

KEEP 'EM FLYING

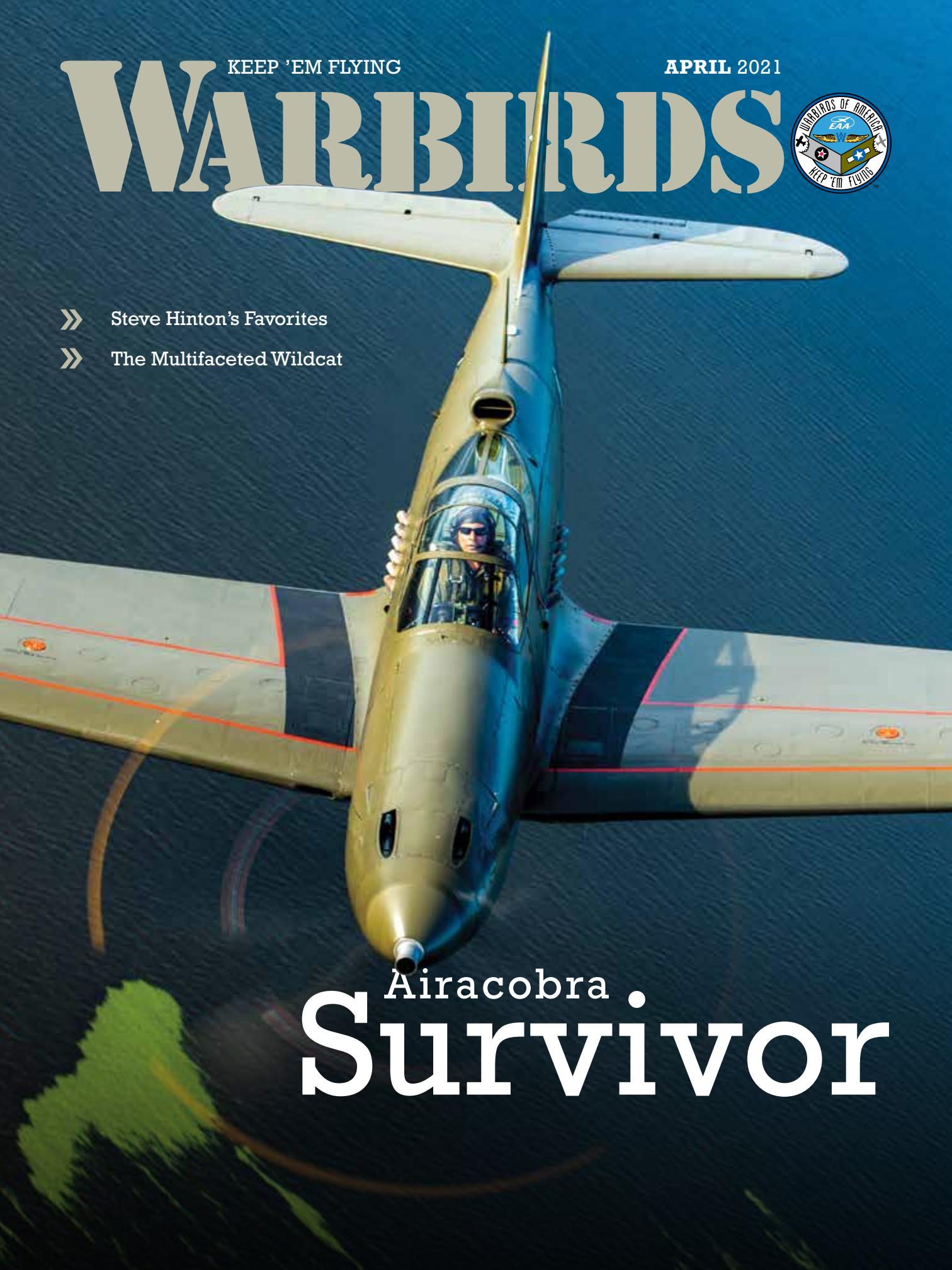
APRIL 2021

WARBIRDS



- » Steve Hinton's Favorites
- » The Multifaceted Wildcat

Airacobra . Survivor





Partner
Recognition
Vehicle Pricing

Trademark(s) of North American Car and Truck of the Year Corporation
used under license by Ford Motor Company.



THE TRUCK THAT NEVER SETTLES.

— 2021 NORTH AMERICAN TRUCK OF THE YEAR™ —

THE 2021 FORD F-150



BUILT *Ford* PROUD



Art in Action

JIM "ZACK" OLZACKI

PRESIDENT, EAA WARBIRDS OF AMERICA



PRING IS HERE, and our thoughts gravitate to air shows, clinics, flyovers, fly-ins, and just flying. Vaccinations are underway. Many areas are seeing improvements in the number of COVID-19 cases, hospitalizations, and deaths.

We are all experiencing the withdrawal that goes along with being separated from the action. Maybe we are only experiencing the withdrawal and separation because the one event we usually attend was taken away by COVID-19. We are all looking forward to working our way back and getting our warbird fix, and getting to see and mix with our fellow Warbirds friends to share old and new stories. We look forward to getting back to our Warbirds community and the wonderful flying machines we all love.

The SUN 'n FUN Aerospace Expo is on our radar, as are the associated clinics. Warbirds in the air truly are "art in action." The sound and beauty of warbirds roaring overhead give you chills and make your chest pound. What about those wonderful formations of warbirds displaying the precision they practice so hard to bring us? We love to see section take-offs, formation flybys, break to land, and the recovery that gets so many planes on the ground in such a short span of time. SUN 'n FUN is just around the corner, and its organizers are doing everything they can to make this year's event a big success.

Don't miss this opportunity to get back in the game if you are mentally and physically prepared.

Greg Gibson, SUN 'n FUN's chief marketing officer, director of air operations, and air show director, reported, "One good thing that has grown considerably is the success of the Warbirds area. We have had great attendance."

SUN 'n FUN is planning a Warbirds hospitality facility this year separate from the air show performers. The thinking is that pilots who fly only in the warbirds part of the show should have their own tent, food, etc. Warbirds volunteers who have signed up for a specified number of hours would also have access to the hospitality area. The amenities provided will depend on sponsorship funds and the ability to free up other budget areas for this. This is all good. SUN 'n FUN has put expanding warbird appreciation and involvement on its horizon and has enhanced and improved on its plans for the future of warbird involvement and support. We are working on volunteer staffing for this effort.

Don't miss this opportunity to get back in the game if you are mentally and physically prepared. This event is laying the groundwork for other events and will serve as a model and test case. Don't miss the Blue Angels and their first air show with their new F/A-18E/F Super Hornets.

CONTINUED ON PAGE 48

CONTENTS

APRIL 2021
VOLUME 44 / NUMBER 3

» FEATURES:

12

Steve Hinton

Living the dream
by Budd Davisson

18

Airacobra Reborn

Military Aviation Museum's P-39 comes home
by Budd Davisson

26

Split Personalities

Three faces of the CAF's Wildcat
by Frank B. Mormillo

34

Killer 'Cats and Snakes

Combat memories of P-39 and F4F/FM2 gunfighters
by Jim Busha





FOR THE LATEST
in warbird news, visit
www.warbirds-eaa.org



ANY COMMENTS?
Send to Warbirds editor:
jbusha@eaa.org



LIKE US ON FACEBOOK
at EAA-Warbirds of America



» COLUMNS:

- 01 From the CO's Cockpit**
by Jim "Zack" Olzacki
- 04 WB Volunteers**
- 06 The Way It Was**
by Joe Handelman
- 46 Mystery Warbird**
by Mark Laatsch

» FRONT COVER: Jerry Yagen's freshly restored P-39 Airacobra chases the lens of Scott Slocum.

