

July 2021



*Corey J Beitler's*

# ***"Distelfink Airlines"***

*An Online Aviation Newsletter*

## ***Mid-Atlantic Air Museum's World War II Weekend***



***Airbus A320***

***Northrop Grumman C-2A(R) Greyhound***

***World War II Weekend Portraits***

***Northrop P-61C Black Widow***

***North American F-86F Sabre***

***Hallmark Globe Swift Ornament***

*Craig Hutain flies the Commemorative Air Force Airbase Georgia's North American P-51D Mustang "Red Nose" at the 2021 Mid-Atlantic Air Museum's World War II Weekend. Hutain was busy all weekend piloting "Red Nose", flying both warbird experience flights and performing an aerobatic routine with the P-51 in the airshow portion of the event.*

## FROM THE EDITOR'S DESK

Greetings Everyone:

Welcome to the July edition of "Distelfink Airlines". This edition is the largest ever published of the newsletter, 42 pages. There are lots of photographs in this edition as I had the opportunity to cover one of the largest living history events and airshows with a World War II theme that is held in the United States, the Mid-Atlantic Air Museum's World War II Weekend. This event was held the first weekend in June and I spent three amazing days at this event taking thousands of photographs of aircraft, reenactors, vehicles, and so much more.

The feature section of this newsletter has many photographs in it from this event. I could not put everything into the newsletter that I photographed, and I admit I had to leave out some very awesome photographs. The photographs I chose I did so in the mindset that they will give you a sampling of what this event is about. It is not just about the aircraft, but also the thousands of reenactors that portray all aspects of World War II life and the hundreds of volunteers that help make this event take place. It was truly an honor to be able to capture some amazing photographs of reenactors at this event as well as historic aircraft. I want to thank all of the reenactors who posed for portraits and other photographs for me, and were very patient with me when I directed them to where I needed them to be for photographs. I would also like to thank David and Christina Brown, the WWII Weekend Media Coordinators, for allowing me to attend the event as a credentialed media member. I would also like to thank Pete Lerro for doing a terrific job setting up the morning and evening photoshoots at the event. Finally, I want to thank the Mid-Atlantic Air Museum and all the other participating organizations for making the effort to have this event and continue to do so in a way that honors our "Greatest Generation". The "Aviation Scrapbook" section features some of the people portraits I took at World War II Weekend that were my favorites.

The "Aircraft Spotting" section features an Airbus A320 operated by Allegiant Air. The Airbus A320 is the world's best-selling narrow-body commercial aircraft. The "Airshow Aircraft Fact File" takes a look at a North American F-86F Sabre painted in the colors of the former U.S. Air Forces in Europe "Skyblazers" flight demonstration team. I chose this aircraft for this month because of its very patriotic color scheme. The "Aviation Sightings" section looks at the Northrop Grumman C-2A (R) Greyhound that was a recent visitor to the Lehigh Valley International Airport. These aircraft have been visiting my local airport recently on training flights.

The Northrop P-61C Black Widow located at the National Air and Space Museum's Steven F. Udvar Hazy Center is featured in the "Aircraft of the National Air and Space Museum" section. The large, twin-engine P-61 was built as a purpose-built night fighter during World War II and had an advanced radar set designed to find targets at night and in bad weather conditions.

Finally, a look at the new Hallmark "Sky's The Limit" Keepsake ornament for 2021. This year, the aircraft featured is the Globe Swift, a small, two-seat sport airplane built during the late 1940s. This is the 25th year Hallmark is doing an airplane ornament for the "Sky's The Limit" series.

I hope you enjoy reading this edition of "Distelfink Airlines". I encourage you to visit the newsletter's social media pages for new editions of the newsletter and updates on airshow and other aviation event coverage.

-Corey

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### **Hallmark Globe Swift Ornament**

*The small two-seat, sport airplane built during the late 1940s is the 25th aircraft featured in the popular Hallmark "Sky's the Limit" series of aircraft Christmas ornaments.*

## AIRCRAFT SPOTTING

### Airbus A320

(1988)



*The Airbus A320 is part of the A320 Family of narrow-body commercial airliners designed and produced by Airbus. The A320 is a twinjet aircraft and in 2019 surpassed the Boeing 737 to become the world's best-selling airliner. The A320 Family includes the shorter A318 and A319, the A320, and the stretched A321. The A320 Family revolutionized the commercial airline industry being the first commercial aircraft to use digital fly-by-wire flight control systems and side-stick flight controls. Since the A320 Family was introduced in 1988, more than 9,500 aircraft have been delivered to more than 330 operators worldwide. This Airbus A320 is an aircraft operated by ultra-low-cost U.S. airline Allegiant Air. This A320 was spotted arriving at the Lehigh Valley International Airport.*

### *Airbus A320*

**Flight Crew:** 2 Pilots, 4 Cabin Crew

**Passenger Capacity:** 150 in a two-class layout

**Length:** 123 ft 3 in

**Tail Height:** 38 ft 7 in

**Wingspan:** 117 ft 5 in

**Wing Area:** 1,330 sq ft

**Powerplant:** CFM56 or IAE V2500 turbofans (x2)

**Range:** 3,330 nmi

**Maximum Takeoff Weight:** 172,000 lb

**Cruise Speed:** 510 mph

**Top Speed:** 537 mph

**Service Ceiling:** 39,100-41,000 ft



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# How to spot the Airbus A320

## Sharklets

In 2009, Airbus introduced a blended wingtip device for the Airbus A320 called sharklets to replace the original wingtip fences. The design of the sharklet was chosen after years of study by Airbus on types of winglets. The sharklets increase fuel efficiency by decreasing lift-induced drag. The average reduction of fuel burn on a flight over 1,500 nautical miles is 3.5%. The first A320 equipped with sharklets was delivered in 2012.

## Interior

The A320 has a passenger cabin with six-abreast seating that can hold 150 passengers in a two-class layout or 160 passengers in a single-class layout. Airbus updated the cabin layout and interior on the A320 in 2007. The new cabin offers improved ambient lighting, larger overhead bins, improved noise reduction, and a new in-flight entertainment system.

