May 2025

Corey J Beitler's

"Distelfink Airlines"

An Online Aviation Newsletter

Golden Age Air Museum Biplanes & Bands Fly-In/Cruise-In

The Golden Age Air Museum's 1929 Waco GXE seconds from landing during last summer's Biplanes & Bands Fly-In/Cruise-In event. The museum sells rides in this aircraft during public events at the museum and by appointment. These rides are especially popular during fall events at the museum, when the nearby Blue Mountain Ridge features fall foliage in vibrant colors.

FROM THE EDITOR'S DESK

Biplanes & Bands, Loening OA-1A, Convair Sea Dart, Rob Holland, Boeing 747-400

Greetings Everyone:

The May edition of "Distelfink Airlines" is here. Airshow season is just around the corner here in the Mid-Atlantic and Northeast regions of the United States. "Distelfink Airlines" has two airshows lined up to start the season. I will be covering the upcoming Power In The Pines Airshow at the Joint Base McGuire-Dix-Lakehurst in May and the Mid-Atlantic Air Museum's World War II Weekend in June with media credentials. I am currently in discussion to cover two additional upcoming airshows representing the newsletter. These events should provide plenty of new content for "Distelfink Airlines" through the summer months.

This editor's note starts with sad news. As most who read this newsletter will probably already know by the time it is published, beloved airshow performer and competitive aerobatics pilot Rob Holland lost his life in an aviation accident on April 24, 2025. Rob Holland was a fixture at airshows in the Mid-Atlantic and Northeast of the United States and was a highly successful competitive aerobatics pilot on the national and international levels. Rob was well-liked by his fellow performers and throughout the airshow industry. There have already been several well-written and heartfelt tributes to Rob from aircraft manufacturers, airshows, aviation museums, fellow airshow performers, and enthusiasts. Rob captivated audiences at airshows with not only his skill and precision in his MXS-RH aircraft, but also on the ground with his personality and positive attitude when he signed autographs, posed for pictures, and talked to the spectators. There is a small tribute to Rob Holland at the end of this newsletter in "One Last Thing". My thoughts and prayers continue to be with Rob's family and his friends who knew him best during this difficult time.

The featured content for this edition takes a look back at the Biplanes & Bands Fly-In/Cruise-In held at the Golden Age Air Museum last June. This was some extra content I had from last year, and I decided to run it for this edition. This event had a nice selection of fly-in aircraft that attended, and most of the aircraft in the Golden Age Air Museum aircraft collection were flown at the event as well. The photo feature highlights some of the attending fly-in aircraft and aircraft from the Golden Age Air Museum collection.

The "Aircraft Of The National Air And Space Museum" section features the Loening OA-1A "San Francisco". This aircraft is the only survivor of its type and took part in a goodwill flight by the U.S. Army Air Corps to Mexico, Central and South America in 1926 and 1927. This aircraft also has a special connection to Charles Lindbergh and his historic flight with the "Spirit of St. Louis".

The "Aircraft Of Special Interest" section in this edition is a look at the Convair Sea Dart. This aircraft was a concept tested to design and fly a supersonic seaplane fighter and interceptor. Convair's engineering team made an admirable attempt to build and design an aircraft to meet difficult performance requirements set forth by the U.S. Navy. The Sea Dart never made it past the prototype and testing stage, but most of the examples built found their way to museums, so their intriguing story is not forgotten.

Finally, "Aviation Sightings" has what is now a rare catch in the skies these days, a Boeing 747-400 in passenger service. It is amazing to think that not too long ago, the 747-400 dominated long-distance commercial air travel worldwide.

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

Regards,
-Corey

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What's Inside:

Boeing 747-400

A Boeing 747-400 operated by the German airline Lufthansa on approach to the Washington-Dulles International Airport in Chantilly, Virginia, after a flight from Frankfurt, Germany. A common sight at major international airports worldwide during the 1990s and early 2000s, the Boeing 747-400 has been rapidly phased out of service by airlines in recent years in favor of more fuel-efficient twin-engine aircraft.

The Boeing 747-400 is a four-engine, long-range, wide-body jet airliner produced by Boeing Commercial Airplanes and an advanced and updated variant of the Classic Boeing 747. Popular with airlines worldwide and built in large numbers, the 747-400 became an icon of long-distance air travel during the 1990s. The 747-400 typically seats 416 passengers in a three-class layout and has a range of 7,285 nautical miles (13,492 km).

The Boeing 747-400 retains the airframe of the Classic Boeing 747 variants of the 1960s and 1970s but features several improvements and updates. Introduced into service with Northwest Airlines in 1989, the 747-400 featured a new, two-crew glass cockpit. The 747-400's wingspan was extended 17 feet (5.2 m), and the wings were constructed from a new aluminum alloy to reduce weight and fitted with winglets to reduce aerodynamic drag. The tail was redesigned to hold an additional fuel tank to extend range, and the landing gear was upgraded with larger wheels and carbon brakes. Three new turbofan engines, the Pratt & Whitney PW4056, the General Electric CF6-80C2B1F, and the Rolls-Royce RB211-524G/H, were available on the 747-400 that offered greater thrust and less fuel consumption than the engines on the previous variants of the Classic Boeing 747. Finally, the passenger cabin was updated with new choices for interior colors, layouts, and other improved amenities.

Boeing delivered a total of 694 747-400s during a production run of 20 years from 1989 to 2009. The –400 variants were the best-selling model of the Boeing 747. In addition to passenger models, Boeing sold 747-400F freighter versions of the aircraft, with an opening nose cargo door, and 747-400M "Combi" versions, which could carry passengers and freight. In the 2010s, airlines began phasing out the Boeing 747-400 in favor of more efficient, long-range, twin-engine aircraft such as the Boeing 777 and Airbus A350. The suspension of air travel worldwide during the COVID-19 pandemic accelerated these retirements.

The Boeing 747-400 seen here arriving at the Washington Dulles International Airport is operated by the German airline Lufthansa, one of the last airlines that operates the aircraft in passenger service. Lufthansa plans to retire the eight 747-400s in its fleet by 2028.


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1988 Potpourri Press *Spirit of St. Louis* Mug & Tin Set

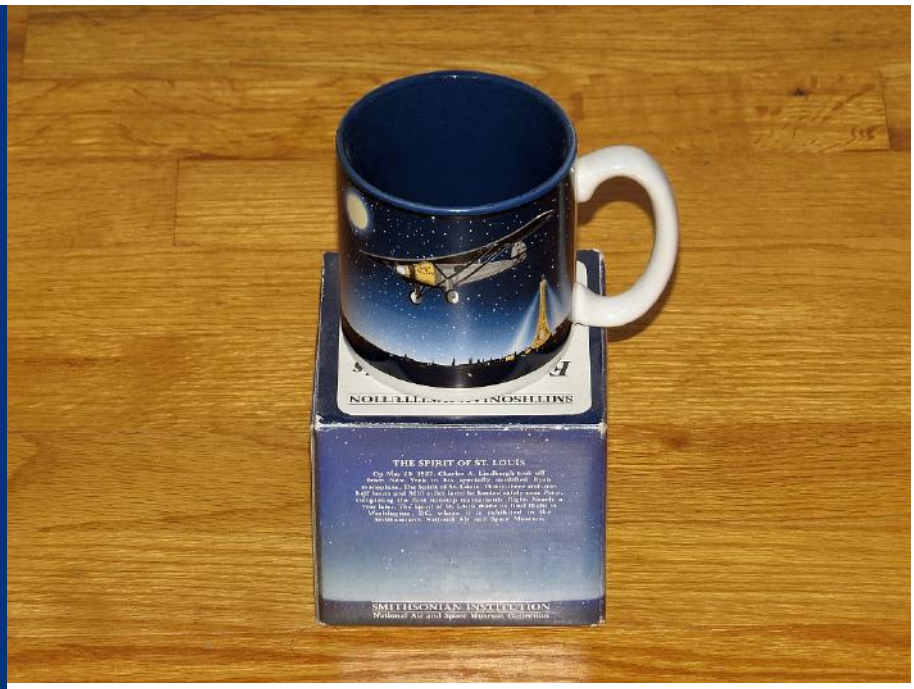
In 1988, the Smithsonian Institution partnered with Potpourri Press for a product line of merchandise, including tins, mugs, and puzzles commemorating "Famous Flights". This merchandise was sold in the National Air and Space Museum gift shop and featured artwork of some of the famous aircraft in the National Air and Space Museum's collection. This mug and tin from the "Famous Flights" product line features artwork of the "Spirit of St. Louis" arriving in Paris on the evening of May 21, 1927.

