderbolt II in 1979. The unit, based at the Warfield Air National Guard Base at the Martin State Airport in Baltimore, was the first Air National Guard unit to fly the A-10. The A-10s flown by the unit were newly built aircraft from Fairchild and delivered straight to the squadron from the factory in Hagerstown. The 175th Wing deployed overseas with their A-10 aircraft and personnel several times to support U.S. military operations in the Middle East and Afghanistan, including during Operation Enduring Freedom and Operation Resolve Support. Throughout their years of operating the A-10, the 175th Wing also performed numerous flyovers of sporting events and visited numerous airshows throughout the nation to display the A-10 and share its mission and capabilities with the public.

In 2024, it was announced that the U.S. Air Force would deactivate the 175th Wing, and the unit would lose its A-10 aircraft by September 2025, transitioning to a cyber warfare operations unit and losing its flying mission. The announcement was met with sharp criticism from elected officials in Maryland, as the state would be the only one in the United States without a flying mission. This year, the 175th Wing made their final visit to EAA Airventure in Oshkosh and several other airshows throughout the Northeast and Mid-Atlantic regions of the United States during the summer months. As a final salute to the 175th Wing's dedicated years of service to the State of Maryland and the United States, two A-10s performed a flyover of the Baltimore Ravens football game in Baltimore on September 14, 2025.

The 175th Wing's deactivation provided an opportunity for the Hagerstown Aviation Museum to acquire an A-10 Thunderbolt II for display at the museum. Working closely with the 175th Wing, A-10C Thunderbolt II, #79-0087, a veteran of combat operations in Iraq and Afghanistan, was identified as the A-10 to be donated to the museum. The Hagerstown Aviation Museum also worked closely with the National Museum of the U.S. Air Force to acquire the A-10.

On September 22, 2025, the Hagerstown Aviation Museum welcomed Fairchild Republic A-10C Thunderbolt II, #79-0087, to the museum at a special "A-10 Homecoming" event. The event was open to the public, and VIP guests, including former A-10 pilots and Fairchild employees, were invited to the event. A notable VIP guest at the event was Greg Davis, a former A-10 test pilot for Fairchild Aircraft. Despite overcast skies, a few thousand people gathered at the museum for the "A-10 Homecoming". While awaiting the A-10's arrival, early visitors to the event checked out the museum's aircraft collection and other aviation artifacts on display.

Shortly after the noon hour, #79-0087 arrived above the Hagerstown Regional Airport. This was the final operational flight by the 175th Wing as an active unit before its deactivation the following day. The A-10C Thunderbolt II was piloted by Maj. Taylor "Snarf" Price. Maj. Price performed three missed approaches at the airport, giving the gathered crowd one last opportunity to see the A-10 in flight and hear the unique sound of its General Electric TF-34 engines. After landing, Maj. Price taxied over to the museum, receiving a water cannon salute from the Hagerstown Regional Airport Fire Department. The ground crew quickly secured the A-10 Thunderbolt II as Maj. Price took a few minutes to reflect in the cockpit on his final flight in the legendary "Warthog". After exiting the aircraft, Maj. Price was congratulated by his ground crew and shared a traditional toast with them to celebrate the final flight. Finally, Maj Price and each ground crew member signed the inside of the A-10's front landing gear door and posed for a group picture by the nose of the A-10.

After the celebratory toast and photo opportunity, a small ceremony was held in front of the museum's hangar with the A-10 as a backdrop. Hagerstown Aviation Museum President John Seburn talked about the process the museum went through to get the aircraft for its collection, and that it was always the vision of the museum to have an A-10 Thunderbolt II on display. Seburn then congratulated Maj. Price on his final flight with a handshake.

Maj. Taylor "Snarf" Price shakes hands with Hagerstown Museum President John Seburn during the "A-10 Homecoming" event held at the museum on September 22, 2025. After the A-10 Thunderbolt II, #79-0087, arrived at the museum, a small ceremony took place, and the aircraft was officially handed over to the museum by Maj. Price and the 175th Wing of the Maryland Air National Guard.