## Fly-By Wire

The A320 was the world's first airliner to use fly-by-wire technology. Input commands from the pilot are fed to a flight control computer system, which sends the commands to the control surfaces of the aircraft. The flight control system has flight envelope protection, which prevents the pilot from inputting commands that would structurally compromise the aircraft or exceed its operating limits.



## Cockpit

The Airbus A320 is operated by a two-person crew consisting of a pilot and copilot. The glass cockpit is equipped with Electronic Flight Instrumentation System (EFIS) with side-stick controllers. The A320 cockpit also features an Electronic Centralised Aircraft Monitor (ECAM), which gives the flight crew information about all systems on the aircraft. Since 2003, A320 aircraft have LCD cockpit display units on the flight deck instead of the original CRT display units. Heads-up cockpit displays are available on the A320 as an avionics upgrade from Airbus.

## Engines

There are two engine options available for the Airbus A320, the CFM International CFM56 turbofan, and International Aero Engines V2500 turbofan. Allegiant Air's fleet of Airbus aircraft are equipped with CFM56 engines.

## A320neo

In 2010, Airbus launched a new, more fuel-efficient version of the A320 called the A320neo (new engine option). The new aircraft has more efficient CFM International LEAP-1A or Pratt & Whitney PW1000G turbofans and larger wingtip sharklets. The A320neo entered service with Lufthansa in 2016. The older variant of the A320, as seen here, is technically renamed the A320ceo (current engine option). The A320ceo Family of aircraft is being phased out of production in favor of the A320neo variants.

## Allegiant Air

*Allegiant Air, often shortened simply to Allegiant, is a U.S. ultra-low-cost airline that operates scheduled and chartered flights. The airline is wholly owned by Allegiant Travel Company and was founded in 1997 as WestJet Express. Allegiant Air primarily serves leisure travelers from northern climates and operates flights to popular warm-weather tourist destinations. Allegiant Air flies to 129 destinations from 23 operating bases in the United States. The airline prefers to operate from smaller airports with limited or no commercial airline service where competition is limited and landing fees are less expensive. Currently, Allegiant Air operates an all-Airbus fleet of 114 aircraft, 35 A319-100's and 79 A320-200's. The aircraft pictured, N246NV, was ordered new from Airbus in 2015, and delivered to Allegiant in 2017.*

# Northrop Grumman C-2A(R) Greyhound



*A Northrop Grumman C-2A (R) Greyhound on approach to the Lehigh Valley International Airport. The C-2A(R) Greyhound provides critical logistical support in the form of carrier onboard delivery (COD) to a U.S. Navy aircraft carrier battle group. The aircraft and their flight crews deliver key personnel, mail, aircraft parts and engines, and other supplies to the aircraft carrier.*

A U.S. Navy aircraft carrier is a floating city on the sea. The aircraft carrier is usually home to over 80 fixed-wing and rotary aircraft and thousands of personnel that operate these aircraft and the ship itself. Although an aircraft carrier leaves port with enough supplies for several months of operation, every so often, critical supplies are needed such as aircraft parts and engines, or additional personnel are brought aboard. Since 1966, the Grumman (now Northrop Grumman) C-2A Greyhound has served as the U.S. Navy's carrier onboard delivery (COD) aircraft.

The C-2A Greyhound is a derivative of the E-2 Hawkeye early warning aircraft, sharing the wings and Allison T56 turboprop powerplants of the E-2 but having a wider fuselage and a rear loading ramp. After successful flight trials, the C-2A entered service with the U.S. Navy in 1966. The aircraft can carry up to 10,000 pounds of cargo or up to 28 passengers. The rear loading ramp makes the unloading and loading of cargo efficient on a busy aircraft carrier flight deck. For aircraft carrier operations, the C-2A can fold its wings for compact storage on an aircraft carrier flight or hangar deck. One unique aspect of the C-2A's design is that it has four vertical stabilizers, as it was found a single tail would have been too high to fit on an aircraft carrier hangar deck.

In 1984, the U.S. Navy ordered 39 additional C-2A's, designated C-2A(R)'s, with upgraded airframes and avionics, the aircraft being delivered from 1987 to 1990. In the early 2000s, the 36 C-2A(R) aircraft remaining in operation received a service life extension upgrade. The upgrade included new eight-blade propellers, installation of a ground proximity warning system, and navigational upgrades. The C-2A(R) served with carrier battle groups in Operation Desert Shield and Desert Storm during the Gulf War and Operation Enduring Freedom in Afghanistan. The C-2A(R) is expected to remain in service with the U.S. Navy until 2024.

This C-2A(R) Greyhound is operated by U.S. Navy Carrier Airborne Early Warning Squadron 120 (VAW-120) based at Naval Air Station Norfolk in Virginia. The squadron is a Fleet Replacement Squadron and responsible for training crews on the C-2A(R) Greyhound and E-2 Hawkeye. This C-2A(R) Greyhound was spotted practicing approaches at the Lehigh Valley International Airport during a training flight.

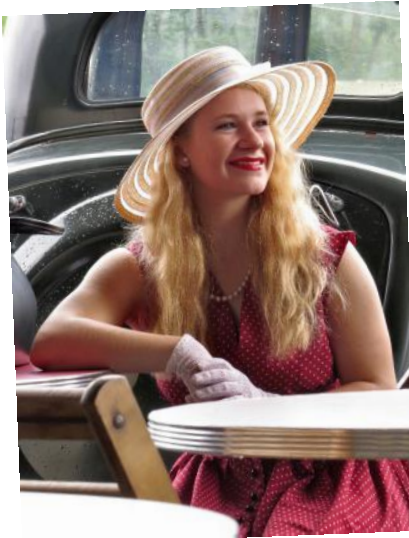




## AVIATION SCRAPBOOK







### *World War II Weekend Portraits*

*With so many reenactors in attendance portraying all aspects of World War II, the Mid-Atlantic Air Museum's World War II Weekend is the perfect event to take portraits of the participants in their authentic clothing. These were some of my favorite portraits from a memorable weekend.*

# ***Mid-Atlantic Air Museum's World War II Weekend***



***One of the nation's largest living history events and airshows with a World War II theme returned to the Reading, Pennsylvania-based museum this June.***