» BACK COVER: Steve Hinton in one of his favorites – the F-86 Sabre – locks onto a MiG-15 at the Planes of Fame air show.
Photo by Connor Madison

For more on many of the topics in this issue, visit www.EAA.org/Warbirds.



Keeping the Mission Alive

HOW THE VOLUNTEERS AT THE WARBIRDS OF AMERICA YOUTH EDUCATION CENTER ARE PRESERVING THE HISTORY OF OUR WARBIRDS AND INSPIRING THE NEXT GENERATION

BY CHRISTINA BASKEN

The Warbirds of America Youth Education Center, located next to the Reenactment Camp across from Fighter Town during the week of EAA AirVenture, offers youths an exciting look into some of the greatest fighters of our time (like the P-51D Mustang and F4U Corsair) and the opportunity to learn about their history, hear fascinating stories, and even meet the pilots who flew them and still fly them today!

The Warbirds Youth Education Center now contains four iconic warbird simulators for EAA AirVenture Oshkosh, and all of them will be available to help accomplish the center's mission of inspiring young people.

P-51D Mustang *Sizzlin' Liz* and F4U Corsair *Korean War Hero* are the new simulators, joining P-51D *Old Crow* and an F4U Corsair modeled after Lt. j.g. Thomas J. Hudner's aircraft. All of the simulators were made by Redbird Flight Simulations.

Old Crow was modeled after the Mustang flown by World War II triple ace C.E. "Bud" Anderson, with donor support provided by Hank Menke and family. The Corsair modeled after Lt. j.g. Tom Hudner's aircraft assigned to VF-32 received donor support from the John M. O'Connor family. *Sizzlin' Liz*, modeled after a WWII 4th Fighter Group Mustang, received donor support from the Marco Family Foundation. *Korean War Hero*'s donor support was provided by the James & Shelley Tobul Foundation.

"We're very excited about the Redbird flight simulators and the thousands of kids who will get to experience flying the Mustang and Corsair sims during EAA AirVenture Oshkosh," said Warbirds of America Executive Director Bill Fischer. "We're also grateful for all the support from our donors and volunteers who helped bring this project to fruition."



Youth enjoying simulators P-51D *Old Crow* and F4U Corsair modeled after Lt. j.g. Thomas J. Hudner's aircraft at the Warbirds of America Youth Education Center.

The simulators are housed in the Warbirds Youth Education Center during the week. The facility was constructed in 2017 with donor support from Paul and Corinne Gieseke Wood and the Vlado Lenoč Fund.

"The kids generally love it," said Harold Cannon, former Warbirds of America president and current volunteer. "I had one young man, he was in the simulator, and he headed over in a tight bank; he was leaning over and looking at the simulated side window and just had this great look on his face. This child was just lit. He was just absolutely lit up with joy. You get the occasional 7-year-old that rolls the thing over and pushes the stick forward and you go, 'Holy moly, this child has innate ability.' So you don't know what you're going to get, but it's always fun and it's always rewarding to watch the kids enjoy themselves."

The center opened in 2017 and, since its inception, the goal has been to inspire a new generation of aviators while keeping the history of these fighters alive.

"It's the opportunity to open a dialogue that you can teach a little bit about aviation, a little bit about the techniques of flying, and a whole lot about history," Harold said. "One of our simulators was actually signed by Bud Anderson, who's still with us and is a pretty well-known World War II ace. The opportunities to try and teach a little bit of history, a little bit of appreciation of what America means — that's a big part of what we do."

"We often have people from the reenactors' camp, which is right next door to us, come over and interact with the kids, and they'll have them out doing jumping jacks and doing a drill sergeant routine with them," Harold said. "It turns hilarious and informative at the same time. I think the opportunity to give them a little bit of a bug and find out what their country's done is just as important as trying to spark a little fire to help them get involved with aviation."



INTERESTED IN BECOMING A WARBIRDS OF AMERICA VOLUNTEER?

The EAA Warbirds of America needs you! We are looking for a cadre of dedicated individuals with a passion for preserving history and ensuring that the men and women who operated these historic treasures will never be forgotten. Whether you're a pilot or an enthusiast, a dreamer or a doer, please consider sharing your passion with a like-minded community. So what are you waiting for? Roll up your sleeves and contact us as you begin a new journey of lasting friendships, camaraderie, and personal satisfaction that you will experience nowhere else.

To learn more about the unique volunteer opportunities available as an EAA Warbirds of America volunteer, please contact us at Warbirds@EAA.org.

In 2019, the Warbirds Youth Education Center saw just over 1,000 kids through the program during the week of AirVenture. When kids and families enter the center, they are met with the enthusiastic and friendly faces of several Warbird volunteers dedicated to preserving warbirds.

"We run six days, and during that time we run about eight volunteers per shift, and two shifts per day working around the air show times. So the number of man-hours is pretty big, and our volunteers really enjoy it," Harold said. "It's a combination of giving a history and a flying lesson to a child all at once, and by 'child' I mean we take them if they can reach the control stick and the throttle, all the way up to age 18."

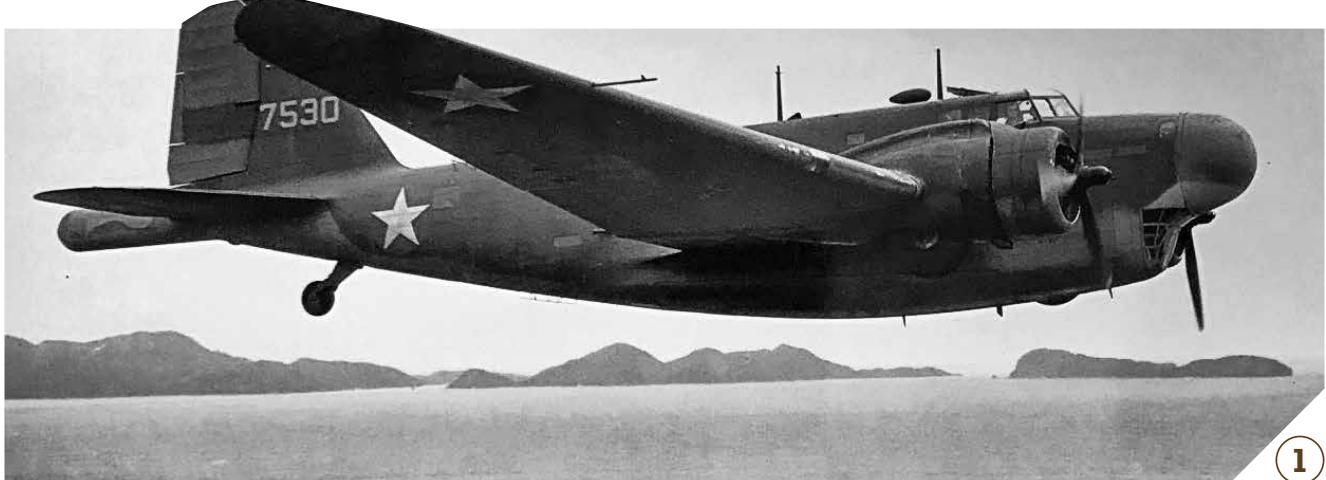
Harold said that every Warbirds of America member, volunteer, or AirVenture attendee who stops by simply to gather more information is supporting a larger mission.