On May 20-21, 1927, airmail pilot Charles Lindbergh became a media sensation and one of the world's most famous aviators almost overnight when he became the first person to complete a solo, nonstop, transatlantic flight in his airplane, the *Spirit of St. Louis*. Taking off from New York, Lindbergh fought exhaustion, hunger, and cold temperatures to guide the *Spirit of St. Louis* 3,600 miles (5,794 km) across the Atlantic Ocean to Paris in just over 33 hours. When Lindbergh arrived in Paris, he was greeted by over 150,000 people. Since that historic flight, Charles Lindbergh and the *Spirit of St. Louis* have been the subject of books, movies, documentaries, artwork, and thousands of items of aviation memorabilia. Today, the *Spirit of St. Louis* hangs in honor of Lindbergh's achievement in the Smithsonian Institution's National Air and Space Museum on the National Mall in Washington, D.C.

In 1988, the Smithsonian Institution collaborated with Potpourri Press, a gift and stationery company, to design a product line to sell in the National Air and Space Museum gift shop. The product line was called "Famous Flights" and featured a series of tins and ceramic coffee mugs featuring original artwork depicting famous flights in aviation and spaceflight history. The aircraft chosen for the mugs and tins included the Wright Flyer, the Grumman F-14A Tomcat fighter jet, the Lockheed SR-71 Blackbird spy plane, the Rutan Voyager, the Space Shuttle *Columbia,* and Charles Lindbergh's *Spirit of St. Louis.* In addition to the series of mugs and tins, a pair of 200-piece jigsaw puzzles featuring original artwork with collectible tins were also sold. One of the puzzles featured a space scene with an astronaut spacewalking, the Saturn V rocket with the Apollo 11 space capsule launching into space, and the Space Shuttle *Columbia* in orbit. The second puzzle featured the same aircraft featured on the mugs and tins but added a Boeing B-17 Flying Fortress bomber from World War II in the artwork. The artwork on the puzzles was also featured on two small ceramic coin/key/trinket dishes sold in the National Air and Space Museum gift shop. Interestingly, the National Air and Space Museum's partnership with Potpourri Press was short-lived, and the "Famous Flights" series was the only merchandise product line produced by the company for the museum.

This tin and mug are part of the Potpourri Press "Famous Flights" series and feature the *Spirit of St. Louis* arriving in Paris on the evening of May 21, 1927, after its historic transatlantic flight with the Eiffel Tower in the background. My Grandfather, an avid collector of Charles Lindbergh and *Spirit of St. Louis* memorabilia, purchased the mug and tin at the National Air and Space Museum gift shop during one of his trips to the museum.

The tin included a small pen and stationery that featured the same artwork of the Spirit of St. Louis found on the tin. The stationery included in this tin was note cards with matching envelopes. After using the stationery and the pen, many people repurposed the tins for other uses or displayed them as décor pieces.



The mug was made of stoneware and had a capacity of 11 ounces. The front side of the mug featured artwork of the Spirit of St. Louis, and the back featured a small description of the airplane. The mug came in a decorative box with the same artwork and description on its front and back sides.

Franklin Mint A-10A Thunderbolt II "Black Lightning"

As part of their Armour Collection lineup of 1/48 scale die-cast model aircraft, the Franklin Mint made an excellent replica of the Fairchild Republic A-10 Thunderbolt II close air support (CAS) in service with the U.S. Air Force since 1977. The Franklin Mint made this model in several different paint schemes, including this colorful example representing a scheme worn by an A-10A Thunderbolt II flown by the 103rd Fighter Wing, 118th Fighter Squadron of the Connecticut Air National Guard in the mid-2000s.

The Fairchild Republic A-10 Thunderbolt II is a single-seat, twin-turbofan, straight-wing, subsonic attack aircraft developed by Fairchild Republic for the U.S. Air Force. In service since 1977, the A-10 is named after the Republic P-47 Thunderbolt, a famous fighter and ground attack aircraft from World War II. In service, the A-10 is commonly known by its nickname, "Warthog" or "Hog" because of its distinctive appearance. The A-10 is designed to provide close air support (CAS) to friendly ground forces by attacking and destroying enemy tanks, armored vehicles, and personnel. In addition to CAS missions, the A-10 can perform combat search and rescue and airborne forward air controller missions. The A-10 Thunderbolt II is the only purpose-built CAS aircraft ever produced for the U.S. Air Force.

The A-10 was designed to operate in high-threat environments at low altitudes. As a result, the A-10 was designed to survive direct hits from enemy small-arms fire and missiles. The cockpit and vital systems are protected by a "bathtub" of titanium armor, and the fuel tanks are self-sealing in the event of a puncture. The cockpit windshield can also withstand small arms fire. Redundant flight control systems allow the A-10 to remain flying even if the airframe is seriously damaged. The main landing gear remains partially exposed when retracted. This minimizes damage to the airframe if an A-10 has to make a belly landing due to combat damage. For additional defense against enemy fire, the A-10 is equipped with countermeasures such as flare and chaff dispensers, and air-to-air missiles can be carried for defense against enemy helicopters and other aircraft.

As the A-10 was designed for the CAS mission, the airframe was designed around the GAU-8/A Avenger rotary cannon, the rounds of which can pierce the armor of any tank in the world. In addition to the cannon, the A-10 has eleven hardpoints for external stores and ordnance. Up to 16,000 lb (7,260 kg) of weapons can be carried in the form of air-to-ground missiles, anti-armor missiles, cluster bombs, laser-guided bombs, and rocket pods. The hardpoints can also hold other external stores, such as extra fuel tanks for increased range and electronic countermeasures or targeting pods.

To facilitate operating in the close support role and from forward areas, the A-10 Thunderbolt II is capable of taking off and landing from improvised and rough airstrips. The A-10's General Electric TF-34-GA100A turbofan engines are mounted high on the fuselage to prevent ingestion of dirt and debris when using improvised airstrips. The A-10 was also designed for quick repairs in forward combat areas. Many of the aircraft's parts, such as the tail surfaces and engines, are interchangeable between each side of the aircraft The A-10's high wing and long landing gear allow the loading of ordnance and other external stores onto the hardpoints with minimal ground support equipment.