*The Yankee Air Museum's restored North American B-25D Mitchell "Rosie's Reply" in flight at the 2021 Mid-Atlantic Air Museum's World War II Weekend. The event marked the debut airshow for the Yankee Air Museum's B-25D in this paint scheme, which is designed to honor the contributions of thousands of women who worked in American factories during World War II.*





*I take a break from my media duties covering the 30th annual Mid-Atlantic Air Museum's World War II Weekend to have my portrait taken with the lovely ladies (Amanda LaVergne, Carly Kincannon and Kristen Michelle) of the girl group, the America's Sweethearts.*

For 30 years, the essence of the World War II years has come alive each year the first weekend in June at the Mid-Atlantic Air Museum, located at the Reading Airport in Reading, Pennsylvania. The event has grown into one of the most well-known airshows in the United States showcasing World War II aircraft and one of the largest living history reenactments in the nation. The event is an amazing tribute to the "Greatest Generation", the men and women who fought overseas and those who worked in the factories on the homefront to give the United States and its allies what was needed in both manpower and equipment to win World War II.

For the first time in its history, the coronavirus pandemic canceled the event in 2020. World War II weekend returned in 2021 and was one of the first large-scale aviation events to be held in the United States since last year. The airshow portion of the event featured over 30 restored World War II-era fighters, bombers, trainers, and transports, including a rare Mitsubishi A6M2 Model 21 Zero flown by Mark Mur-

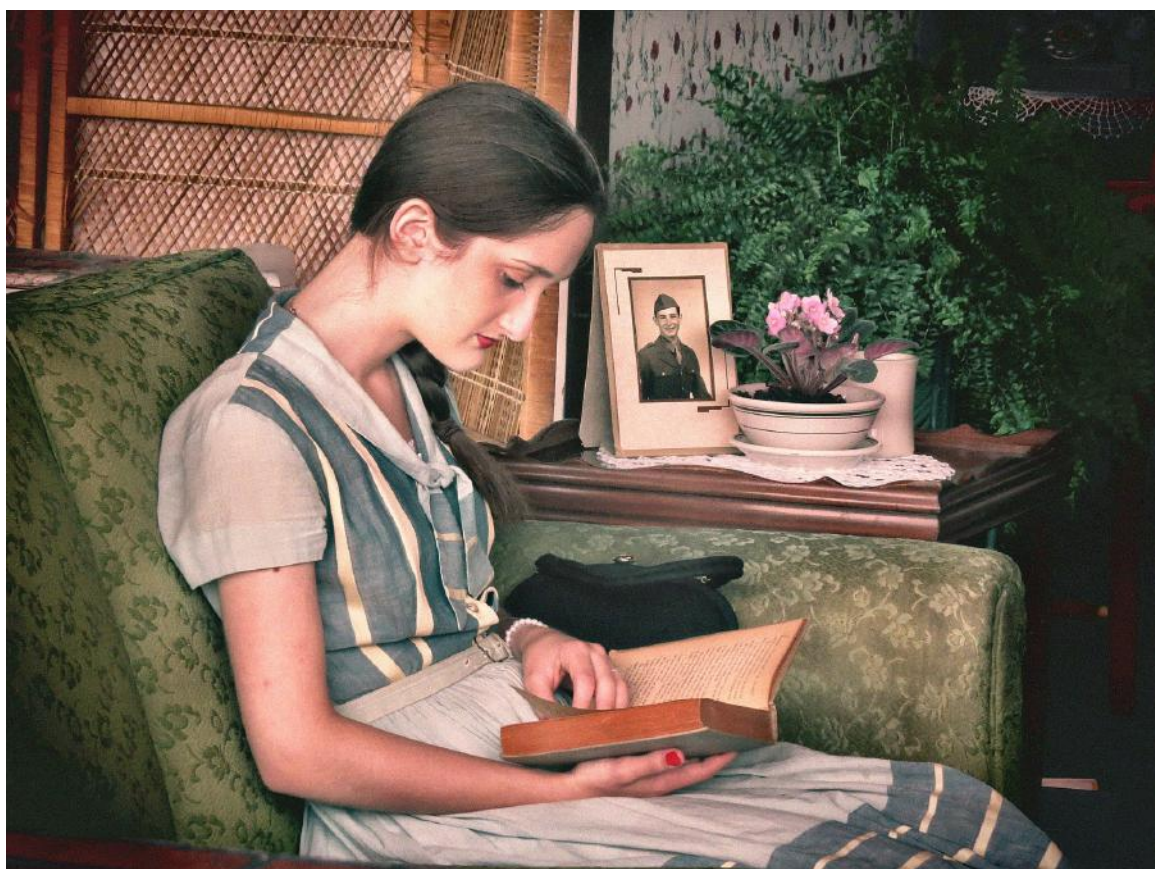
phy and the Commemorative Air Force's equally rare Bell P-63 Kingcobra flown by Mark Todd. Rides were available in several historic aircraft at the event. For the first time, World War II Weekend featured a special night engine run photoshoot for aviation photographers featuring some of the warbirds.

What is unique about the Mid-Atlantic Air Museum's World War II Weekend is that it isn't just an airshow. The event is a living history exhibit that features hundreds of military vehicles, over 1,700 reenactors portraying all aspects of World War II, live entertainment appropriate for the period, and World War II veterans as special honored guests.

Blessed by excellent weather and temperatures in the high 80's and low 90's all weekend, the event was attended by huge crowds of spectators from all over the nation. The following photographs showcase some of the highlights of the 2021 Mid-Atlantic Air Museum's World War II Weekend. In keeping with the theme of the event, many of these photographs are presented with vintage color compositions.