Additional guest speakers during the ceremony highlighted the importance of the A-10's capabilities in the CAS role and thanked Maj. Price and the 175th Wing for donating the aircraft to the museum. The guest speakers also thanked the 175th Wing for their years of dedicated service to our country with the Maryland Air National Guard. A proclamation commemorating the historic day from the State of Maryland was also presented to the Hagerstown Aviation Museum.

After the ceremony, the members of the public were allowed to see the A-10 Thunderbolt II up close and take pictures of the aircraft. Maj. Price was available to answer questions about the A-10 and sign commemorative photos of the A-10 provided to event attendees by the museum. Former A-10 pilots, pilots from the 104th Fighter Squadron, and former Fairchild employees posed for pictures next to the A-10. For many members of the public in attendance, this was a unique opportunity for them to be up close to and take photos of an A-10 Thunderbolt II. After a few hours, the crowd dispersed, and the A-10, #79-0087, was towed into the museum's hangar. In this location, the aircraft will be demilitarized and made safe for public display. Although technically on loan from the National Museum of the U.S. Air Force, it is planned that the A-10 Thunderbolt II #79-0087 will be a permanent resident at the Hagerstown Aviation Museum to honor the aircraft's place in Fairchild and Hagerstown, Maryland, history.

The "A-10 Homecoming" event held by the Hagerstown Aviation Museum was an excellent opportunity to see an A-10 Thunderbolt II from the 175th Wing one final time. It is fitting that the Hagerstown Aviation Museum obtained an example of the A-10 that served with the 175th Wing of the Maryland Air National Guard. The A-10 on display allows the museum to not only honor the history of Fairchild Aircraft, but also represent a military unit that proudly served the State of Maryland and the United States with pride and dedication for over 40 years, flying the iconic A-10 "Warthog" at home and in combat operations abroad, defending our nation's freedom.

Aviation enthusiasts, former A-10 pilots, and former Fairchild employees continue to check out the A-10 Thunderbolt II, #79-0087, as the "A-10 Homecoming" event draws to a close at the Hagerstown Aviation Museum on September 22, 2025. The Hagerstown Aviation Museum did an excellent job organizing and putting this event together, on short notice, for everyone to enjoy.

Fairchild Republic A-10C Thunderbolt II

Manufacturer : Fairchild Republic

Type: Close Air Support Attack Aircraft

Nickname: "Warthog", "Hog"

Entry Into Service: A-10A (1977), A-10C (2007)

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 m^2)

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 fuselage)

Vought F4U-1D Corsair

This Vought F4U-1D hangs on display in the National Air and Space Museum's Steven F. Udvar-Hazy Center located in Chantilly, Virginia. This Corsair never saw combat during World War II but is presented in the colors and markings of an aircraft flown by Marine Fighter Squadron VMF-113 when it was based in the Marshall Islands in July 1944. The Corsair is displayed with its flaps, landing gear, and tailhook extended, simulating how the aircraft would appear on approach to an aircraft carrier flight deck for landing.

The Vought F4U Corsair was an American fighter aircraft that saw service in World War II and the Korean War. Designed as a carrier-based fighter, the Corsair initially entered service in 1943, and by 1944, the aircraft served in large numbers with the U.S. Navy and U.S. Marine Corps. By V-J Day, September 2, 1945, Corsair pilots had amassed a stunning 11:1 kill ratio against Japanese aircraft, and the Corsair had established itself as one of World War II's most successful naval fighter-bomber aircraft.