Designed during the Cold War, the A-10 Thunderbolt II never had the opportunity to fight the war it was designed for, a European conflict between the Soviet Union and NATO Allies where the A-10 would have been responsible for knocking out Soviet tank formations. Despite this, the A-10 Thunderbolt II has played an important role in supporting the ground forces of the U.S. and its Allies in recent military conflicts such as the 1991 Gulf War, Operation Enduring Freedom, Operation Iraqi Freedom, and the recent military actions against the forces of the Islamic State. In these conflicts, the A-10 not only performed CAS missions but also acted as an airborne forward air controller, directing other aircraft and weapons systems to attack enemy targets. In recent conflicts, one of the most important missions the A-10 and its pilots have performed is combat search and rescue. During these missions, A-10 pilots search for and find friendly forces and then provide air cover for a rescue operation. Several of these types of missions were flown in Operation Enduring Freedom, with A-10s suppressing enemy ground forces with cover fire as the friendly forces were successfully extracted from the area by helicopter.

A total of 716 A-10s were built by Fairchild Republic from 1972 to 1984. Of those aircraft, approximately 220 remain in active service with U.S. Air Force, Air Force Reserve Command, and Air National Guard squadrons. Since its introduction, the A-10 Thunderbolt II has been continuously upgraded. Beginning in 2005, a significant upgrade program updated all A-10As to the A-10C standard. This program, done in increments, updated the A-10's avionics and allowed the aircraft to use precision weapons. The A-10s remaining in service have also received replacement wings to address a situation of fatigue cracks forming in the original wing structures.

This angle of Franklin Mint's 1/48 scale Fairchild Republic A-10 Thunderbolt II model shows some of the distinctive features of the A-10's design that make it such a successful CAS aircraft. The straight wing and twin tails give the A-10 superb maneuverability at low speeds. The placement of the engines on the upper portion of the fuselage allows the A-10 to use unprepared airstrips and reduces the chance of the engines ingesting foreign debris. Franklin Mint did a superb job replicating some of the A-10's unique design features on their model.

Although the Franklin Mint did an excellent job replicating the Fairchild Republic A-10 Thunderbolt II and the special "Black Lightning" paint scheme worn by this A-10 operated by the Connecticut Air National Guard, the model has some shortcomings. The Franklin Mint inaccurately reproduced the light gray color found on the A-10 for their model. The color on the model is almost off-white rather than the light gray it is supposed to be. The "Black Lightning" markings on the fuselage are also decals instead of pad-printed graphics and may be prone to cracking or peeling over time.

Although the A-10 Thunderbolt II has proven to be a durable and versatile aircraft, the U.S. Air Force believes its slow speed and lack of stealth technology make it vulnerable in modern warfare. As a result, the U.S. Air Force plans to phase out the A-10 from its active inventory within the next five years, with some Air National Guard units already losing their aircraft. The A-10's retirement continues to be a contentious debate between top military officials and political figures. The U.S. Air Force has stated the Lockheed Martin F-35 Lightning II can perform the CAS role and replace the A-10, but some military and political officials do not agree. Despite the proposed retirement of the entire A-10 fleet, the aircraft continues to be deployed overseas. Recently, A-10s from the 124th Fighter Wing of the Idaho Air National Guard were sent on an overseas deployment to the Middle East, proving the aircraft still has capabilities valuable in the modern combat environment.

This 1/48 scale die-cast model of a Fairchild Republic A-10A Thunderbolt II was manufactured by the now-defunct Franklin Mint as part of their Armour Collection product line of die-cast aircraft models. The Franklin Mint produced the Armour Collection line, which featured die-cast models of World War II and Modern combat aircraft, in the early 2000s. Today, the Franklin Mint Armour Collection models are highly sought after by collectors because of their limited production runs and high quality. The A-10 Thunderbolt II was made in several different squadron liveries by the Franklin Mint.

This A-10A Thunderbolt II represents A-10A BuNo #78-621 flown by the 103rd Fighter Wing, 118th Fighter Squadron, of the Connecticut Air National Guard. In 2003, the squadron celebrated its 80th anniversary, and to mark the occasion, painted one of their A-10As in this special livery to honor the squadron's heritage from World War II. This A-10A eventually became known as "Black Lightning". The 103rd Fighter Wing flew A-10A Thunderbolt IIs from 1979 to 2008. Now designated the 103rd Airlift Wing, the unit flies the Lockheed C-130H Hercules transport aircraft.

The Franklin Mint did an excellent job capturing the overall shape of the A-10 Thunderbolt II correctly. The model has all the features that are distinctive to the A-10, including the large straight wing, twin tail configuration, and oversized engines. The model is heavy, as most of it is made of die-cast metal. The A-10 features a detailed cockpit and a weapons load of bombs, air-to-air missiles, and of course, the distinctive nose cannon.

Franklin Mint also did an excellent job replicating all the correct markings on this model. The black lightning bolts are in the correct place on the sides of the fuselage. The model also has the correct serial numbers and identification markings in the proper locations. An interesting note on the markings of this model is the markings on the engines. In 2003, this A-10 wore special "80" stenciling on its engines to honor the anniversary of the 118th Fighter Squadron. Later, this stenciling was removed and replaced with the emblem for the 103rd Fighter Wing, "The Flying Yankees". The model has the 103rd Fighter Wing emblem on the engines, which is correct for the aircraft after 2003.

As with any die-cast model, there is room for improvement with this A-10 Thunderbolt II from the Franklin Mint. One aspect of this model that could have been improved was the paint finish. In photos of the actual aircraft used as a reference, the lighter gray color used on this model is too light and should be darker. On the real aircraft, it is light gray, but on the model, it is almost white. Since plenty of pictures of the actual A-10 in this color scheme exist, it is unusual that Franklin Mint made such a significant error on the shade of gray they used on their model. The weapons load, although painted with accurate colors, could have used some detail painting and stenciling to make it more visually appealing on the model.

The other aspect of this model that could have been improved was the use of decals. Franklin Mint used a decal for the large lightning bolts on the fuselage of the aircraft. Larger decals can be troublesome over time with cracking and peeling. Although this model remains in excellent condition several years after being produced, it must be handled carefully and kept out of direct sunlight and in a climate-controlled environment to protect the decals. The same situation exists for the model's tires, which are made of rubber and could crack or dry rot over time if exposed to heat or sunlight.

This classic die-cast model from the Franklin Mint is an excellent representation of an iconic U.S. military aircraft. This A-10A was heavily photographed when it debuted as a tribute to the 118th Fighter Squadron and its cherished history. As a result, this particular A-10 and its color scheme have been frequently modeled by plastic model kit builders. The Franklin Mint's die-cast model of this A-10 is an excellent replica that will be a conversation piece in any die-cast model airplane collection due to its colorful markings and impressive size.

Franklin Mint's 1/48 scale die-cast Fairchild Republic A-10 Thunderbolt III model makes an excellent display piece, especially the "Black Lightning" version with its colorful paint scheme. The Franklin Mint's die-cast A-10 model is an impressive display piece thanks to its large size and accurate representation of distinctive features found on the actual aircraft.

Golden Age Air Museum Biplanes & Bands Fly-In/Cruise-In

The annual mid-June event at the aviation museum features food, a wine and beer tasting tent, live music, a small car show, visiting fly-in aircraft, and flight demonstrations of aircraft in the museum's collection.

Caroline Dougherty flies the Golden Age Air Museum's reproduction 1930 Great Lakes Sports Trainer. The Great Lakes Sport Trainer was built from 1928 until the 1930s, and was popular with aerobatic pilots flying in competitions for many years. Plans for the airplane are still available today and new examples are built with modern engines as homebuilt and replica aircraft.