*The Mid-Atlantic Air Museum's World War II Weekend is famous for its daily airshow featuring restored World War II aircraft operated by private individuals and various aviation museums throughout the United States. The 2021 edition of the event featured more than 30 restored World War II aircraft in attendance. Some of these aircraft, such as the Commemorative Air Force Airbase Georgia's P-51 Mustang "Red Nose" arrived early to sell warbird experience flights to enthusiasts.*



*The Mid-Atlantic Air Museum's World War II Weekend isn't just about the historic aircraft and airshow, over 1,000 reenactors from all over the United States attend the event. Living history displays are set up through the grounds representing encampments, field hospitals, and the homefront. In this photograph, Liesl, a reenactor with the Victory Society, reads in the American Homefront display. Reading was a popular leisure activity for many Americans throughout the war.*





One of the benefits of Friday at the Mid-Atlantic Air Museum's World War II Weekend is that the crowds are typically a bit lighter than on the weekend days. The lighter crowds make Friday a wonderful opportunity to photograph some of the entertainers. Set up on the American Homefront display, the radio station WRDG is "on the air" at the show throughout the weekend. Visitors to the event can see a variety of entertainers perform on the radio station's stage. Here, Alyssa Martin sings as Dawn O' Day.

There are also hundreds of vintage military vehicles that are displayed on the event grounds at the Mid-Atlantic Air Museum's World War II Weekend. Most of these vehicles have been lovingly restored by their owners, sometimes over a period of years as they search for that rare part or two to make their vehicle's restoration complete. One of the more unusual vehicles on the field this year was this Ford fire truck. Trucks such as these were used at military airfields as crash tenders.





*With no official airshow on Friday, the first day of the Mid-Atlantic Air Museum's World War II Weekend is the perfect opportunity to take a warbird experience flight in one of the many historic aircraft offering these flights at the event. Although these flights are not cheap, they can be the experience of a lifetime for many aviation enthusiasts. In this photograph, a lucky rider is returning to the event following a flight in the Commemorative Air Force Airbase Georgia's restored Douglas SBD-5 Dauntless.*



*The "Jeep" was one of the most important ground vehicles of World War II. The light vehicle, originally designed for reconnaissance purposes, became the U.S. Army's primary 4x4 light all-purpose vehicle. To boost production for the war effort, the Jeep was built by Willys-Overland and Ford during World War II. The two manufacturers combined to make approximately 640,000 Jeeps during the war. The Jeep was for many purposes including ambulances, fire fighting vehicles, and cable laying.*





One of the most popular exhibits at the Mid-Atlantic Air Museum's World War II Weekend is the Gulf Service Station display. The display does a wonderful job showcasing to event visitors what a service station looked like during the 1940s. The station is fully equipped with a vintage gas pump, air compressor, toolboxes, vintage oil containers attendants, and a Dodge coupe awaiting service. Gulf was one of the first oil companies to offer branded products, so a customer was assured of quality.

The Magnolia Sadies Vintage Dancers could be seen throughout the weekend on the ground of the Mid-Atlantic Air Museum's World War II Weekend. The Magnolia Sadies is a vintage dance troupe dedicated to recreating dances and entertainment from the early 1900s to the 1950s. The group performs dances styles from the 1920s, 1940s, and 1950s. In this photograph, five of the dancers pose next to the Commemorative Air Force Airbase Georgia's Bell P-63 Kingcobra.





Visitors to the Mid-Atlantic Air Museum's World War II Weekend must pay attention as vintage military vehicles are always on the move throughout the event grounds. Here, an American M20 Scout Car and its crew are on the move. The M20 was a variant of the M8 Light Armored Car that had its turret replaced with an armored open-top structure and a ring mount for a machine gun. Ford built over 3,500 of these vehicles and many were used for reconnaissance work and as command vehicles.



The America's Sweethearts, a girl group based in New York City, are regular entertainment performers at the Mid-Atlantic Air Museum's World War II Weekend. The group sings a variety of music including jazz, swing, WWII era music, and popular Broadway tunes. In this photograph, group members Kristen Michelle, Carly Kincannon, and Amanda LaVergne take a break from singing to pose for a portrait next to the Commemorative Air Force Airbase Georgia's Bell P-63 Kingcobra.



Volunteers play a huge role in making the Mid-Atlantic Air Museum's World War II Weekend a success. Volunteers help park cars, sell tickets, sell museum memberships and work the flight line. Here, one of the tug crews responsible for moving aircraft takes a break under the wing of the Warriors and Warbirds Museum's Curtiss C-46 Commando transport aircraft. Soon after this photograph was taken, a thunderstorm hit the event grounds and sent everyone looking for a dry place to seek shelter.

The weather cleared and soon after, the warbirds giving rides were back flying again. In this photograph, the Yankee Air Museum's Boeing B-17G Flying Fortress "Yankee Lady" takes to the sky on a warbird experience flight. Visitors to the Mid-Atlantic Air Museum had eight warbirds to pick from if they wanted to take a warbird experience flight at the event. "Yankee Lady" is a regular participant at World War II Weekend and also takes part in the bomber flight during the airshow part of the event.





The clearing weather late Friday afternoon also allowed some of the pilots flying aerobatic demonstrations in the airshow on Saturday and Sunday to practice their routines. One of the demonstrations flown on Friday was a performance by John Current in the Commemorative Air Force Airbase Georgia's Goodyear FG-1 Corsair. The FG-1 Corsair was a license-built version of the Chance Vought F4U Corsair manufactured by Goodyear. The Corsair was one of the finest naval fighter aircraft of World War II.



The Delaware Aviation Museum's North American B-25J Mitchell "Panchito" is one of the regular visitors to the Mid-Atlantic Air Museum's World War II Weekend. Warbird experience flights aboard "Panchito" are popular with event visitors. This photograph from Friday evening shows "Panchito" departing the Reading Airport on one of these flights. Unfortunately, "Panchito" would suffer mechanical problems on a flight Saturday morning, and would be grounded for the rest of the event.



Members of the media and select photographers at the Mid-Atlantic Air Museum's World War II Weekend were treated to an exclusive sunset photo walk of the aircraft ramp on Friday evening. Thankfully the weather cleared for this amazing opportunity. The aircraft on the ramp looked great in these last few minutes of sunlight. Shown here is the Commemorative Air Force's restored Boeing B-29 Superfortress, "Fifi". This B-29 is one of only two in the world today that remain in airworthy condition.

Members of the media and photographers were up early on Saturday morning at the Mid-Atlantic Air Museum's World War II Weekend for a special sunrise photo tour of the aircraft on the ramp. Saturday is typically the busiest day at the event, with large crowds, lots of war-bird experience flights, and a full airshow featuring most of the World War II aircraft in attendance. In this photograph, the Yankee Air Museum's B-17G Flying Fortress "Yankee Lady" sits on the ramp in the early morning light.