"The Warbirds of America has a motto of 'Keep 'em Flying' and as much as supporting the aircraft, we have governmental programs to make sure that our ability to fly and exhibit these aircraft continues aside from that," Harold said. "A lot of what we do has to do with honoring the veterans and telling their stories. Somebody's got to come along and keep this torch lit. This is part of our effort to make sure that happens." 

I WANT YOU FOR WARBIRD VOLUNTEER STORIES

Share your stories on what it means to be a Warbirds Volunteer. Contact the editor at jbusha@eaa.org





1 Douglas B-18B Bolo, serial No. 37-530. The photo depicts a B-18 that has been modified for anti-submarine warfare. The photograph was probably taken in 1942; note the nose radar dome and the tail-mounted MAD boom. USAAF PHOTO

2 Boeing B-29-60-BW, serial No. 44-69737 at Patterson field near Dayton, Ohio, in the winter of 1944-45. This Superfortress was later modified to a TB-29 configuration. W.T. LARKINS PHOTO

3 North American FJ-3 Fury (redesignated F-1C after 1962), BuNo 135935 4B-29, visiting Naval Air Facility (NAF) Washington on April 2, 1966. J.G. HANDELMAN PHOTO

4 Vought F4U-7 Corsair, BuNo 133712, aboard a French Aéronavale aircraft carrier in the 1950s. FRANCIS BELMONT PHOTO



5



6



7



8

5 Grumman F6F-3 Hellcat on the island of Espiritu Santo in the New Hebrides in 1944. USN PHOTO FROM THE STEICHEN COLLECTION AT THE NATIONAL ARCHIVES II

6 A very early Martin PBM-1 Mariner from VP-55 (later designated VP-40). This airplane would have been assigned to the squadron commander, and is painted in pre-World War II. USN PHOTO

7 U.S. Navy WAVES (Women Accepted for Volunteer Emergency Service) washing a North American SNJ Texan at NAS Jacksonville, Florida, in 1944-1945. Did the forward cockpit get wet? USN PHOTO FROM THE STEICHEN COLLECTION AT THE NATIONAL ARCHIVES II

8 A Bell UH-1C Iroquois demonstrating a smoke screen at the Aberdeen Proving Grounds in Maryland on Armed Forces Day, May 17, 1968. J.G. HANDELMAN PHOTO

SUN 'N FUN Air Show Director's Welcome

SUN 'N FUN AEROSPACE EXPO, LAKELAND, FLORIDA, APRIL 13-18, 2021

BY GREG GIBSON, CMO/AIR SHOW DIRECTOR

WARBIRD AREA INFORMATION & SCHEDULE OF EVENTS

GREETINGS, FELLOW WARBIRD ENTHUSIASTS!

I won't bore you with yet another "how we're all surviving COVID" essay — we've all heard and lived through all we can stand. What I will tell you is that thanks to some very successful SUN 'n FUN Aerospace Expos over the past several years, we are financially sound and on the road to recovery. A major part of that success has been the incredible support of our warbird members, and your participation in our shows has helped draw the crowds that gave us record performances up until 2020. On behalf of your entire SUN 'n FUN family, I'd like to express our sincere thanks and bring you up to speed on what we have been able to accomplish since we last saw you here in Lakeland.

We have been able to continue with our Aerospace Center for Excellence (ACE) scholarship programs and have now pinned wings on 120 new private pilots. Our special student-assisted project Zenith 750 Cruzer will be flying off its required hours by the time you read this, and this specially equipped aircraft will help those with physical limitations train and gain their light-sport aircraft pilot certificates through a partnership with Able Flight.

Project SkyLab, which we introduced last year, is nearing completion and will add more than 22,000 square feet to the Florida Air Museum at our campus entrance. This expansion will include a convertible environment that will house exhibits, workshops, and even an IMAX theater. The area can also be combined into a meeting space that will accommodate more than 500 people. In a humble nod to our long relationship with EAA, Bonnie Poberezny's own Pitts S-1 will hang in the entrance to the new facility, so be sure to stop by for a tour!

And to make our relationship with Warbirds of America even more special, we are pleased to announce that our longtime Warbirds friend Doug Jeanes has joined the ACE team as executive director. You all know Doug from his more than 22 years as president and executive director of the Cavanaugh Flight Museum, and he decided after retiring from that position earlier this year that joining us in Florida would be just the thing to bookend a fantastic career. Please join us in welcoming Doug to the team when you see him.

For the 2021 air show, we've expanded our warbird flight times to get more of you flying, so be sure to check with your Warbirds of America volunteers on arrival to secure your slot. And since we missed out on the opportunity last year, we are also making preparations to commemorate the 75th anniversary of the end of World War II with several activities.

Your ongoing support has been critical in this new era, so on behalf of everyone here at SUN 'n FUN/ACE, I'd like to extend our warmest thanks and an enthusiastic invitation to join us again in 2021. SUN 'n FUN is proud to be your partner, and we remain committed to building the warbird community and sharing your efforts to "Keep 'em Flying!"

Blue skies,

Greg Gibson

CMO/Air Show Director

SUN 'n FUN Aerospace Expo

863-904-4041

ggibson@flysnf.org

PILOT NOTES

Several weeks before the event, pilots can find the 2021 SUN 'n FUN Fly-In NOTAM online at FAA.gov. Or they can phone the SUN 'n FUN Fly-In at 863-644-2431.

Lakeland ATC will operate 24 hours a day; however, the SUN 'n FUN aircraft parking area (south side of the airport) is closed from 7:30 p.m. to 7 a.m. Warbird-type aircraft arriving after 7:15 p.m. Eastern will be parked at the FBO ramp until the following morning. Consult the NOTAM for more information.

Contact Lakeland Tower on frequency 118.65 MHz when 10 nm miles south of the Lakeland Linder International Airport. Pilots should state, "Warbird south arrival, color and type aircraft, position." The FAA asks that all pilots do a final radio check upon arrival to check for inadvertent ELT activation. All aircraft at the fly-in must be tied down, or chocked if on paved areas. Pilots must place tie-down augers into the ground if parked in turf areas. Note: Bring your own tie-down equipment and/or chocks. All aircraft must be tied down or chocked.

Pilots flying large multiengine warbirds to the 2021 SUN 'n FUN Fly-In are asked to contact the Warbirds line chief, Doug Freeman, at afvet001@gmail.com for aircraft parking configuration.

QUICK FLIGHTLINE DEPARTURES

The Warbirds line crew must be present for engine startup, both for crowd control and firefighting purposes. Please contact the Warbirds line crew on 125.025 MHz shortly before your planned engine start.

Note: The Warbirds ramp is now completely static, with no dedicated active areas at any time. Aircraft participating in the daily air show that are parked on the ramp will either be tugged into the pit area prior to the show or started on the ramp with crowd control and security in place.



Starting on the ramp for general departures must be arranged with the line crew so that the startup area can be sanitized. Please use caution and always get confirmation of your startup approval prior to boarding your aircraft for departure if you are parked on the Warbirds ramp.

AIR SHOW BRIEFING SCHEDULES

The slate of briefings is published on the bulletin board outside Warbirds headquarters. Briefing locations may change in order to use the best available facilities. Check with Warbirds headquarters when you arrive on-site.

WARBIRDS HOSPITALITY

Due to the welcome and growing number of participants the past several years, Warbirds will have its own hospitality area rather than co-locating with the air show performers. This new area will be adjacent to the Warbirds line shack on the southeast side of the Warbirds ramp.

AIRCRAFT FUELING PROCEDURES

Sheltair Aviation (863-647-3911) will provide fuel at Lakeland airport. Fuel trucks are available upon request in the Warbirds area and will be available upon recovery to the Warbirds area after the air show. Pilots are responsible for paying for their fuel purchases.