Eric Lunger flies his restored World War II-era Boeing N2S Stearman biplane at the 2024 Biplanes & Bands Fly-In/Cruise-In event held at the Golden Age Air Museum. The Stearman is one of the iconic American biplanes in aviation history and one of World War II's great training aircraft. Lunger's Stearman has a smoke system installed to add a little visual excitement for spectators when it is flown at an airshow or fly-in.

A trip to the Golden Age Air Museum located near the town of Bethel in scenic Berks County, Pennsylvania, takes museum visitors back to the early days of aviation. Located at the Grimes Airfield, the Golden Age Air Museum was established by the Dougherty family in 1997. The museum is dedicated to collecting, restoring, and displaying aircraft, aero engines, and artifacts from the "Golden Age of Aviation". This period in aviation history saw great advances in the design of aircraft, with airplanes evolving from wood and fabric -covered biplanes to all-metal monoplanes. These airplanes and the pilots who flew them, such as Charles Lindbergh, Jimmy Doolittle, and Amelia Earhart, captured the public's imagination, with stories of their record-breaking flights making the front pages of newspapers nationwide.

The Golden Age Air Museum has a collection of over 30 aircraft, several vintage automobiles, and hundreds of smaller pieces of aviation memorabilia. One of the highlights of the museum collection is a rare airworthy original 1918 Curtiss JN-4D "Jenny", an airplane that was a favorite of the barnstormer pilots. Museum volunteers have built three World War I reproduction aircraft for the museum collection, including a 1916 Sopwith Pup fighter, a 1918 Fokker Dr.I Triplane fighter, and most recently, a 1918 Spad X.III, a French-built fighter used by American pilots during the war.

One of the annual events at the Golden Age Air Museum is the Biplanes & Bands Fly-In/Cruise-In. The event at the museum, usually held in mid-June, features food, a wine and beer tasting tent, live music, a small car show, and flight demonstrations of aircraft from the museum's collection. The event is open to fly -in aircraft, and biplane rides are available in the museum's 1929 Waco GXE during the event.

This photo feature highlights some of the aircraft seen at the 2024 Biplanes & Bands Fly-In/Cruise-In held last June. More about the Golden Age Air Museum, including a brief history of the museum, its aircraft collection, and the 2025 public event schedule is available at www.goldenageair.org.

During the Biplanes & Bands Fly-In/ Cruise-In, the Golden Age Air Museum aircraft collection is pulled out of their hangars and displayed on the field if weather conditions allow. Several airworthy aircraft in the collection are also flown during the event. This airplane is the museum's 1918 Curtiss JN-4D "Jenny". The "Jenny" was built as a training aircraft during World War I. After the war, surplus examples were used for hauling mail, flying airshows, and barnstorming across the country.

The Golden Age Air Museum's Biplanes & Bands Fly-In/ Cruise-In is open to classic cars driving in and pilots flying in with their aircraft. All aircraft types are welcome to the museum events provided they can safely operate from the Golden Age Air Museum's grass airstrip. Many of the pilots that "fly-in" to the Golden Age Air Museum events are regular attendees. This is Betsey Carlisle arriving at the museum in her classic yellow and orange Aeronca Model 7 "Champ" or Champion.

A surprise visitor to the 2024 Biplanes & Bands Fly-In/Cruise-In was this Beechcraft C-45 Expeditor, one of the military versions of the Beechcraft Model 18 or "Twin Beech". The Beechcraft Model 18 was produced from 1937 to 1969 and was used worldwide as a civilian executive transport, utility, small airliner, and cargo aircraft. During World War II, over 4,500 Model 18s were produced for military use. They were used as light transport aircraft, liaison aircraft, and trainers for bomber aircrews.

It is unusual for larger aircraft, such as this restored Beechcraft C-45 Expeditor, to visit the Golden Age Air Museum. As a result, this beautiful aircraft drew quite a crowd of admirers once it was parked on the field. This C-45 was delivered to the U.S. Army Air Forces in 1942 as a C-45H. It was converted to a C-45G in 1953 and operated by the U.S. Air Force until 1959 when it was sold as surplus on the civilian market. It is currently owned by Dream Weaver Aviation LLC in East Berlin, Pennsylvania.

Mark Denest and Tim Trimble are regular visitors to Golden Age Air Museum events with their restored Fairchild PT-26 Cornell trainers. Here, they are arriving at the event with a formation flyby. The PT-26 was a development of the Fairchild PT-19 Cornell trainer that featured an enclosed cockpit for more comfortable flying in cold weather conditions. Most of the PT -26s built were sent to Canada for use by the Royal Canadian Air Force under the British Commonwealth Training Program.

Collin Aucker is a regular visitor to local fly-ins with his Steen Skybolt biplane which is painted in this patriotic paint scheme. This airplane is a regular visitor to the Golden Age Air Museum's Great Pumpkin Fly-In held every October. The Skybolt was designed by high school teacher Lamar Steen as an engineering project. After the prototype flew in 1970, plans were made available for the two-seat aerobatic biplane, and over 400 have been built by aircraft homebuilders in 29 countries.

A small but interesting variety of fly-in aircraft showed up for the Golden Age Air Museum's Biplanes & Bands Fly-In/Cruise-In, including vintage, general aviation, and home-built types. This 1952 Cessna 170B was one of the classic general aviation aircraft on the field. The 170 is a single-engine, four-place, general aviation aircraft produced by Cessna from 1948 to 1956. The 170B variant, introduced in 1952, had a new wing tapered outboard of the flaps, a new tailplane, and a revised tailwheel bracket.

The Cessna L-19/O-1A Bird Dog was the military variant of the civilian Cessna 170. Examples of the L-19/O-1A were used in the Korean and Vietnam War. The L-19/O-1A Bird Dog was used for several utility roles, including reconnaissance, artillery spotting, medical evacuation, radio relay, and as a forward air controller for other tactical aircraft. Cessna built over 2,200 L-19s/O-1As for military use. After they were retired in the 1970s, many L-19s/O-1As were sold as surplus on the civilian market.

During the event, several aircraft in the Golden Age Air Museum's collection were flown for the event attendees. One of the aircraft flown from the collection was the Taylor E-2 Cub. The E-2 Cub was designed as a small and light utility aircraft and is the forefather of the Piper J-3 Cub. A total of 353 Taylor E-2 Cubs were built between 1931 and 1936. The Golden Age Air Museum's Taylor E-2 Cub was produced in 1932 and is serial number 54. The museum acquired this Taylor E-2 Cub for its collection in 1991.

Another aircraft from the Golden Age Air Museum Collection that got some flight time during the Biplanes & Bands Fly-In/Cruise-In was the museum's 1932 Pietenpol Air Camper. The first Air Camper was built by Bernard H. Pietenpol in 1929, who wanted to prove an airplane could be built around an automobile engine. The design was so successful that the plans were run in the 1932 "Flying and Glider Manual" produced by Modern Mechanics magazine. This Air Camper is powered by a Ford Model A engine.

Commonly known as the "Champ", the Aeronca Model 7 Champion was designed to compete with the Piper J-3 Cub and entered production in the United States in 1945. The "Champ" was marketed for flight training and personal use. During its long production run, over 10,000 "Champs" were produced, over 7,000 of those by Aeronca. The airplane was also produced in a military variant, designated the L-16. This "Champ" is part of the Golden Age Air Museum's aircraft collection.