The sunrise photo walk on Saturday provided one of the best photography opportunities of the entire event. Pete Lerro from Lerro Photography provided several reenactors dressed as a flight crew to pose with the Commemorative Air Force's Boeing B-29 Superfortress "Fifi" parked on the ramp. The B-29 was one of the most advanced bombers of World War II and saw service later in the conflict, primarily in the Pacific theatre. Here, our reenactor flight crew poses with the B-29 for a full crew photo.



Several photographs from World War II show bomber crews gathering next to a Jeep or other vehicle and looking over maps to plan their next mission. Lerro Photography endeavored to recreate such a scene with "Fifi" as the backdrop. A restored Jeep was brought into the scene and the reenactor flight crew gathered around a map on the hood of the vehicle as if they were planning their next mission. It is wonderful living history scenes like these that make World War II Weekend such a unique event.





*A little fun added to this wonderful living history scene as a woman dressed as a World War II pinup girl joins the flight crew for a few photographs next to the B-29 "Fifi". She quickly became the center of attention, posing on the hood of the Jeep and showing the gentlemen how to read their map. Pinup girls were a morale booster for many flight crew members during the war and often served as the inspiration for the nose art that was painted by flight crews on many aircraft.*

*The Yankee Air Museum's North American B-25D Mitchell now carries the name "Rosie's Reply", with nose art designed to honor "Rosie the Riveter" and the thousands of female factory workers who played a key role in helping the United States win World War II. By sheer chance, this reenactor portraying "Rosie the Riveter" stopped by the B-25 during the morning media photo walk. Arrangements were quickly made to pose her in a Jeep by the nose of the airplane for this unique photo opportunity.*





As preparations are made for the afternoon airshow, Saturday morning is a good time at the Mid-Atlantic Air Museum's World War II Weekend to check out the living history display, vehicles, and military encampments throughout the event. No detail is forgotten in many of these excellent displays. Most of the reenactors are more than happy to pose for photographs at the event. In this photograph, the wonderful ladies that portray attendants at the Gulf Service Station display sit for a portrait.



Visitors to the Mid-Atlantic Air Museum's World War II Weekend always have to be on alert as vintage military vehicles are always on the move throughout the event grounds. Some of these movements are for the benefit of the general public attending the event, so they can actually see the vehicles move and run. Here, a restored M4 Sherman medium tank is on the move. The M4 was the most widely used medium tank by the United States and its Western Allies during World War II.





Although people like to see the large bombers and fast fighters, training and liaison aircraft played a very important role in World War II. The Civil Air Patrol was active throughout the war performing a variety of duties such as hunting for enemy submarines off the coast and serving courier duties for defense plants. This Stinson 10/L-9 nicknamed "Bloody Mary" wears World War II Civil Air Patrol markings and is operated by the Delaware Valley Wing of the Commemorative Air Force.

The afternoon airshow at World War II Weekend featured many of the historic aircraft in attendance at the event flying. At the last minute, some surprise attendees were added to the airshow roster for Saturday, including Ellenville LLC's incredibly rare Mitsubishi A6M2 Model 21 Zero flown by Mark Murphy. This Zero is one of the few remaining airworthy examples in the world. The Zero was Japan's primary naval fighter throughout World War II and operated from aircraft carriers and land bases.



Mark Murphy puts Ellenville LLC's rare Mitsubishi A6M2 Model 21 Zero through its paces at the Mid-Atlantic Air Museum's World War II Weekend during the Saturday airshow. Sadly, the Zero was only available to perform in Saturday's airshow and not Sunday. For ease of maintenance and reliability, the Zero is fitted with an American Pratt & Whitney radial engine instead of the original Sakai engine. The crowd at the event certainly enjoyed seeing this rare aircraft fly on Saturday.



When the producers of the 1970 film "Tora! Tora! Tora!" needed Japanese aircraft to film the scenes in the movie that depict the attack on Pearl Harbor, they built them using old U.S. AT-6 and BT-13 training aircraft. Lynn Garrison was in charge of modifying these aircraft with extended fuselages, dummy weaponry, and historic paint schemes. Many of these replica Japanese aircraft survive today. This replica of a Nakajima B5N "Kate" torpedo bomber was one of the aircraft used in the film.





Vintage aircraft collector Tom Duffy has always supported the Mid-Atlantic Air Museum's World War II Weekend by bringing some of his restored aircraft to the show. This year, Duffy brought two of his aircraft to the event, his restored North American P-51D Mustang, and his North American B-25J Mitchell. In this photograph, Duffy's B-25 Mitchell "Take Off Time" is flying as part of the bomber display in the airshow. The B-25 was one of the most widely used medium bombers of World War II.

Saturday's airshow was blessed with extra aircraft attending from Ellenville LLC, which not only sent their rare Mitsubishi A6M2 Model 21 Zero but also their Goodyear FG-1 Corsair "Godspeed" and their North American P-51D Mustang "Tiger's Revenge". Unfortunately, the aircraft could only participate in the airshow on Saturday because of other commitments on Sunday. In this photo, the FG-1 Corsair "Godspeed" painted to honor the late astronaut John Glenn, departs for home.



The airshow portion of the Mid-Atlantic Air Museum's World War II Weekend always ends with a "missing man" formation to honor all those from the Greatest Generation who gave their lives in service to our country during World War II. On Saturday the formation was flown by Ellenville LLC's P-51D Mustang and three aircraft from the Commemorative Air Force Airbase Georgia Wing. The Airbase Georgia's Good-year FG-1 Corsair is the aircraft pulling out of the formation and skyward.



Warbird experience flights take place after the airshow on Saturday and if there is demand, can go until dusk. Many event attendees stay into the evening on Saturday to watch the aircraft coming and going from the airport on these ride flights. For those looking for a ride flight a little less expensive, Bay Aviation's Fairchild PT-19 Cornell shown here was a great way to go. Saturday was a warm and beautiful evening for flying in this open cockpit aircraft used as a primary trainer during World War II.