If you wish to be reimbursed for fuel used during the daily air show, be sure that you have at least a commercial airman certificate with a current second-class medical. The acceptance of fuel or smoke oil reimbursement without those certificates could lead to FAA enforcement. If you do not have these certificates, you may still fly in the air shows, but you may not be reimbursed for your fuel or smoke oil.

If you participate in the daily air shows and have at least a commercial airman certificate and a second-class medical, your section leader will record information with the air show fuel coordinator in order to reimburse you for the actual time flown in the daily air shows. Reimbursement checks are mailed to the air show pilots several weeks after the event.

AIR TRAFFIC PROCEDURES

Pilots are asked to carry a copy of the 2021 SUN 'n FUN NOTAM.

IMPORTANT! Pilots flying aircraft without ADS-B will need to use the FAA's ADAPT tool to request an authorization to deviate from the rule. More information can be found on the FAA website at FAA.gov/nextgen/equipadsb/adapt.

No radio (NORDO) aircraft are not authorized (except for ultralights).

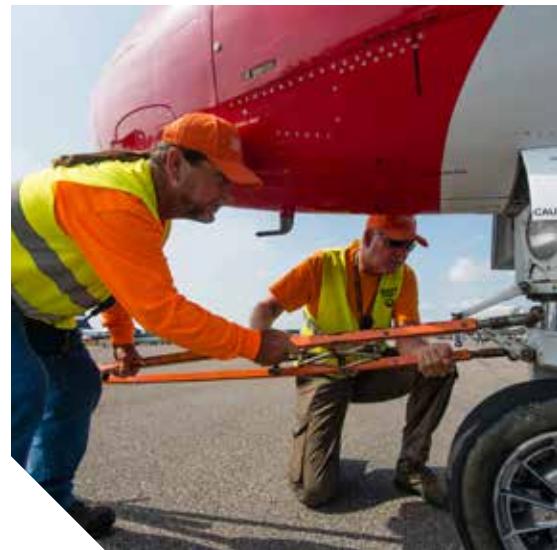
The airport is closed during the daily air show. Consult the NOTAM for specific dates and times of airport closures, along with air traffic information. Tune to ATIS frequency 118.025 for updates. Warbirds pilots can communicate with the Warbirds line crew on 125.025 MHz. Please use this frequency to obtain information, directions, and assistance – especially to request the presence of Warbirds line crew members before starting your engines.

Helicopter operations into and out of the Warbirds area will be kept to a minimum. Those planning to fly warbird-type helicopters in for display should follow the NOTAM procedures for helicopters. Plan to arrive at Choppertown and then shut down. Contact the Warbirds line crew on 125.025 MHz or phone the Warbirds line chief, Doug Freeman, at 863-397-5957 after shutdown. All transfers to the Warbirds area must be coordinated in advance. Note: Pilots should bring all necessary ground movement equipment or towing wheels (in case taxiing under power is not available).

SIGNING UP TO FLY

IN THE AIR SHOW

In order to fly in the daily air shows, new air show participants are required to attend one of the Warbirds briefing sessions entitled "Flying at SUN 'n FUN for the First Time." This briefing may also be a good refresher for veteran SUN 'n FUN pilots. To fly in a warbird formation group during the show, pilots must be formation qualified through the FAST program or the Joint Liaison Formation program. Note that not all aircraft types will fly formation.



**NEED A
CUSTOM
FUEL
BLADDER?**

EMAIL DETAILS TO
JIM@EMCCUSTOMSHOP.COM

We have completed thousands of custom projects spanning over 35 years. Our fuel cells are currently installed in most flying Warbirds today and have proven to last decades.

EMC

EAGLE
MANUFACTURING
CORPORATION

855.97EAGLE
EMCCUSTOMSHOP.COM

EAGLE MANUFACTURING CORP DBA EAGLE TECHNOLOGIES CORP

Warbird air show pilots will complete the Pilot/Aircraft Technical Evaluation Form, self-certified by the pilot in command. All warbird air show pilots must attend the briefing sessions on the days they want to participate. There are time limits and possibly specific themes for each day, so not all aircraft and types may fly every day. During the briefing, pilots will be instructed on the numbers of specific aircraft types required for that day, flight patterns, etc. At the briefing, pilots will sign the waiver for each day they fly.

Also, in order to fly in any of the daily shows, participants will be required to provide photocopies of each of the following to the appropriate section leader:

- Current pilot certificate (both sides; must be commercial or higher to receive fuel compensation)
- Current FAST card (if flying formation in an air show)
- Current medical certificate
- Copy of insurance certificate, which includes flyby coverage
- Date of last BFR

CAMPING

For full hookup/general camping information, see

FlySNF.org/aerospace-expo/camping.

Anyone who would like to volunteer to work in the Warbirds area at SUN 'n FUN should contact Robin McFarland, volunteer coordinator, at 863-644-2431, ext. 144, or email rmcfarland@flysnf.org.

RENTAL CARS

Enterprise Rental Car's on-site office will be set up on the east side of the SUN 'n FUN campus.

Enterprise Rental Car Lakeland Branch Office: 863-647-0866 – Option No. 4, SUN 'n FUN account code is XZ42H23.

For full rental car information, visit FlySNF.org/guest-services/transportation.

AIR SHOW LINE

By FAA requirement, once the daily air show waiver is put into effect, an air show line is established through the Warbirds aircraft parking area on Runway 5/23. Orange cones, temporary fencing, and Lakeland Police Department personnel mark this area. **During the waiver period, no one is permitted to proceed beyond that line, other than security and/or rescue personnel.** The Warbirds line crew will try to park all planes being judged or being flown in the warbird air shows inside of the air show line.

If you are flying in the air show, you may proceed to and from your aircraft within this zone, but once the warbird air show is completed, we ask that you proceed back behind the show line after you have your airplane secured. In other words, if your aircraft is parked beyond the air show line during the time of the waiver, you may not watch the show from your aircraft.

GROUND OPERATIONS

As pilots, we all feel a need to be vigilant regarding safety issues. To that end, we carefully inspect our aircraft during preflight. We run up the engines. We check the weather. We ask ourselves, "Am I physically and mentally ready to fly today?" In short, we make many critical safety decisions before the wheels start to roll.



One area that needs close attention is our understanding of the ground environment in which we operate – especially when operating conventional gear or tailwheel aircraft. These aircraft have unique challenges when it comes to forward visibility. These challenges have a direct impact on safe ground operations. Included in our preflight activities should be a self-evaluation of these key points:

Can I see where I'm going? Have I studied the airport diagram? Have I noted any potential safety hot spots?

These are concerns when operating at every airport, every day. Add an aviation event to the mix and you get people, cars, trucks, emergency vehicles, golf carts, tents, displays, and lots of aircraft. You can expect to see aircraft of varying sizes, shapes, and operational needs.

Here are a few specific things that can help pilots plan for safe ground operations in conventional or tailwheel aircraft, especially in the busy air show or fly-in environment.

- After preflight inspection, check your surrounding area for obstructions.
- Notify aircraft marshals of your intentions.
- Do not start your engine until a marshal is present and crowd control is in effect.
- Before engine start, review your taxi route, noting areas of high traffic.
- Ask for help if you are not completely familiar with local ground operations.
- Review the standard aircraft marshal hand signals.
- Obey the commands of any aircraft marshal.
- When taxiing, use S-turns to improve your field of vision.
- Keep your eyes moving, scanning outside the cockpit.
- Taxi slowly. When in doubt, stop.
- Watch for other aircraft entering the taxiway.