The Aeronca C-3 Master was nicknamed "The Flying Bathtub" because of its shape. Aeronca built 400 examples of this ultra-light airplane from 1931 to 1937. With room for two adults in side-by-side seating and powered by a 40-horsepower, two-cylinder engine, the Aeronca C-3 was advertised as a simple, low-cost, reliable airplane. The C-3 and the earlier C-2 were often called "powered gliders" because of their predictable handling characteristics, gliding ability, and gentle landing speeds.

The North American T-6 Texan was a single-engine advanced training aircraft used from World War II into the 1970s. It 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 British Commonwealth countries. Over 15,000 T-6s were built and restored examples remain popular as warbirds and airshow aircraft. This restored T-6 belongs to Steven Lindrooth.

The Taylorcraft L-2 Grasshopper was an American observation and liaison aircraft built for the U.S. Army Air Forces during World War II. Liaison aircraft like the L-2 were used for artillery spotting, light transport, and short-range reconnaissance missions. The Taylorcraft L-2 was primarily used stateside during World War II for training purposes. After the war, many Taylorcraft L-2s were sold as surplus for civilian use, designated as the DCO-65. This restored L-2M belongs to Neil Baughman.

The Golden Age Air Museum's Biplanes & Bands Fly-In/ Cruise-In brought out a large number of restored warbirds to the airfield, including this Beechcraft T-34 Mentor. The T-34 Mentor was a military training aircraft derived from Beechcraft 35 Bonanza general aviation aircraft. The T-34 entered service as a trainer in the 1950s and decades later, some still remain in service in the role in smaller nations worldwide. T-34s are a popular warbird, and many remain flying today with private owners.

This biplane, owned by Bob Bush, is a regular at most Golden Age Air Museum events, including the Great Pumpkin Fly-In. This homebuilt biplane is a Shober Willie II, the original design built by William C. Shober. Shober marketed the type, suited for engines in the 150 to 250 horsepower range, in the early 1970s. Only five Willie IIs are known to have been completed by amateur homebuilders. Bob and his Dad built the Willie II in the 1970s, and Bob continues to fly the biplane to events over 40 years later.

At any fly-in, especially one on a grass airstrip, it is almost a certainty there will be a Piper J-3 Cub on the field. One of the most important light aircraft in aviation history, the Piper J-3 Cub was designed as a training aircraft and built by Piper Aircraft between 1938 and 1947. The simple, lightweight design of the Cub gives the aircraft excellent short-field performance and low-speed handling properties. The Cub also saw use during World War II as a liaison aircraft and was designated the L -4 Grasshopper.

A Cessna 210 Centurion prepares to depart the Golden Age Air Museum for home. The Centurion was built by Cessna from 1957 to 1986. It was designed as a high-performance general aviation light aircraft. During its long production run, the Centurion went through several design changes including, revised landing gear, a new fuselage and tail, improved avionics, more powerful engines, and seating increased from four to six people in the cabin. This Centurion is a 1965 210E model.

In recent years, the Pennsylvania Army National Guard has supported some of the Golden Age Air Museum events by sending one of their UH-60 Black Hawk helicopters for static display. The helicopter and its flight crew come from nearby Fort Indiantown Gap in Annville, Pennsylvania. At the 2024 Biplanes & Bands Fly-In/Cruise-In, a UH-60 Black Hawk was once again on display on the museum grounds. The crew was available to answer questions, and kids were allowed the opportunity to sit in the cockpit.

The Sikorsky UH-60 Black Hawk and its crew perform a fly-over of the museum before heading back to Fort Indiantown Gap after departing the Biplanes & Bands Fly-In/Cruise-In event. The UH-60 Black Hawk is a four-blade, twin-engine, medium-lift utility military helicopter. Introduced in 1979, the UH-60 has been deployed by the U.S. Army for several roles, including transport, medical evacuation, gunship, and special operations. Improved variants of the UH-60 remain in production today.

One of the truly beautiful airplanes on the field at the Biplanes & Bands Fly -In/Cruise-In was this 1946 Fairchild 24 owned by Jonathan Martin. The Fairchild 24 was designed as a four-seat light transport and utility aircraft during the 1930s. When it entered production in 1932, the Fairchild 24 became an instant sales success. The Fairchild 24 was popular with air taxi services, prominent businessmen, and Hollywood actors thanks to its streamlined design, attractive looks, and excellent performance.

Fairchild 24s were built with two different engine types depending on the variant, either a Warner Super-Scarab radial engine or a Fairchild Ranger inline engine. The Fairchild 24 was adopted by the U.S. Army Air Corps as a light transport aircraft and designated the UC-61 Forwarder. During World War II, the Civil Air Patrol operated several UC-61s/24s, some equipped with a pair of 100-pound bombs, to hunt for German U-boats off the east coast of the United States.

During the afternoon hours on Sunday at the Biplanes & Bands Fly-In/Cruise-In, several of the fly-in aircraft began to head for home. Dream Weaver Aviation's Beechcraft C-45G Expeditor is warming up its engines before lining up on the runway to depart. The large C-45 drew a lot of interest on the field from the event spectators. The C-45 Expeditor was the military version of the Beechcraft Model 18 and was used as a liaison and light transport aircraft during World War II, and throughout the 1950s.

The Bücker Bü 131 Jungmannt was designed as a basic trainer and aerobatic biplane aircraft in German in the 1930s. The Bü 131 proved to be a very successful design, and the type was widely exported to other countries and license-built in countries such as Spain, Japan, Poland, and the Czech Republic. Over 5,000 Bü 131s were built worldwide, and many remain flying today. In the United States, many surviving examples are fitted with modern Lycoming engines for improved performance and reliability.

The Golden Age Air Museum has an excellent collection of vintage biplanes in its airworthy collection and many of them were flown during the Biplanes & Bands Fly-In/ Cruise-In event. This is the museum's 1931 Bird CK. The airplane was built for barnstorming and can hold three passengers in its front cockpit. The Bird CK was also noteworthy in the 1930s as being a safe and easy to fly airplane. The Golden Age Air Museum acquired this Bird CK in 2001 and used it for sightseeing rides until 2008.

The Fleet Model 7 was an open-cockpit biplane with seating for two in tandem and available as a land-based trainer or a seaplane. The Model 7 was powered by a 125-horsepower Kinner B5 radial engine. The unusual shape of the tail was the result of a study indicating greater proportions were needed for spin recovery. The Fleet Model 7 had exceptional maneuverability and was easy to fly. Fleet Model 7s were built by Fleet Aircraft, a division of Consolidated Aircraft Corporation, in Buffalo, New York.

A recent addition to the aircraft collection at the Golden Age Air Museum is this 8/10-scale replica of a Waco Taperwing RTO. The original Waco Taperwings are considered one of the true classics of the Golden Age of Flight. The biplanes were used in air-racing and for barn-storming throughout the 1930s. This 8/10-scale replica of the Taperwing is powered by a 165-horsepower Warner engine. In this photo, Neil Baughman has just landed the Taperwing after flying it in a brief demonstration.

The Boeing Stearman is one of America's iconic airplanes. The Stearman was built as a primary trainer before and during World War II. During the war, the Stearman was used as a primary trainer by the U.S. Navy, U.S. Army Air Forces, U.S. Marine Corps, U.S. Coast Guard, and the Royal Canadian Air Force. Today, the Stearman is still a popular aircraft for crop dusting, banner towing, and as sport planes. This restored Stearman painted in World War II U.S. Navy colors belongs to Eric Lunger.