For the first time, the Mid-Atlantic Air Museum's World War II Weekend featured a night engine-run photography session featuring three of the participating aircraft. The ramp was wet down by a fire truck to provide reflections and lightning was provided by Pete Lerro from Lerro Photography. The special photo shoot was enjoyed by all the photographers who attended it. In this photograph, raw fuel ignites in the exhaust of this P-51D Mustang as its engine is brought to life for the photo shoot.

The Commemorative Air Force Airbase Georgia also had their Douglas SBD-5 Dauntless dive bomber available for the night engine run photoshoot. The Douglas SBD Dauntless was one of the best dive bombers to see service in World War II. The aircraft, although considered obsolete at the start of World War II, played a key role in the Pacific theatre early in the war. SBD crews helped change the course of World War II by sinking four Japanese aircraft carriers during the Battle of Midway in June 1942.



*Sunday at the Mid-Atlantic Air Museum's World War II Weekend is a good day to relax, photograph anything missed and enjoy the essence of the event, especially if you've been on the ground the previous two days. The Mid-Atlantic Air Museum has several World War II aircraft in its collection, but none flew in the airshow this year. The aircraft were on static display on the ramp though, and this is the museum's restored B-25J Mitchell "Briefing Time" basking in the morning sunshine.*



*Two vintage 1942 Ford automobiles on display in the American Homefront display on Sunday morning. In mid-1942, American automobile factories quit building automobiles and focused on building equipment for the war effort. Automobile factories produced tanks, trucks, aircraft, and aircraft engines war effort. This industrial capacity not only allowed the United States to produce enough equipment for its own military but also equipment for the armed forces of its Allies.*





*The Commemorative Air Force Capital Wing's General Motors TBM-3E Avenger "Doris Mae" departs on a ride flight on Sunday morning. The ride flights were popular event attendees all weekend, with people going on flights until the late afternoon on Sunday. The Avenger was a torpedo bomber designed by Grumman, with the majority being built during the war under license by General Motors. The Avenger was the type of aircraft flown in World War II by the late U.S. President George H.W. Bush.*

*Motorcycles would become an important vehicle in the arsenal of the U.S. Army during World War II. Based on an existing civilian model, the WL, the Harley-Davidson WLA was built in large numbers during World War II, with over 90,000 officially being manufactured. Spare parts to build thousands more were also manufactured by Harley-Davidson. The U.S. Army used the WLA for police work, escort and courier duties, scouting and to transport small amounts of radio equipment.*





*“Follow Me” Jeeps played an important role in safety at both U.S. Army Air Corps U.S. Navy air bases during World War II. These Jeeps were used to help control aircraft movement on the ground and help aircraft move to and from parking positions and navigate the maze of runways and taxiways at an airfield. Jeeps were used as “Follow Me” vehicles for many years following World War II. Typically, they were painted in bright, highly visible, checkered patterns so they could be easily spotted.*



*Although there was a brief thunderstorm on Friday afternoon, much of the weekend remained dry. On Saturday and Sunday, bright sunny skies, high temperatures, and high humidity made the Mid-Atlantic Air Museum’s World War II Weekend a warm place to be. This did not dampen the enthusiasm of the large crowd present on both Saturday and Sunday. In this photograph, some attendees take a break from the sun in shade under the Berlin Airlift Historical Foundation’s Boeing C-97 Stratofreighter.*





Sunday's airshow followed the same format as Saturday's, with aircraft flying according to their type or in a themed presentation. Some aircraft headed for home early after a long weekend at the event to arrive back at their home bases before dark. The Commemorative Air Force Airbase Georgia's aircraft stayed until late in the day on Sunday. This photo of their Douglas SBD-5 Dauntless shows the perforated dive flaps that made the SBD such an accurate dive bombing platform.

The Yankee Air Museum's C-47D Skytrain, "Hairless Joe", departs the event to head home for Michigan. Based on the DC-3 commercial airliner, the C-47 was a military transport aircraft used in all theatres of operation during World War II. The C-47 was used for a variety of roles including cargo and troop transport, glider towing, paratroop dropping, and air ambulance. The C-47 played such a critical role in the war effort for the Allies that it was named one of the key weapons that won the war.



*John Current performs a dirty pass with the Commemorative Air Force Airbase Georgia's Good-year FG-1 Corsair on Sunday. Initially, the powerful Corsair was not cleared for carrier operations, as the aircraft tended to bounce upon landing. Revisions to the landing gear cured the bouncing and the Corsair was soon cleared for carrier operations. The Corsair was an excellent fighter and strike aircraft, and later variants served throughout the 1950s and saw action in the Korean War.*



*Mark Todd flew a great demonstration on Saturday and Sunday with the Commemorative Air Force Airbase Georgia's restored Bell P-63A Kingcobra. The mid-engine P-63 was a development of the earlier P-39 Airacobra. Although superior to the P-39, the P-63 was not accepted for use in the U.S. Army Air Corps but thousands were supplied and used by the Soviet Union. This aircraft was retained in the United States for testing by Bell Aircraft and later by NACA (National Advisory Committee for Aeronautics).*





*"Yankee Lady" the Boeing B-17G Flying Fortress operated by the Yankee Air Museum, rumbles overhead during the Sunday airshow at the Mid-Atlantic Air Museum's World War II Weekend. Although "Yankee Lady" has been a participating aircraft at the event many times, the public never seems to tire of seeing her flying throughout the weekend. The B-17 is one of the most famous bombers of World War II, and had a reputation for being able to withstand considerable battle damage and still return to base.*

*Arguably, the most popular part of the airshow at the Mid-Atlantic Air Museum's World War II Weekend is "Fifi" performing her flight demonstration. Expertly handled by the experienced Commemorative Air Force flight crew, the large B-29 performs several photo and high-speed flybys for the crowd. The Boeing B-29 Superfortress was the pinnacle of technology of World War II bomber aircraft. The B-29 featured a streamlined design, pressurized cabin, and remote-controlled gun turrets.*



A pair of restored North American SNJ advanced trainers head for home on Sunday afternoon. Sunday is a great day at the Mid-Atlantic Air Museum's World War II Weekend to see aircraft in the air as all depart for home toward the end of the event. The North American SNJ was a fully aerobatic training aircraft designed to simulate the power, speed, and maneuverability of modern fighter aircraft. It was also used by the U.S. Army Air Corps and designated the AT-6 Texan.