The design and development of the Corsair began in 1938 when the U.S. Navy Bureau of Aeronautics requested proposals from American aircraft manufacturers for a new carrier-based fighter aircraft. Vought responded with the XF4U-1 prototype, an aircraft designed by a team including chief designer Rex Beisel, project engineer Frank Albright, aerodynamics engineer Paul Baker, and propulsion engineer James Shoemaker. The new aircraft was powered by a Pratt & Whitney R-2800 radial engine that developed 2,000 horsepower. This engine drove an aluminum three-blade propeller from Hamilton Standard spanning just over 13 feet (3.96 m). When the prototype XF4U-1 flew for the first time in May 1940, the airplane had the most powerful engine and largest propeller combination ever installed on a fighter aircraft. To accommodate such a large propeller, the XF4U-1 had a wing bent in a gull shape on both sides of the fuselage. This innovative wing design gave the propeller ground clearance and reduced drag where the wings joined the fuselage.

At the time of the proposal, the U.S. Navy was strictly concerned about speed. As a result of the start of World War II in Europe, and anticipating being involved in the conflict in the future, the U.S. Navy requested several changes to the XF4U-1 prototype, including heavier armament in the form of three .50 caliber machine guns in each wing. These guns forced the removal of the fuel tanks that had been located in each wing. To replace the lost fuel capacity, a 237-gallon (897 L) fuel tank was installed between the engine and the cockpit. For the Corsair to maintain its sleek fuselage profile, the cockpit had to be moved three feet aft of its original position.

Moving the cockpit's position further aft had unfortunate consequences. Visibility from the cockpit was problematic, especially during takeoff and landing. The early production Corsairs also had vicious stall characteristics, powerful torque and propeller effects at low speed, and cowl actuators that leaked oil onto the windshield, further compounding the cockpit visibility problems. The most significant problem with the early models of the Corsair was its landing gear. The main landing gear struts were long and stiff, causing the Corsair to bounce significantly when landing on an aircraft carrier deck. Due to these problems, the Corsair could not be landed safely on an aircraft carrier deck.

The flaws did not deter the U.S. Navy from accepting the Corsair for service. Early production Corsairs were diverted to the U.S. Marine Corps, which began using them from land bases in the Pacific theater in early 1943. U.S. Marine Corps pilots engaged the enemy with Corsairs for the first time on February 14, 1943, while flying from Guadalcanal. As Vought continued to work to solve the Corsair's problems, the U.S. Navy decided to fill its carrier-based squadrons with the Grumman F6F Hellcat. The Hellcat was slower than the Corsair, but it could be landed easily on an aircraft carrier deck. The Hellcat filled in until late 1944, when the U.S. Navy finally cleared the Corsair for aircraft carrier operations.

The introduction of the Corsair into the Pacific theater had an immediate impact on the war. The F4U's speed and firepower allowed pilots to engage Japanese aircraft only when the advantage favored them. The Corsair's six machine guns could also make quick work of most Japanese aircraft, as many were not protected by armor or self-sealing fuel tanks. In the last months of World War II, Corsairs were used for ground-attack missions to support U.S. Marines as the island-hopping campaign drove toward the Japanese home islands. By the time World War II ended in 1945, the U.S. Navy and U.S. Marine Corps credited Corsair pilots with destroying over 2,100 enemy aircraft. In addition to the U.S. Navy and U.S. Marine Corps, variants of the Corsair were also operated by the British Royal Navy and the Royal New Zealand Air Force.

During World War II, the U.S. Navy and U.S. Marine Corps pilots flew over 64,000 operational sorties with Corsairs. Of those sorties, over 54,400 were from runways and over 9,500 were from aircraft carrier flight decks. Only 189 Corsairs were lost in combat, with a further 1,435 lost in non-combat accidents. Demand for the Corsair was so great during World War II, that in addition to Vought, Goodyear Aircraft Corporation and Brewster Aeronautical Corporation were contracted to build the fighter under license.

One of the most famous Corsair pilots of World War II was Major Gregory "Pappy" Boyington. Boyington assumed command of U.S. Marine Corps squadron VMF-214, nicknamed the "Black Sheep" squadron, on September 5, 1943. During less than five months of action, Boyington received credit for shooting down 28 Japanese aircraft. Japanese aircraft shot Boyington down on January 3, 1944, but he survived the war in a prisoner of war camp.