The 2024 Biplanes & Bands Fly-In/Cruise-In had a special visitor in the form of pilot Andrew King. Andrew King is a legendary figure in the vintage aircraft community, and is frequently trusted to fly and ferry some of the rarest vintage aircraft in the country to new owners and aviation museums nationwide. King often helps the Golden Age Air Museum by flying biplane rides during event weekends. In this photo, King is departing for home on Sunday in his Travel Air E-4000 "Miss Marianna".

Andrew King performs a final flyby of the museum grounds in his Travel Air E-4000 "Miss Marianna" before heading home to Virginia on Sunday afternoon at the Biplanes & Bands Fly-In/Cruise-In. Nicknamed "Miss Marianna", this aircraft has an interesting history. The airplane began life as a Travel Air Model 3000 before being converted to a Travel Air E-4000 in the 1950s. During its lifetime, "Miss Marianna" has been used to haul mail, dust crops, and give sightseeing rides.

On late Sunday afternoon at the Biplanes & Bands Fly-In/ Cruise-In, Paul Dougherty flew the museum's 1918 Spad S.XIII for the gathered spectators. The replica of the famous French fighter from World War I was built by museum volunteers over several years. The S.XIII is considered one of the best fighter aircraft of World War I and was flown by many top Allied aces during the war. The museum's replica is painted in the colors and markings of the S.XIII flown by American ace Charles J. Biddle.

Mike Damiani is on the takeoff roll in the Golden Age Air Museum's Sopwith Pup replica for a flight demonstration at the Biplanes & Bands Fly-In/Cruise-In. The Pup was a British fighter aircraft that entered service in October 1916. The Pup had excellent maneuverability and gentle flying characteristics, which made it an excellent fighter until it was outclassed by more modern types in 1917. The Pup was also used in early experiments and training for aircraft carrier deck landings and takeoffs.

The Piper PA-16 Clipper is an extended version of the Piper PA-15 Vagabond. Both aircraft were designed in 1947, with the PA-16 Clipper having a longer fuselage to accommodate four people in the cabin. The PA-16 Clipper was only offered in 1949, as production switched to the Piper PA-20 Pacer in 1950. The PA-16 Clipper's production numbers were low, with only 736 built in the single year of production. Despite the low production numbers, over 300 examples of the Clipper remain airworthy.

A Van's Aircraft RV-4 homebuilt taxis out to the runway to depart for home late Sunday afternoon at the Biplane & Bands Fly-In/Cruise-In at the Golden Age Air Museum. The RV-4 is a light, single-engine aircraft offered in kit form. The RV-4 seats two people in a tandem seating arrangement. The typical engine used for the RV-4 is the Lycomingo-360 four-cylinder piston engine, producing 180 horsepower. Since the type's introduction in 1980, over 1,400 RV-4s have been built by aircraft homebuilders.

Steve Lindrooth prepares to head for home in his restored North American T-6 Texan advanced trainer. Fly-in aircraft at the Biplanes & Bands Fly-In/Cruise-In included restored warbirds like this T-6 Texan and the T-34 Mentor seen earlier, modern general aviation aircraft such as Cessna 172s and Piper J-3 Cubs, and homebuilt aircraft. The variety of fly-in aircraft that attend Golden Age Air Museum events and the ability to see them up close on the museum grounds is an engaging experience for visitors.

As the Biplanes & Bands Fly-In/Cruise-In drew to a close on Sunday afternoon, Mark Denest headed for home but not before performing a flyby of the museum in his restored Fairchild PT-26 Cornell for the spectators remaining on the museum grounds. By all accounts, the 2024 Biplanes & Bands Fly-In/Cruise-In event was a success for the Golden Age Air Museum. The event was attended by dozens of fly-in aircraft, cruise-in vehicles for the car show, and hundreds of drive-in spectators.

Loening OA-1A *San Francisco*

This Loening OA-1A on display in the National Air and Space Museum's Steven F. Udvar Hazy Center in Chantilly, Virginia, is the sole surviving example of its type. This aircraft, christened the "San Francisco", was one of five OA-1As to fly in the Pan-American Goodwill Flight of 1926 and 1927. Organized by the U.S. Army Air Corps, the flight visited Mexico and Central and South America to improve relations with Latin American countries and encourage the development of commercial aviation.

The Loening OL, also known as the Loening Amphibian, is an American two-seat amphibious aircraft designed by Grover Loening and built by Loening Aircraft and later the Loening Keystone Aircraft Company. The Loening OL was built in several variants for the U.S. Army Air Corps and the U.S. Navy during the 1920s. The Loening OA-1A *San Francisco* was part of the historic Pan-American Goodwill Flight of 1926 and 1927 through Mexico and Central and South America. The flight aimed to improve relationships with Latin American countries, encourage commercial aviation, and provide training for U.S. Army Air Corps personnel.

The Loening OL was designed as a high-performance amphibian with stability floats under each lower wing. The hull was built of Duralumin on a wooden frame, with the fuselage built on top of the hull. An unusual feature of the hull was that it was divided into five watertight compartments designed to keep the aircraft from sinking if one were punctured. These compartments were connected to a bilge pump so any water that entered the aircraft could be removed. In addition to its hull, the Loening OL featured conventional landing gear for operations off of land. The main landing gear was retractable, and a tailskid mounted to the rear of the hull was used for land operations.

The airplane had a large cockpit with tandem seating for a crew of two. Flight controls were located in both cockpits, but navigation and engine instruments were only installed in the front cockpit. The Loening OL prototype was powered by a 400-horsepower Liberty V-1650-1 inline engine mounted inverted and driving a three-blade steel propeller. The engine was enclosed in a streamlined cowling to protect it from sea spray and had an innovative suppression sprinkler system to extinguish a fire. Oil from a tank in the fuselage was cooled by passing through spiral copper tubing exposed to the slipstream on top of the cowling. The fuel tanks were mounted in the Loening OL's hull, with a 140-gallon (530 L) tank between the wings and a 60-gallon (230 L) reserve tank between the cockpits. This capacity gave the Loening OL enough fuel for roughly 10 hours of flight time.

The Loening OL flew for the first time in 1923 and attracted interest from the U.S. Army Air Corps, which ordered four prototypes. This was followed by an order for 15 OA-1A production aircraft. The OA-1A differed from the prototypes by having a redesigned vertical fin and being powered by a 420-horsepower Liberty V-12 engine. The OA-1A was succeeded by the improved OA-1B, OA-1C, and OA-2 variants.

The U.S. Navy ordered their own variants of the Loening OL. The U.S. Navy versions of the aircraft had a different tail design, a cockpit that seated three crew members, and were powered by a Packard V-12 1A-1500 engine. U.S. Navy variants of the aircraft included three OL-5s built for the U.S. Coast Guard, the OL-8, which was powered by an air-cooled Pratt & Whitney R-1340-4 radial engine, and the OL-8A, an OL-8 equipped with arrestor gear so operations could be conducted off aircraft carriers. In all, 165 Loening OLs were built in several variants for the U.S. Army Air Corps and U.S. Navy throughout the 1920s.

In 1927, Major General Mason Patrick proposed a U.S. Army Air Corps goodwill flight through Mexico and Central and South America. The flight was endorsed by Secretary of War Dwight Davis and Secretary of State Frank B. Kellogg. The supporters of the flight hoped the mission would interest Latin American countries in aviation for transportation and communication in a remote area of the world. They also hoped the flight would encourage Latin American countries to buy U.S.-built aircraft and engines and stimulate a depressed U.S. aircraft industry.