As the weekend draws to a close, various aircraft head for home. Here, Mike Flakker departs for home from the event in his beautifully restored Boeing N2S-3 Stearman. The Stearman was used throughout the war for primary flight training in both the U.S. Army Air Corps and U.S. Navy. After the war, many were sold as surplus for crop dusting and banner towing. Today, restored Stearmans are popular with vintage aircraft collectors and many survive in the hands of private owners and museums.





*Perhaps my most unique picture from the event is the finale. Jesse and her husband Dan are reenactors that participate in the American Homefront display. Similar to other reenactors, Dan and Jesse have participated in the event for several years. Many reenactors participating have grown up at the event, met spouses and now even have children participating. This year I was delighted to learn Jesse and Dan are expecting their first child. I never thought I'd come away with such a unique period photograph at the Mid-Atlantic Air Museum's World War II Weekend, but a vintage bassinet in the American Homefront display was the perfect prop for these expecting parents to stand next to for a portrait. To me, this photograph signifies what World War II Weekend is all about, a great weekend with friends, reenactors, vintage aircraft, and continuing to honor our "Greatest Generation".*



## Northrop P-61C Black Widow



*The Northrop P-61C Black Widow on display in the World War II Aviation exhibit in the National Air and Space Museum's Steven F. Udvar-Hazy Center. The P-61 was the first American aircraft specifically designed to destroy enemy aircraft at night and in bad weather conditions. This P-61C served most of its operational career as a weather research aircraft and had accumulated less than 600 hours of flight time when it retired donated to the Smithsonian Institution.*

The Northrop P-61 Black Widow has the distinction of being the first American aircraft to be specifically designed to find and destroy enemy aircraft at night and in bad weather conditions using its on-board radar system. Hampered by development and production problems, the P-61 only reached operational status in the final year of World War II. During that time, the P-61 and its crews served with distinction in the European, Mediterranean, and Pacific theatres, destroying over 120 enemy aircraft.

The development of Jack Northrop's large night fighter began in the early days of World War II. During the Battle of Britain in 1940, the Royal Air Force (RAF) lacked an aircraft to patrol the night skies during the London Blitz bombing raids. By the time fighter aircraft were launched to intercept German Luftwaffe bombers, the enemy aircraft had already completed their raids and returned home. The U.S. Army Air Corps realized if and when the United States entered the war, it would need a night fighter capable of patrolling the night skies.

Northrop was awarded a contract by the U.S. Army to

build the aircraft in early 1941. The design that came out of Northrop's factory was a large aircraft with powerful armament and large engines. A twin tail boom and rudder design were chosen for stability when the aircraft closed on an enemy aircraft from behind. The heavy armament on the aircraft consisted of four 20 mm cannons mounted in the belly of the aircraft and four .50 in machine guns mounted in a remote-controlled turret on the top of the fuselage. The aircraft carried a crew of three consisting of a pilot, gunner, and a radar observer/gunner in the rear fuselage.

As work progressed on the aircraft, the development of the advanced radar set took place simultaneously at the Massachusetts Institute of Technology (MIT). The radar set, designated the SCR-520, was ready by 1942. The U.S. Army was so enthusiastic about the aircraft it ordered production examples before the prototype XP-61 even flew. On May 26, 1942, Northrop test pilot Vance Breeze flew the XP-61 for the first time. Although the size of a medium bomber, the XP-61 had the speed and handling capabilities of a fighter aircraft.



Supply problems and an unexpected design issue with the top turret causing buffeting in flight led to production delays and modifications. By 1943, production P-61's were coming out of the Northrop factory, and training began immediately. The first P-61 combat operations in the European theatre began after D-Day in 1944. Soon after, P-61 crews were flying deep into enemy airspace at night, attacking trains and road traffic and making travel for enemy ground forces difficult.

The P-61 arrived in the Pacific theatre about the same time and was used to protect American bomber bases during the night. The Black Widows quickly gained control of the night skies in the Pacific. On August 14, 1945, a P-61B named *Lady in the Dark* of the 548th Night Fighter Squadron was unofficially credited with the last Allied air victory of World War II.

With the war over, the U.S. Army canceled the production of the P-61 Black Widow. Some P-61's were modified into reconnaissance aircraft and performed photographic aerial surveys of the Pacific Islands. Most P-61's were retired from military service by the early 1950s.

The National Air and Space Museum's P-61C was delivered to the U.S. Army in 1945. It was used for cold-weather tests in Alaska and then for the National Thunderstorm Project in 1946. The crews of the P-61 would use the aircraft's radar to find thunderstorms and fly into them to study them. A variety of instruments were installed on the aircraft to conduct the study. The purpose of the study, conducted by the U.S. Weather Bureau and the National Advisory Committee for Aeronautics (NACA) was to study the effects of thunderstorms on aircraft to better protect them.

The P-61C was put aside for the Smithsonian Institution after being declared surplus in 1950. In 1951, it was briefly returned to airworthy status for a NACA study on how aerodynamic shapes behaved when dropped from high altitude. In 1954, the aircraft was returned to the Smithsonian Institution. Today, it is displayed in the National Air and Space Museum's Steven F. Udvar-Hazy Center. By carefully removing layers of paint, Smithsonian Institution curators have shown the three different paint schemes of the aircraft's service life.



## North American F-86F Sabre

(1953)



A restored North American F-86F Sabre in flight at an airshow. This Sabre is based at the Valiant Air Command Museum in Florida and makes appearances at U.S. airshows. The F-86F has been flown in airshows by former U.S. Navy F-14 Tomcat pilot Dale "Snort" Snodgrass and more recently by well-known warbird pilot and former naval aviator, Doug Matthews. The Sabre is painted in the colorful paint scheme of the former U.S. Air Forces in Europe "Skyblazers" flight demonstration team. The "Skyblazers" performed at airshows throughout Europe in the 1950s and 1960s. The team's popularity and success led to the eventual creation of the U.S. Air Force "Thunderbirds" Air Demonstration Squadron.