During taxi operations, don't let your guard down when activity on the airport seems to be light. Keeping mentally sharp during ground operations can prevent a tragic accident. Being certain of what lies in front of your aircraft is critical to the safety of other pilots and other bystanders. Even when it seems that S-turning isn't necessary, continue to exercise disciplined checks of your surrounding environment, including the use of clearing turns. Pay particular attention to ground marshals/controllers, as they have a different perspective of the area in front of your aircraft. Using all available resources as you maneuver on the airport is one way to ensure you're doing your utmost to operate safely. Remember, the pilot in command is responsible for the safe operation of his or her aircraft. Taxi and fly safely! ✈

INTRODUCING EXPRESS ARRIVAL

**THE SAFEST WAY IN
TO THE AIRVENTURE
GROUNDS**

- > Get your wristbands, parking, and Camp Scholler passes mailed in advance
- > No more waiting in line*
- > Shipping of Express Arrival passes is **FREE** for EAA members

*Carry-in bags with Express Arrival admissions are still subject to security screening.

**VISIT EAA.ORG/TICKETS
TO ORDER YOURS TODAY!**

EAA AIRVENTURE
OSHKOSH
EXPRESS ARRIVAL

In Partnership with **AIRBUS**



Steve Hinton



LIVING THE DREAM
BY BUDD DAVISSEN



omeone should make a movie of Steve Hinton's life. It has all the important ingredients for a good script. An early childhood spent partially soaked in Varsol cleaner and high-octane avgas with the soundtrack of Pratt & Whitneys and Merlins behind it. Teen years culminating in flying the big iron (Mustangs, etc.). A developing adulthood that saw him moving into increasingly high-performance aircraft, his adventures being punctuated by near tragedies along the way. And flowing throughout it all was a fierce, underlying passion for the aircraft and the history they represent. Of course, any such movie would have to have a sequel to chronicle adventures yet to come. And it begs the question: Having flown more than 150 different types, including almost all of the warbirds still flying, which are his favorites and what's on his bucket list?

IN THE BEGINNING

Steve is fairly certain there has never been a time when he wasn't inordinately fascinated by historical aircraft.

"I was born on NAS China Lake, where my dad, a Marine, was working with the Naval Weapons Lab," he said. "Then we moved to LA, where he worked for General Dynamics. So airplanes were part of my DNA. However, finding that one of my second grade classmates, Jim Maloney, could draw airplanes better than I could is what cinched the whole deal and, unknowingly, set the path for the rest of my life."

Jim and Steve became close friends, and Jim's dad, Ed, owned a museum. But not just any museum. It was the Planes of Fame Air Museum, which featured many of the airplanes Steve was trying to draw.

"Warbirds, historic biplanes, you name it," he said. "So starting when I was 7 or 8 years old, Dad would drop me off to play with my friend Jim. However, that 'play' had us hanging around the airplanes that were being restored. I don't know that we contributed anything worthwhile. However, when we were in our teens, Jim's dad officially put us to work cleaning old airplane parts and generally doing grunt work."

"When I got my driver's license, the museum became my weekend home," Steve said. "Ed had Jim and me doing more and more mechanical work. In the process, we got a hands-on education in engine and airframe support and restoration that was available no place else on the planet. Ed Maloney became my mentor and chief supporter, and the museum, Planes of Fame, became part of my passion."

Ed Maloney must have seen something special in Steve because he made sure that when his son Jim was learning to fly, Steve was right there learning alongside him. They soloed in a C-150 and then went into the L-5 and T-6. They were both 19 when they each soloed the Mustang.

"For a time," Steve said, "I had a nighttime job loading newspapers into Convair 240s for distribution, but my first paying flying job was ferrying Bob Hoover's air show F-86 to Oshkosh in 1974. I was 22 years old, and that was a very big deal for me!"



ABOVE: Left to right, Jim Maloney, Ross Diehl, and Steve Hinton. Steve credits Ross, an Air Force pilot, as being a mentor when he and Jim were first flying the big iron as teenagers.

LEFT: The Boeing P-12 (top) and Seversky 2PA/AT-1 are one-of-a-kind aircraft Steve and Jim regularly flew for the museum.





ABOVE: Steve readily admits that the F-86 is about his most favorite airplane.

RIGHT: Steve has flown most of the still-flying variations of the Corsair, often for movies.

FIGHTER REBUILDERS IS BORN

In 1980, when Steve and Jim were both 28 years old, they decided to open an aircraft rebuilding operation.

"The museum didn't have a budget for us, so we were always broke because we volunteered our mechanical services," Steve said. "So, since we had nothing to lose, we started a business in which we'd be selling what we had learned working on the museum's airplanes. We filed a dba for 'Fighter Rebuilders' and rented a small space from the airport that was on the museum's property. We've increased our space there, and some people think we're part of the Planes of Fame, but we're on a totally separate lease. To this day, I'm still helping on restorations for the museum and am the president there, but it's all strictly volunteer work. There is no official connection between Fighter Rebuilders and Planes of Fame.

"Our first customer was Flying Tiger Airlines," he said. "We did a P-40E for them. They flew the airplane for a few years. Then it went to the San Diego Air & Space Museum and is now in the Pearl Harbor museum."

Unfortunately, Jim Maloney died in a PT-22 accident in 1983, but Steve has continued expanding Fighter Rebuilders.

"We've done quite a number of flying restorations for other museums, including the late Bob Pond's [Palm Springs Air Museum], the late Paul Allen's Flying Heritage & Combat Armor Museum in Everett, Washington, the Stephen Grey collection in Europe, as well as dozens of individual owners," he said. "Many of the airplanes we did at the beginning were more or less hot rods. Very few of them had original paint jobs. However, after a while the name of the game was 'originality,' especially for the museum airplanes. We had to make them as authentic as possible both inside and out, which was an interesting learning curve.

"We've done all types of airplanes, from exotic ones like the Planes of Fame's Zero to what we would consider more or less normal airplanes, like the Mustang," Steve said.

"What makes one exotic and the other one more normal is the availability of parts. There is no part on a Zero that you can pick up the phone and order. The P-51D is just the opposite. Almost every part, big or small, is immediately available from somewhere. The lack of parts is what made rebuilding the P-38 and P-39 for Stephen Grey among the most difficult [jobs] we've done."

Over the years, just about every type of fighter in existence went through Fighter Rebuilders' shop, but Steve said that he'd like to rebuild a couple of older jets, especially a Republic F-84 and/or some version of the Grumman F9F Panther/Cougar.



ABOVE: The Mustang has always loomed large in Steve's life both as a pilot and a fighter rebuilder.

LEFT: One of the first Planes of Fame fighters, the P-40N, was often flown by Steve.

ONTO THE FLYING: ANY FAVORITES?

Although Fighter Rebuilders is considered one of the premier restoration shops in the world, Steve is probably better known as a pilot than a restorer, thanks to his air racing and air show performances and the large amount of movie work he's done. Also, because he is renowned for having flown so many different airplanes and knows what makes each one tick, Steve spends a lot of his time traveling the world to do initial test flights in rare restorations on both sides of the pond. Spending so much time in so many different cockpits has given him a unique perspective and allowed him to give valid in-cockpit evaluations of an incredibly diverse variety of Allied and Axis airplanes from World War II and later. As a result, it would be impossible for him not to like some airplanes more than others. So does he have a favorite?