The airplane selected to make the trip was the Loening OA-1A. As an amphibious aircraft, the OA-1A had the benefit of being able to take off and land on both water and land, an advantage in the remote locations the flight would travel to. The OA-1A's 200-gallon (757 L) fuel capacity enabled it to fly long distances without refueling. Five OA-1A aircraft were selected to make the flight ten pilots. To stimulate public interest in the flight, each airplane was named after a major American city. The aircraft were named the *New York*, *Detroit*, *San Antonio*, *St. Louis*, and *San Francisco.*

Before the flight commenced, the route and schedule were carefully planned. Advance officers visited the planned stops, selected landing areas, and arranged diplomatic commitments. Advance shipments of spare parts, extra engines, fuel, oil, and other supplies shipped were stored along the route. The planned schedule allowed for 56 flying days and 77 days for maintenance and diplomatic functions.

The 22,000-mile flight (35,200 km) flight began on December 21, 1926, from San Antonio, Texas. The route took the five aircraft and their crews through Mexico, Guatemala, El Salvador, Honduras, Nicaragua, and Costa Rica. The flight then crossed the Panama Canal and flew to Colombia, Ecuador, Peru, and Bolivia before flying down the west coast of South America to Valdivia, Chile. The five aircraft and their crews then crossed the Andes Mountains to Bahia Blanca, Argentina. The flight then flew to Uruguay, Paraguay, Brazil, and Venezuela. Finally, the flight began working its way back home, traveling through the West Indies and back up the coast of the United States to arrive in Washington, D.C.

Diplomatic functions during the flight required the airplanes to remain at the capital city of each country on the tour for a day or two. In addition to diplomatic functions, the pilots carried out all maintenance on the aircraft themselves, as there were no qualified technicians along the route. Refueling the OA-1As along the route was an especially difficult task. The fuel had to be pumped into the fuel tanks of each airplane from steel drums by hand, a process that took several hours.

At many locations along the flight, the OA-1As were the first airplanes seen by local residents. A complication run into by the pilots on the journey included that the airplanes had no radios, and all communication had to be done by hand signals. Weather conditions were also unpredictable because there was no accurate forecasting along the route. The engines, because of their inverted orientation, were prone to maintenance issues. Despite the complications, only one accident occurred during the flight. The *Detroit* and *New York* collided in mid-air while landing in Buenos Aires, Argentina, destroying both aircraft and killing the crew of the *Detroit.*

The Pan-American Goodwill Flight of 1926 and 1927 concluded at Bolling Field in Washington, D.C., on May 2, 1927. The journey took 59 flying days and 74 non-flying days and was completed on schedule. The flight's pilots were greeted by President Calvin Coolidge and other dignitaries in the nation's capital. The excitement of the flight was short-lived as just three weeks later, Charles Lindbergh crossed the Atlantic Ocean in the *Spirit of St. Louis* and became a hero overnight.

The Loening OA-1A *San Francisco* was linked to Lindbergh's historic flight in a unique way. After a hero's welcome in Washington, D.C., Lindbergh flew to New York City to be honored there, landing at Mitchel Field on Long Island. At the airfield, Captain Ira C. Eaker was waiting for Lindbergh in the OA-1A *San Francisco*. Capt. Eaker, utilizing the OA-1A's ability to land on water, flew Lindbergh to a waiting ship in New York Harbor. Lindbergh then boarded the vessel, which took him to Lower Manhattan for his entry into the city.

The 1926 and 1927 Pan-American Goodwill Flight left a lasting legacy. It helped the United States improve relations with several Latin American countries. The flight also helped establish a trail for commercial air transport operations in these countries. When Pan American Airways began air service to South America a few years later, the company selected routes and destinations closely following the flight of the Pan-American Goodwill Tour. Finally, the flight introduced many Central and South American countries to the benefits of aviation as a form of transportation. These countries began to build military and civilian air operations, often buying aircraft from the United States to do so.

The Loening OA-1A *San Francisco* is the sole surviving example of its type. The airplane was donated to the Smithsonian Institution by the War Department in December 1927. It was restored by the National Air and Space Museum from 1964 to 1965. After restoration, it was loaned to the Museum of the United States Air Force in Dayton, Ohio, where it was displayed from 1977 to 2006. The OA-1A San Francisco is now displayed in the National Air and Space Museum's Steven F. Udvar-Hazy Center in Chantilly, Virginia.

Convair YF2Y-1/F2Y Sea Dart (1953)

The Convair YF2Y-1/F2Y Sea Dart is an American seaplane fighter developed in the 1950s. An unorthodox design, the Sea Dart was designed as a supersonic fighter for the U.S. Navy and rode on hydro-skis for take-offs and landings from a body of water. The prototype, the XF2Y-1, flew for the first time in 1953. The U.S. Navy ordered 12 additional production Sea Darts, with four designated as YF2Y-1s service test aircraft. Due to unsatisfactory engine performance, design problems with the hydro-skis, and a crash due to an in-flight breakup during a demonstration flight that killed Convair test pilot, Charles E. Richbourg, the U.S. Navy lost interest in the Sea Dart and canceled the program in 1956. This YF2Y-1 Sea Dart, BuNo #135764, is displayed at the Harold F. Pitcairn Wings of Freedom Aviation Museum in Horsham, Pennsylvania.

Convair YF2Y-1/F2Y Sea Dart

Crew: 1

Length: 51 ft 1.5 in (15.583 m)

Height: 16 ft (4.9 m) on three-point beaching gear, 7 ft 5 in (2.26 m) in aircraft horizontal rigging position

Wingspan: 35 ft 4in (10.77 m)

Wing Area: 568 sq ft (52.8 m^2)

Powerplant: Westinghouse J46-WE-12B afterburning turbojet engines (x2)

Range: 446 nmi (826 km)

Maximum Speed: 695 mph (1,118 km/h) at 8,000 ft (2,400 m), 825 mph (1,328 km/h) at 36,000 ft (11,000 m)

Empty/Maximum Takeoff Weights: 16,725 lb/24,373 lb (7,586 kg/11,055 kg)

Service Ceiling: 54,800 ft (16,700 m)

Armament: Colt Mk 12 20 mm ((0.787 in cannon (x4), Fin Folding Aerial Rockets, Air-to-Air Missiles (x2)

Seaplane Jet Fighter

Design

The YF2Y-1/F2Y Sea Dart was designed as a delta-winged fighter and interceptor with a watertight hull and retractable hydro-skis for takeoff and landing on water. The hydro-skis extended after the Sea Dart reached an indicated speed during the takeoff run and then retracted once the aircraft was airborne. When floating or moving slowly on the water, the Sea Dart floated on the surface with the trailing edge of its wings touching the water. The dive brakes in the lower rear fuselage doubled as water brakes and as a rudder when the Sea Dart was floating or moving slowly on the surface. The Sea Dart's two Westinghouse turbojet engines were mounted on the upper fuselage to limit the ingestion of water spray by the air intakes.

Survivors

Despite the obscure nature and limited scope of the Sea Dart's development, four of the five examples built survive and are either on display in museums or in stored awaiting restoration for museum display. This aircraft, BuNo #135763, is on display at the San Diego Air & Space Museum. It is on loan to the museum from the National Museum of Naval Aviation in Pensacola, Florida.

Armament

Neither the prototype XF2Y-1 nor the YF2Y-1 service test aircraft were ever armed. Had the Sea Dart gone into production as the F2Y, the aircraft would have carried four forward-firing Colt Mk 12 20 mm cannons and Fin Folding Aerial Rockets. Convair also planned for the F2Y Sea Dart to have the capability to be equipped with a pair of air-to-air missiles.