### North American F-86F Sabre

**Crew:** 1

**Length:** 37 ft 1 in

**Height:** 14 ft 1 in

**Wingspan:** 37 ft

**Wing Area:** 313.4 sq ft

**Powerplant:** General Electric J47-GE27 turbojet (x1)

**Range:** 1,325 nmi

**Maximum Speed:** 687 mph

**Cruise Speed:** 540 mph

**Empty/Loaded Weights:** 11,125 lb/15,398 lb

**Service Ceiling:** 49,600 ft

**Armament:** 0.50 in (12.7 mm) Browning M3 machine guns (x6), Mantra rocket pods with 18 SNEB 68 mm rockets per pods (x2), 200 US Gallon drop tanks (x2), up to 5,300 lb of bombs on four underwing pylons (standard maximum loadout on underwing pylons was 1,000 lb bombs (x2) on outer pylons and 200 gallon drop tanks (x2) on inner pylons)



# Honoring A Flight Team Of The Past

## Armament

The F-86F had a standard armament of six .50 in machine guns in the nose. Rocket pods and bombs could be carried on underwing pylons for ground-attack missions. One of the advantages the F-86F had over the Soviet-built MIG-15 was its innovative gunsight. The gunsight used the aircraft's radar to compute the range to the target automatically. This made the F-86F a more accurate weapons platform than its rival, the MIG-15.

## Engine

The F-86 was powered by the General Electric J47 turbojet engine. Unlike today's jet engines for military aircraft which produce smokeless exhaust, the J47 produced a noticeable exhaust trail that was highly visible in combat, especially at full power.

## Control Surfaces

An all-moving tailplane was introduced on the F-86F. This type of control surface gave the F-86F superior handling at speeds near or exceeding the speed of sound and allowed the aircraft to be recovered from a sonic dive.



## The Skyblazers

This F-86F is painted in the color scheme of the U.S. Air Forces in Europe "Skyblazers" flight demonstration team. The "Skyblazers" performed at airshows throughout Europe during the 1950s and early 1960s. The team flew the F-86 Sabre in demonstrations from 1953 to 1956. Each year, the "Skyblazers" designed a new paint scheme for their display aircraft. This colorful scheme decorated their F-86's for the 1956 airshow season in Europe, the final year the team would use the F-86F. The team converted to the North American F-100C Super Sabre in 1957 and flew this aircraft until the team was disbanded in 1962.

## Range

Early jet fighter aircraft were not fuel-efficient and had limited range. The F-86 was no exception to this handicap. To increase range, the F-86 often carried two external fuel tanks on wing-mounted pylons. Each tank could hold 200 US gallons of fuel.

## Wings

The F-86 was the first American jet fighter designed that used research on swept wings captured from Germany during World War II. The research showed swept wings reduced drag and prevented compressibility problems when aircraft approached the speed of sound. The F-86's wings had a sweep of 35°. Later production models of the F-86F also had leading-edge slats which greatly improved low-speed handling and maneuverability.

## North American F-86F Sabre

Also known as the "Sabrejet", the F-86 Sabre is a transonic fighter aircraft designed by North American Aviation in the late 1940s. The F-86 was one of the most successful jet fighters used by the United States during the Korean War and was one of the few aircraft that could counter the Soviet-built Mig-15 on equal terms. The F-86 was produced in several variants and had a long service career with the air forces of many other nations throughout the world. During the 1950s and 1960s, the F-86 was used by many of the world's military jet demonstration teams including the Italian Air Force's "Frecce Tricolori", the Japanese Self Defence Force's "Blue Impulse" and the Royal Canadian Air Force's "Golden Hawks" in airshow performances. Today, the F-86 is recognized as one of the most important aircraft of the Korean War, and restored examples like the one shown here are crowd favorites at airshows.

# Hallmark Globe Swift Ornament



*The Globe Swift is the 25th ornament in Hallmark's long-running "Sky's The Limit" series of aircraft Christmas ornaments. The Swift was a two-seat sport plane manufactured in the late 1940s.*

Hallmark Cards Inc. is the oldest and largest manufacturer of greeting cards in the United States. The company also produces stationery, gift wrapping products, and decorative items. One of Hallmark's most profitable and popular lines of products is its collection of Keepsake Christmas ornaments. The Keepsake ornaments feature miniature versions of favorite pop culture characters, classic cars and trucks, trains, sports stars, and even household items. Hallmark produces most Keepsake ornaments in series spanning several years, making them popular collector items. Beginning in 1996, Hallmark began producing a miniature replica in Christmas tree ornament form of a historic American airplane as part of a series of Keepsake ornaments titled the "Sky's The Limit". Throughout this popular series, many famous aircraft such as the Wright Flyer and Charles Lindbergh's "*Spirit of St. Louis*", have been replicated in Christmas tree ornament form. For 2020, the "Sky's The Limit" series features the Globe Swift, a two-seat sport aircraft from the post-World War II period. The ornament is the 25th in this long-running and popular series of aircraft Christmas ornaments produced by Hallmark Cards Inc.

The Globe GC-1 Swift was designed in 1940 by R.S. "Pop" Johnson for the new Globe Aircraft Company. World War II interrupted planned production and the first Swifts, redesigned by K.H. "Bud" Knox and designated the GC-1A, did not come off the assembly line until early 1946. Later that year, a Swift with a more powerful engine, the GC-1B, was introduced. Globe, in cooperation with TEMCO, built over 800 GC-1B's in six months. Unfortunately, production of the aircraft outpaced sales, and the Globe Aircraft Company was forced into insolvency. TEMCO, the largest debtor, bought all the tooling, parts, and aircraft so they could continue production in an attempt to recoup their losses. TEMCO built 260 more Swifts before ending production in 1951.

Today, surviving examples of the Globe Swift are popular vintage pleasure and sport aircraft. Swifts are a common sight at vintage aircraft fly-ins throughout the United States. The ornament produced by Hallmark is a great replica of this classic aircraft from the post-World War II period. The Swift is even painted in the classic silver and blue trim which was a factory paint option. The ornament is available at Hallmark stores throughout the United States and Canada and on Hallmark.com. The ornament retails for \$18.99 in the US and \$23.99 in Canada.







**Distelfink  
Airlines**

Est.

2013



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

## ABOUT

### **DISTELFINK AIRLINES**

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

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

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

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