Famous American aviator Charles A. Lindbergh also flew missions in a Corsair, flying with U.S. Marine Corps pilots at Green Island and Emirau. On September 3, 1944, Lindbergh demonstrated the Corsair's bomb hauling capacity by carrying three 1,000-pound (450 kg) bombs and dropping them on enemy positions at Wotje Atoll. On September 8, Lindbergh flew another attack mission to Wotje Atoll, this time dropping a 2,000-pound (900 kg) bomb. Five days later, Lindbergh flew a final mission to demonstrate the Corsair's bomb hauling capacity to the pilots of Marine Air Group 31. On this mission, Lindbergh flew a Corsair carrying one 2,000-pound (900 kg) bomb and two 1,000-pound (450 kg) bombs during an attack on the atoll.

The Corsair returned to the decks of U.S. Navy aircraft carriers and U.S. Marine Corps airfields during the Korean War. During the conflict, Corsairs were primarily used to support Allied ground forces on the front lines. In 1954, Vought manufactured 94 F4U-7 Corsairs for the French Navy, which used them during the Indochina campaign in the late 1940s and the early 1950s. These Corsairs would be the last of over 12,500 examples of the fighter produced from 1942 to 1953.

During the Corsair's long production run, the aircraft was built in 16 different variants. Later variants of the Corsair had more powerful engines, improved four-blade propellers, upgraded armament, radar, and additional armor plating. The Corsair was also a versatile aircraft and adaptable to many roles, including fighter, fighter-bomber, ground-attack, night fighter, and reconnaissance. The Corsair had the distinction of remaining in production longer than any other U.S. fighter aircraft to see service in World War II.

The National Air and Space Museum's Vought F4U-1D Corsair was delivered to the U.S. Navy in 1944. In November of 1944, the Corsair was sent to VF-89 and stationed at Naval Air Station (NAS) Atlantic City. The Corsair remained with VF-89 as the squadron transferred to NAS Oceana and later, NAS Norfolk. In 1945, the U.S. Navy removed the F4U-1D from active service and placed it in a large pool of aircraft held in reserve status in Quantico, Virginia. In September 1960, the U.S. Navy donated the Corsair to the Smithsonian Institution. At the time, the Smithsonian Institution was collecting examples of American aircraft that played a significant role in winning World War II for future inclusion in a new National Air and Space Museum planned for Washington, D.C., on the National Mall.

In 1980, National Air and Space Museum curators restored the Corsair. The colors and markings match a Corsair nicknamed "Sun Setter", a fighter assigned to Marine Fighter Squadron VMF-113 in July 1944, when that squadron was operating in the Marshall Islands. Unfortunately, due to a lack of space in the National Air and Space Museum building on the National Mall, the Corsair was placed into storage.

When the National Air and Space Museum's Steven F. Udvar-Hazy Center was opened in 2003, the museum curators finally had space to display the Corsair and share it with the public. Today, the Corsair hangs near the museum's front entrance in a dramatic banked position, with its landing gear and tailhook extended. The Corsair hangs on display as if it is approaching for a landing on an aircraft carrier flight deck in the Pacific theater during World War II.

BAE Systems Hawk T.1A (1976)

The BAE Systems Hawk T.1A is a British single-engine, subsonic, jet-powered advanced training aircraft. Initially developed by Hawker Siddeley, the Hawk ended up being produced by its successor companies, British Aerospace and BAE Systems. The Hawk's development began in the late 1960s when the Royal Air Force requested a new fast jet trainer that was simple to maintain and affordable to operate. The initial variant of the Hawk, the T1, flew for the first time in 1974 and entered service with the Royal Air Force in late 1976. Export variants of the Hawk, specifically designed as a lightweight fighter and ground-attack aircraft, with avionics and weapons systems packages suited to customer requirements, were also developed. Since its introduction, over 1,000 examples of the Hawk have been built and sold to 18 countries worldwide.