"First, I have to be honest and say that I like them all," he said. "Each has its own personality and good and bad points. However, the airplane that I'd put right on the top would have to be the F-86. Also, as a child, it's probably one of the first fighters that I could identify, and I still think it's one of the sexiest-looking fighters out there. From every angle, its lines are perfect. From the cockpit, the airplane really grows on you. It's an incredibly simple airplane, has powered controls, and the cockpit fits perfectly. I've restored two and checked out something like 15 pilots in it, and they all come back feeling the same way as I do about it. When I'm flying it with the Horsemen [Flight Team] doing an air show, the way it lets you merge into a formation is pure magic."

"Right behind the F-86 would be the Bearcat, basically for the same reasons I like the Sabre," he said. "It fits the pilot just right and has what are probably the nicest controls of any propeller-driven fighter. They're fairly light and precise, and the airplane has almost unbelievable climb performance. When you're sitting on the ground, you have really good visibility, and because the nose is so short, it feels as if the prop is so big that it's going out to the wingtips. It's also an absolute sweetheart to land, which all Grumman products are. Because they're designed for carriers, they come over the fence slower than most fighters and their landing roll is short and easy to control."

"I think the Mustang is right up there with the others, not only because of the way it flies and how relatively easy it is to support, but because of the history behind it," Steve said. "Think of the pivotal role it played during World War II. Every time I climb into one, I'm reminded of how many young men sat in that seat and risked their lives for us. It's actually pretty sobering."

"Although it's not a fighter, I really like flying the B-25," he said. "For one thing, it's got really reliable engines and, like all North American airplanes, the cockpit layout is superb. It has almost no bad habits and is comfortable to fly. I have around 1,200 hours in them, and every time I fly one, I like them that much more."

One of the airplanes Steve flew that surprised him was an original Bf 109E.

"I had flown the Spanish-built HA-1112 Buchon 109 clone, and I wasn't impressed by that," he said. "Nothing about it was right. The takeoffs and landings were, to say the least, exciting. Not so the original 109E. It was well balanced, and you could bring it across the fence much slower."

"I experienced something similar in the Fw 190," he said. "I flew the Flugwerk copy with the R-2800 engine and it had good performance, but at the time I didn't know how much it deviated from a true 190 until I flew Paul Allen's original. The Focke-Wulf, like the Mustang, has a huge reputation for being a terrific flying machine. As I got out of it after that first flight, I had to say that it lived up to every bit of the hype, which very few aircraft do. It was really nice flying — a lot like a very high-powered, very lightweight Spitfire."

When talking to him about Spitfires, it's important to address specific Spit models because Steve's flown seven different marks: the Mk. I, V, IX, TIX, XVIII, XIV, and XIX. He said he hasn't flown the final version, the Mk. 22. Yet!

"The Griffon engine makes a different airplane out a Spitfire," Steve said. "The Merlin-powered airplanes are pleasant because they are much lighter. They have just the right amount of power and a lot of finesse. The Griffon airplanes are real beasts. They're all power and not much finesse. The best of the Griffon-powered Spits is the Mk. XIV. It almost has Bearcat performance, but the rudder is very heavy so you're constantly trimming. The Mk. XIX will do .88 Mach. It's fast!"

With all that heavy iron behind him, you have to wonder if his bucket list still includes any aircraft he'd like to fly.

"I'm looking forward to flying the late Paul Allen's Flying Heritage & Combat Armor Museum original Me 262 in the not-too-distant future — with the original Jumo engines, not CJ610 GEs," Steve said. "We've gone all through the Jumos and have made a few small improvements, like using Inconel for the turbine blades rather than regular steel, in the hopes we get more flight time out of them."

"I'd also like to fly an SB2C Helldiver," he said. "Why? Just because I haven't. And I want to see how well the dive brakes work."

ABOUT THE FUTURE

Recently Steve brought his son, Steven, who is a well-known race pilot in his own right, in as a partner in Fighter Rebuilders.

"He's doing a Hellcat entirely on his own right now. It's a full-time gig for him, and I'm hoping that, when we're a little farther down the road, he can take over the whole operation, which will free me up for something else that I'd love to be doing."

"Given a choice, I'd be doing Planes of Fame stuff full time — both acquiring and restoring airplanes and helping guide the museum's future," he said. "This was Ed Maloney's dream and, little by little, it has become my dream as well. The museum is living history, and I want to make sure that what Ed started continues to be available to future generations of kids like me who are right now drawing airplane pictures in the margins of their schoolbooks."

Stand by for the Hinton sequel. Exciting stuff is bound to be coming. ➤



ABOVE: Steve has flown countless air shows in the Sabre.

MIDDLE: Warbird reunions are central to the Planes of Fame Museum's show.

BOTTOM: The P-47 Jug was among the first aircraft a very young Steve Hinton flew.



MILITARY AVIATION MUSEUM'S P-39 COMES HOME
BY BUDD DAVISSON



Check out the digital edition of *Warbirds* for
a photo gallery on Military Aviation Museum's P-39.





t was supposed to be a fairly normal ferry flight. The six P-39 Airacobras were formed up in two-ship sections for takeoff on the runway at Antill Plains Airfield near Townsville, Queensland, on Australia's northeast coast. It was a beautiful Friday morning, and they expected to land later that afternoon at Port Moresby on the south coast of New Guinea, where they would spend the weekend. After that they weren't sure what they would be doing. They expected their immediate future to be determined by the Imperial Japanese Navy (IJN). And they were right — it was May 1, 1942.

IN COMBAT, MOTHER NATURE ALWAYS WINS

The flight's route would have them flying up the coast to the northernmost tip of Australia, where they would refuel at Horn Island. The island sat in the Torres Strait where the Coral Sea ended. The route added hundreds of miles to their flight path, but a straight line from Townsville to 7 Mile Drome at Port Moresby would involve crossing over 500 miles of the Coral Sea, and the Airacobras didn't have enough range. The Horn Island route would cut the over-water distance down to 100 miles, with a number of small islands scattered along the way. It would be an easy flight. Or it would have been had Mother Nature not had plans of her own.

The flight lead was Lt. Charles Faletta, who had been in theater for some time and knew both the area and the P-39 well. The rest of the flight, however, had just arrived from the States, and Lt. Walter Harvey, who was on Faletta's wing in P-39F 41-7215, was new to the P-39. About halfway to Horn Island, they refueled at Cooktown Airfield. Then, as they closed in on Horn Island and were almost bingo fuel because they were on internal tanks only, Mother Nature decided to wage her own war on these U.S. Army Air Forces aircraft.

Initially, they were picking their way through heavy rain showers. Then, as the weather closed in, things got really dicey. With Faletta being the only pilot in the formation capable of IFR flight (the rest being strictly VFR pilots), they didn't dare penetrate the heavy storms that covered Horn Island. Even worse, they were all about to run out of fuel. So Faletta turned inland, broke the flight into two-ship sections, and told them to find the best place they could to set down. Faletta and Harvey found relatively flat terrain, and Harvey, in 41-7215, bellied in gear up, sliding to a stop with minimal damage and no injury. Faletta tried his landing with the gear down, but one leg folded and the airplane ground to a halt with one wing in the dirt, but he was uninjured. The two of them joined up and walked for two days before getting to the coast. They arrived on the shore of the Coral Sea on Monday, May 4, 1942. Their goal was to find a way to Port Moresby.