Concept

The Convair YF2Y-1/F2Y Sea Dart was conceived in the 1950s to overcome the problem of operating supersonic fighters from small aircraft carrier flight decks. The foundation for this concern was that supersonic fighters of the time required long takeoff runs and were difficult to control. When the Sea Dart did not meet planned performance expectations, the U.S. Navy began losing interest in the program. The crash of YF2Y-1 Sea Dart BuNo #135762 over San Diego Bay during a demonstration for U.S. Navy officials on November 4, 1954, relegated the Sea Dart program to experimental status and finally terminated it in 1956. Although the Sea Dart was heavily criticized in the media, the reality was Convair made an admirable effort to develop an aircraft designed to meet almost impossible performance requirements set forth by the U.S. Navy.

Hydro-Skis

For takeoff, landing, and maneuvering at high speed on water, the Sea Dart rode on a pair of hydro-skis. On the prototype XF2Y-1, a single-ski arrangement was tested, but the twin-ski layout became standard. These hydro-skis moved between three positions during the takeoff run. Beaching gear could also be mounted to the hydro-skis so the Sea Dart could be pulled on shore for maintenance or storage. Although an innovative feature, the hydro-skis created severe vibrations during takeoff and landing runs despite being mounted on shock-absorbing oleo legs. Further design work on the legs and hydro-skis improved the condition, but the Sea Dart was canceled before it could be fully resolved.

Engines

Convair designers intended to use a pair of Westinghouse XJ46-WE-02 afterburning turbojets to power the Sea Dart. When these engines were not ready, a pair of Westinghouse J34-WE-32 turbojets were installed in the prototype and the first service test aircraft. The J34 engines developed half the power of the XJ46 engines, and as a result, the performance of the Sea Dart was disappointing. Eventually, Westinghouse J46-WE-12B afterburning turbojet engines were installed in the prototype and two service test aircraft. Convair engineers redesigned the rear fuselage of the Sea Dart to accommodate the afterburners. Even with the more powerful engines, the Sea Dart struggled to reach supersonic speed, only being able to do so in a shallow dive. Reaching supersonic speed was a U.S. Navy performance requirement for the Sea Dart program. Problems also developed with the engines ingesting large amounts of sea spray despite being mounted high on the fuselage to avoid such a situation.

Remembering Rob Holland

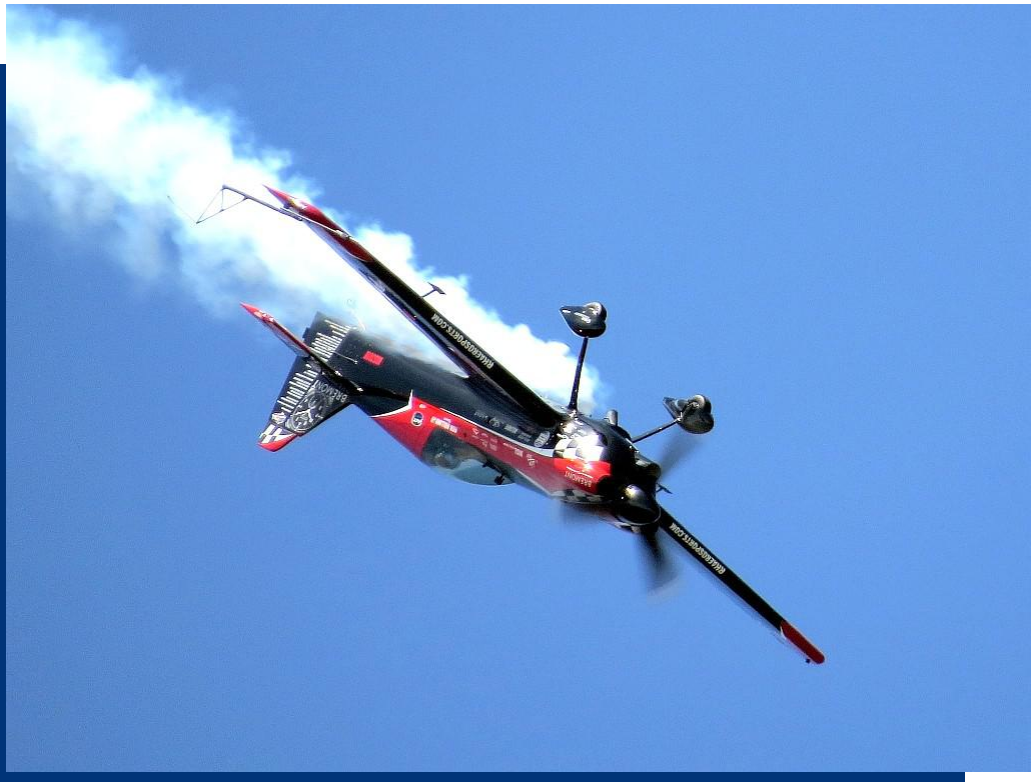
The aviation and airshow community is mourning the loss of airshow and aerobatic competition pilot Rob Holland, who lost his life in an accident while landing at the Langley Air Force Base on April 24, 2025. A winner of numerous awards in the airshow industry for showmanship and medals in international aerobatic competitions, Holland was widely respected among his peers in the industry. These photos of Holland performing in his MXS-RH aircraft are from the 2023 Great Pocono Raceway Airshow.

On Thursday, April 24, 2025, beloved airshow performer and competition aerobatic pilot Rob Holland lost his life in an aviation accident while landing at the Langley Air Force Base in Hampton, Virginia. Holland was landing at the base to perform in the Air Power Over Hampton Roads airshow held on April 26 and 27. The tragic loss of Holland prompted an immediate outpouring of tributes from members of the aviation and airshow communities praising Holland's skill as a pilot, his dedication to the industry, and his character. A licensed pilot since he was a teenager, Holland had gained experience as a banner towing pilot, commuter pilot, corporate pilot, and flight instructor before moving into the airshow industry and competition aerobatics. In a flying career spanning three decades, Holland had amassed over 15,000 hours of flight time in 80 different aircraft types.

Holland began flying airshows in 2003 and quickly became one of the premier performers in the industry, winning numerous awards for showmanship. Noted for his skill and precision in his performances, Holland flew many different types of aircraft during his airshow career, most recently an MXS-RH, a small aerobatic aircraft constructed of carbon fiber and custom-built for Holland by MX Aircraft to fly competition aerobatics and airshow performances. Holland's personality and professionalism made him an annual performer at many airshows nationwide. The trust other performers had in his skills as a pilot allowed Holland to do rare formation flights for air-to-air photo shoots with military jet demonstration teams such as the Canadian Forces Snowbirds and the U.S. Navy Blue Angels. Holland embraced airshow audiences and always made time to interact with them. He never failed to thank veterans for their service and never said no to photos with fans or signing autographs for children.

In addition to flying as an airshow performer, Rob Holland was also a distinguished pilot in competition aerobatics. Holland was a 13-time U.S. National Aerobatic Champion and 14-time U.S. National Freestyle Aerobatic Champion. He also won the World Freestyle Aerobatic competition six times. During his career as a competitive aerobatic pilot, Holland amassed over 30 medals in national and international competitions.

The photos featured here show Rob Holland performing in his MXS-RH aircraft at the Great Pocono Raceway Airshow in May 2023. Rob Holland will be remembered in the airshow and aviation community for his skill, professionalism, dedication, personality, and his motto, "Fly good, don't suck".



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.