BAE Systems Hawk T.1A

Crew: 2 (Student Pilot & Flight Instructor)

Length: 39 ft 3 in (11.98 m)

Height: 13 ft 1 in (3.99 m)

Wingspan: 30 ft 10 in (9.39 m)

Wing Area: 179.6 sq ft (16.7 m^2)

Powerplant: Rolls-Royce/Turbomeca Adour Mk. 151 twin-shaft turbofan (x1)

Range: 397 nmi (639 km) (Normal Range), 1,361 nmi (2,520 km) (Ferry Range)

Maximum Speed: 638 mph (1,028 km/h) (Mach 0.88)

Cruise Speed: 460 mph (740 km/h) (Mach 0.60)

Empty/Gross/Maximum Takeoff Weights: 9,877/18,891/20,062 lb (4,480/8,569/9,100 kg)

Service Ceiling: 44,500 ft (13,567 m)

Armament: 30 mm (1.18 in) Aden cannon in centerline gun pod (x1), AIM-9L Sidewinder air-to-air missiles on underwing pylons (x2)

"Red Arrows" Airshow Aircraft

Flight Characteristics

The Hawk has an excellent reputation in service and is praised by pilots for its exceptional maneuverability, particularly its rate of roll and turning radius. The Hawk can reach speeds of up to Mach 0.88 in level flight and Mach 1.15 in a dive, allowing student pilots to experience transonic flight before moving into supersonic aircraft. The aircraft is fully aerobatic, and its strong and durable airframe is stressed to handle g-forces of up to +9 g.

Flight Systems

A dual hydraulic system provides power to operate the Hawk's flight control systems, flaps, landing gear, and brakes. In the event of an engine failure, a ram air turbine is fitted to the Hawk's tail to provide backup hydraulic power to the flight control systems. Additionally, a gas turbine auxiliary power unit is housed directly above the engine. On export variants of the Hawk used in light fighter and ground-attack roles, additional systems and sensors can be fitted to the aircraft for the operation of weapons and defensive countermeasures.

Cockpit

The Hawk was built in both single-seat and two-seat variants. For the two-seat advanced trainer variants, the second seat is positioned higher, and the instructor has excellent visibility over the student pilot in the front seat. The Hawk features dual controls and can be flown from either seat. Avionics packages in the Hawk's cockpit vary according to variant and customer preferences. The T.1A's cockpit features conventional analog gauges and instrumentation rather than modern LCD screens that are common in newer aircraft. The cockpit is covered by a one-piece canopy and fitted with Martin-Baker Mk 10B zero-zero, rocket-assisted, ejection seats. In the event of an emergency, an explosive charge shatters the top of the canopy, allowing the pilots to eject from the aircraft.

Engine

The Rolls-Royce/Turbomeca Adour Mk. 151 twin-shaft turbofan engine powers the T.1A variant of the Hawk. Air flows into the engine through intakes on each of the forward wing roots. During the Hawk's development, Rolls-Royce engineers worked closely with those from British Aerospace and BAE Systems to reduce the engine's fuel consumption, improve its reliability and serviceability, and lower operating costs. Recently, maintenance and reliability issues with the Adour engines have surfaced as early variants of the Hawk reach high numbers of flight hours on their airframes. Newer variants of the Hawk are fitted with more powerful and improved versions of the Adour engine, equipped with a FADEC (full authority digital engine control) system.

Armament

Although designed as an advanced trainer, some variants of the Hawk can be equipped for combat missions as a light fighter or ground-attack aircraft. The T.1A variant of the Hawk could carry two AIM-9L Sidewinder air-to-air missiles on underwing pylons and a 30 mm Aden cannon in a centerline gun pod. On the "Red Arrows" aircraft, the gun pod is replaced by a special tank that carries diesel fuel used to generate smoke trails by the team during their airshow displays. The diesel fuel is mixed with colored dye to create the colorful smoke trails that are a fixture of "Red Arrows" airshow displays. The tank is divided into three sections and holds enough diesel fuel and dye to produce five minutes of white smoke, one minute of blue smoke, and one minute of red smoke.