As they awaited rescue, what they couldn't have known was that Adm. Shigeyoshi Inoue of the Imperial Japanese Navy, with two fleet carriers and one light carrier accompanied by dozens of support ships, was also headed for Port Moresby. And what Adm. Inoue can't have known was that only 80 miles behind him and unaware of the Japanese fleet's location, two U.S. Navy carrier task forces under the command of Adm. Frank Fletcher were out looking for him. Faletta's flight of P-39 pilots had arrived on the opening days of the Battle of the Coral Sea, which, technically, the Japanese won (the USS Yorktown was damaged and later scuttled). Although the IJN light carrier, the Shōhō, was sunk, more importantly, the two IJN fleet carriers, one damaged and the other with its aircraft complement depleted, were incapable of joining the Battle of Midway, which occurred in an adjacent area only a few weeks later. That gave the Allies an edge in what became one of the most critical battles in the Pacific theater, with the Allied victory laying the first stepping stone toward Tokyo.



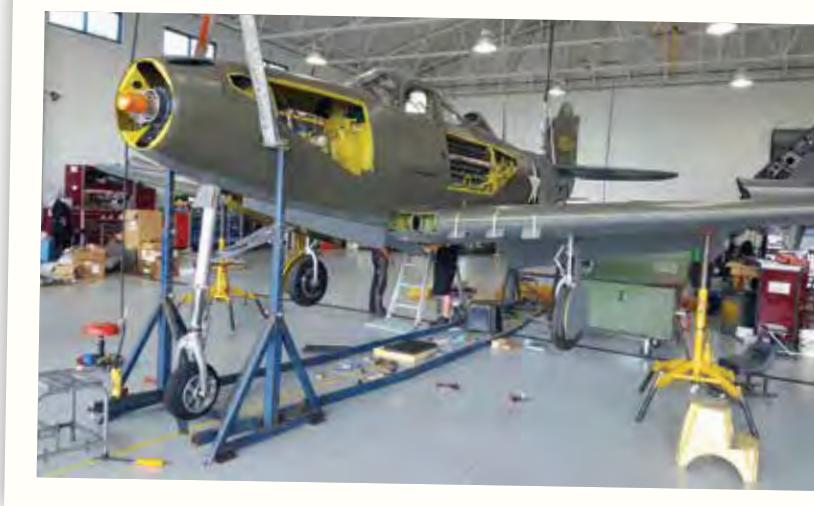
History, and the war, moved on, and as Walt Harvey's P-39F, 41-7215, began settling into the dirt, he rejoined his outfit (36th Fighter Squadron, 8th Fighter Group). He went on to fly 131 missions and passed away in 1998, but reportedly not before visiting Australia and revisiting his old mount.

WHY RESTORATION IN NEW ZEALAND?

Both Harvey's airplane, 41-7215, and Faletta's were left pretty much untouched until they were discovered in 1963. Then, in 1971, a road was bulldozed into the crash sites, and both were recovered and transported to a variety of Australian locations. Over the next 30 years, 41-7215 cycled through a number of owners and failed restoration/refurbishment programs. Eventually, the remains, part of which had seen attempted efforts at restoration, were purchased by Jerry Yagen for his Military Aviation Museum in Virginia Beach, Virginia, and delivered to Pioneer Aero in Ardmore, New Zealand, for restoration.

Why New Zealand rather than California or Utah or Texas or ...? One reason is because New Zealand has a favorable exchange rate, and more importantly, there are numerous aircraft restoration shops on the island that have done a huge number of dramatic restorations. Some of the restorations actually involved more remanufacturing than restoring, as with the Mosquitos that have been reborn there. But wait! New Zealand has a population of around 5 million people. That's the size of the Phoenix metropolitan area. So New Zealand's warbird restorations-per-capita ratio has to be the highest in the world. Why is that?

Paul McSweeney of Pioneer Aero has his theories. "First of all, New Zealand is pretty isolated," he said. "In fact, in that regard, we're sort of the South Pacific version of Alaska. Historically we didn't have a lot of outside entertainment, and mechanical parts were harder to source, so the people, who are universally self-sufficient, are more likely than most to be mechanically inclined and good with their hands. Plus, there's a surprising passion for old stuff. That I can't exactly explain. However, it has to be remembered that during the war tons of airplanes were simply abandoned here by the various forces. At one time, for instance, we had a legendary boneyard that had P-40s and such almost as far as the eye could see. Some of these got picked up and formed the basis for early restoration projects, but unfortunately, as is the case worldwide, most were scrapped. Caches of steel parts that were not prized by the scrap dealers found favor with local farmers and engineers, and these are now finding their way out of dusty sheds and into modern restorations."



TOP: As delivered to Pioneer Aero, the far-from-complete MAM P-39 had already lived a very hard life.

MIDDLE: The P-39 fuselage uses a structure unlike that seen in any other WWII fighter and a major portion of the original components were rebuildable.

BOTTOM: Many of the systems to be restored were unique to the P-39.

"What is especially surprising is that there's a high degree of mechanical enthusiasm among the young people," Paul said, "and we've been lucky to pick up a few of them. They are good with their hands and love old airplanes. Combine the talent of the area with the local work ethic and the favorable exchange rate, and this is a good place for a warbird guy to send his airplane to have it brought back to life. The cost of freight from the U.S. compared to the total project cost is next to nothing, so it's worth it!"

Paul said that past Pioneer Aero projects include nine P-40s of almost every variation, Mustangs, and a few rarities like a Lavochkin La-9 and a Yak-3.



P-39 FROM THE COCKPIT

Mike Spalding, who has been MAM's chief pilot for the past decade and did all of the P-39's initial flying stateside, had the following interesting observations about the aircraft:

"First of all, it runs really hot on the ground. I mean really hot! Before you start it, you have to have everything else on the airplane set and ready for takeoff, so when you get to the end of the runway you can go immediately. You do the runup while rolling onto the runway. On takeoff, you'll throttle up to about 3000 rpm and 52 [inches], lighten the nose a little, and it becomes a big Cessna 150 in terms of handing, but it's still heating up. So you're more interested in getting speed than rate of climb. The power comes back to 2500 rpm and 35 inches for the climb, which gives about 1,500 fpm. You hold about 150 mph, which is a fairly flat angle, and the coolant temps start down. From that point on, temperatures aren't an issue. The need to really stay on top of the temperatures complicates the checkouts of other pilots. You can't just say go fly it, even though it's actually fairly easy to fly, because the temperature control is so critical."

"The controls are surprisingly light, and the airplane reacts well. However, the sounds you're hearing are totally different than in any other WWII fighter. Actually, they're different from any other airplane. The engine and exhausts are all behind you so you don't really hear the Allison. However, you're very aware of the sounds of the gearbox in front of you. With the sounds of so many gears grinding away, it sets thoughts in your mind of how long they can last. Obviously, that's not a problem, but it takes a little while to get used to. Also, the drive shaft is about 6 inches under the seat and runs between your legs, hidden only by a canvas cover. That's different."

"You hear a lot about P-39s being wildly uncontrollable in the stall, but I haven't seen that at all. In fact, it's pretty straightforward, and relaxing the pressure has it flying again."

"Landing is very straightforward, with 120 mph on final and 100 mph over the fence. The flaps are simple hinged affairs and are fairly effective but not wildly so, and a little power is carried down final. As the airplane is pulled level and you begin to flare, the power is removed slowly to put it on its main gear. Ground roll is, again, C-150 simple, but it's absolutely critical you get it off the runway and shut it down as soon as possible or it'll start heating up again."

RESTORING AN ORPHAN WARBIRD

The first work that was done on the 41-7215 shortly after its recovery in the early '70s was aimed at making it a static display, not a flying airplane. Several attempts were made at restoring the airplane to flying status, but none were successful. So what arrived at Pioneer Aero in 2015 and looked pretty much like an airplane still had a long way to go.

There's a big difference between the mindset required to make an airplane into a static display and one that would produce a machine that had a fire-breathing engine and blazing performance. So what Paul had to work with, when beginning the restoration process, presented challenges in some areas but made the work easier in others.