"Red Arrows"

The Hawk may be most famous for its role as the aircraft flown by the Royal Air Force Aerobatic Team, the "Red Arrows", which fly nine of the aircraft in flypasts at special events and flight demonstrations at airshows. The "Red Arrows" began flying the Hawk T.1A in 1980, and have flown displays with the aircraft in over 50 countries worldwide. Although the livery has changed slightly over the years, the Hawks flown by the "Red Arrows" have always been painted almost entirely bright red. Red is the color used by the team for several reasons, one of which is safety, as it stands out against both blue sky and clouds. Although the team has flown T.1A Hawks successfully for nearly 50 years, the aircraft are reaching the end of their fatigue life. Spare parts and engines are also becoming difficult to source for the team. The "Red Arrows" and the Royal Air Force are actively searching for a replacement aircraft type for the team. Currently, it is expected that the "Red Arrows" will continue to fly the T.1A Hawk until 2030.

Curtiss R3C-2 Racer: 1925 Schneider Trophy Winner

Flown by U.S. Army Lt. James H. Doolittle, this Curtiss R3C-2 Racer won the 1925 Schneider Trophy Race for seaplanes and flying boats. Today, the record-breaking air racer is on display at the National Air and Space Museum's flagship location on the National Mall in Washington, D.C. In the early years of aviation, sleek and colorful racing aircraft designs such as the Curtiss R3C-2, and the spirit of sport and competition at air racing events, heightened the appeal of aviation to the general public.

In the early years of aviation, a spirit of competition and sport became a major part of its appeal to the public. Air races began to enjoy worldwide popularity, and one of the most coveted prizes was the Schneider Trophy. The trophy was established in 1912 by wealthy French industrialist Jacques Schneider and awarded to the winner of an annual race for seaplanes and flying boats.

In 1925, the U.S. Navy and the U.S. Army entered the Schneider Trophy competition with three Curtiss R3C-2 seaplanes specially built for the contest by the Curtiss Aeroplane and Motor Company. The single-seat biplanes were small, with a length of just 22 feet (6.71 m), a wingspan of the same length, and a height of 10 feet, 4 inches (3.15 m). The airplanes featured several innovative design elements, including low-drag wing radiators made of brass sheeting for engine cooling, a powerful water-cooled inline engine, fuel tanks installed in streamlined floats, a rigid structure made of wood and doped fabric for added strength and protection, and an upper wing that was flush with the top of the aerodynamic fuselage. The cockpit was fitted only with necessary instruments, including gauges for water temperature, oil temperature, oil pressure, and fuel quantity.

The 1925 Schneider Trophy competition was held at Bay Shore Park near Baltimore, Maryland, on October 23 to 26, with the actual race taking place over the Chesapeake Bay on October 26. Throughout the competition, the American Curtiss R3C-2s racers were faster than the aircraft entered by Great Britain and Italy. Unfortunately, during the race, both R3C-2s entered by the U.S. Navy were forced out of the competition with mechanical problems, leaving Lt. James H. Doolittle, flying the stunning black and gold R3C-2 entered by the U.S. Army, in a position to win the race. Doolittle flew the R3C-2, sporting white race #3, to victory, with an average speed of 232.57 miles per hour (372.59 km/h). The next day, flying the same R3C-2, Doolittle set a new world record over a straight course with a speed of 245.7 miles per hour (395.42 km/h).

The R3C-2 was transferred to the Smithsonian Institution by the U.S. War Department in 1927 and displayed in the museum's Arts and Industries building for several years. Later, it was loaned to the National Museum of the U.S. Air Force, where it was restored by U.S. Air Force personnel. The R3C-2 now hangs on display in the "Pioneers of Flight" gallery at the National Air and Space Museum's flagship National Mall location in Washington, D.C.


U.S. ARMY
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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.