"We had to basically dismantle every area of the airplane to make sure the work that had been done earlier was done correctly," Paul said. "This required totally de-skinning the wings and part of the fuselage, searching for corrosion, and replacing rivets and deformed panels. Plus, we wanted to totally inspect the spars, which fortunately were in reasonably good shape. However, a lot of corrective work had to be done to the wing attach points. On a P-39, the center section is integral with the fuselage, and the wing panels bolt on outside of the main gear. There's no way of adjusting them, so the fittings have to be absolutely accurate or the wings won't attach right. A lot of time and effort went into getting them perfect."

"I would be lying if I didn't admit that the simple fact that we had never worked on a P-39 was a factor," he said. "Plus, being an earlier design, the airplane has structure and systems that, in some areas, are much different than we're used to seeing. A big percentage of the time we spent on the airplane was research and scratching our heads. Fortunately, however, we had a good percentage of the original drawings used to build the airplane. Some were hard to read and a magnifying glass was required, but they gave us a bunch of details in places where we might never have figured it out."

Paul said another problem they ran into that is generally not part of a warbird restoration is the lack of access internally.

"As fighters go, this is a small airplane. However, when you put an Allison in the middle of the fuselage and then have all of the mechanical stuff required to drive the prop plus the radiators and all their plumbing stuffed in there, it gets really crowded. I can't even guess how many times we put the engine in and took it out. It was always in the way."

"The wing panels, which aren't that big, are also crowded because there are six tanks in each," he said. "Originally, those were self-sealing bladder tanks that had really thick walls, so they took up a lot of room. These were replaced with modern, thinner rubber bladder tanks that had to be sized to fit the spaces for them. The fuel plumbing is like nothing you'll see in other airplanes."



When it comes to restoring P-39s, the team at Pioneer Aero realized early on it had to make one important verification before starting a project.

"The very first thing you do, especially before deciding to take on the project, is verify that it either has the prop or the right parts to make the prop," Paul said. "If the prop isn't included, you don't do the project. This is because this prop was only used on the P-39, and absolutely nothing can be substituted for it. Nothing! Today, if you don't have a prop, you don't have a viable P-39 restoration project, regardless of how good the airframe is. Every other part of the airplane is either available or is relatively easy to manufacture. Not the prop. Fortunately, Jerry had what was needed to assemble a good one.

"One thing you don't expect when thinking about restoring a P-39, which is one of the rarest warbirds flying — this is only the third — is that some parts that you think are going to be impossible to find aren't," he said. "The fact that the engine is behind the pilot with a really unusual gear case running the drive shaft under him, then another gearbox is up front driving the prop, means the airplane has a lot of very unusual parts. However, it's surprising that some of it is still out there, primarily because there are such a small number of P-39s flying that the parts haven't been used up. In fact, the prop transfer case we found was new old stock. Even the Allison is unique enough that it won't work in any other airplane, so they aren't used up. When there are a number of airplanes flying, like P-40s or P-51s, their parts get used up faster so are often hard to find."

The reborn 41-7215 took to the air again in February 2019, just short of 77 years since its last flight. Pioneer Aero test-flew the airplane and put enough hours on it to establish its reliability. The company then dismantled it again and went through a tedious packing process, not unlike shipping King Tut's treasures, and off it went to Jerry Yagen's Military Aviation Museum [MAM] in Virginia Beach, Virginia. There it joined the approximately 55 flying World War I and World War II aircraft that are part of MAM's active repertoire. With such a small number of the type still flying, the MAM flying weekends will give a wide audience its first view of a seldom seen icon from history's past. 



TOP: Cannon in front, automotive-type doors, engine behind: Nothing about the P-39 is typical.

MIDDLE: The Allison version used in the P-39 is unusual, so enough have survived to power the few airframes extant.

BOTTOM: The 37 mm T9/M4 Browning cannon was slow firing but packed a lethal punch.





SPLIT PERSON



PERSONALITIES



THREE FACES OF THE CAF'S WILDCAT

STORY AND PHOTOGRAPHY
BY FRANK B. MORMILLO



uring its more than three decades of service with the Commemorative Air Force (CAF), FM-2 Wildcat U.S. Navy Bureau Number 86819 has had three different external identities. Initially operated by the CAF and representing a Wildcat flown by VOC-1 Cmdr. William "Bush" Bringle aboard the USS Wake Island (CVE-65) and USS Marcus Island (CVE-77) in 1945, the warbird was then renovated and refinished in 2003 to represent a Wildcat VI flown by the British Royal Navy's 835 Squadron aboard the escort carrier HMS Nairana (D05) during World War II.



The CAF's FM-2 Wildcat in VOC-1 colors and markings on the ramp at Midland, Texas.

In August 2019, 86819 was refinished once more, and it now represents an FM-2 flown by VC-27 aboard the USS Savo Island (CVE-78) from 1944 to 1945. With 61.5 aerial victories, VC-27 was the highest-scoring FM-2 squadron of World War II (one additional aerial victory was credited to a VC-27 TBM-3 Avenger torpedo bomber), and with nine aerial victories, VC-27's Lt. Ralph Elliott was the highest-scoring FM-2 pilot of the war. VOC-1 served as a naval gunfire spotting unit during the Iwo Jima and Okinawa invasions, while VC-27 was a composite squadron that operated FM-2 Wildcat fighters and TBM-3 Avenger torpedo bombers under a single command.

Built under license by the Eastern Aircraft Division of General Motors, the FM-2 was the final production model of the portly Grumman G-36 monoplane fighter that first flew in prototype form as the XF4F-2 on September 2, 1937. However, the basic design was actually a development of the proposed XF4F-1 biplane fighter that had been ordered by the U.S. Navy as a backup to the Brewster XF2A-1 monoplane fighter, which later came to be known as the Buffalo. While the Navy had placed a development order for the XF2A-1 in 1936, there were apparently lingering doubts about the ability of high-speed monoplanes to operate from aircraft carriers. However, when it became apparent that biplane fighters would soon be no match for monoplanes, Grumman was instructed on August 28, 1936, to revise its project as a monoplane to compete against the XF2A-1.

With its fuselage bearing a family resemblance to Grumman's F3F biplane fighters, the XF4F-2 was a midwing monoplane with retractable landing gear similar to the kind used in the Grumman biplanes. Powered with a 1,050-hp Pratt & Whitney R-1830-66 Wasp radial engine, the XF4F-2 flew for the first time on September 2, 1937. However, the XF4F-2 lost out to the XF2A-1 for a production contract in 1938. But that was not the end for the Grumman G-36 design. Returned to Grumman for redevelopment, the XF4F-2 was reengined with a 1,200-hp XR-1830-76 radial, the wings were revised from a rounded to a square-tipped shape with increased area, and the tail surfaces were revised. Redesignated XF4F-3, the revised Grumman fighter could attain a top speed of 335 mph, and its handling qualities compared favorably with those of most other contemporary land-based fighter planes. As a result, Grumman was awarded a production contract by the Navy for the F4F-3, soon known as the Wildcat, on August 8, 1939, and both the French and Greek governments placed orders for the fighter as well.

The French Wildcats were to be powered with 1,000-hp Wright R-1820-G205A radials, while the Greek fighters were to be powered with 1,000-hp Pratt & Whitney R-1830-S3C4G radials. At this point, all the Wildcats were armed with a quartet of wing-mounted .50-caliber Browning machine guns and could also carry two 100-pound bombs under the wings. However, Germany conquered both France and Greece before they could receive any Wildcats, and those orders were taken over by the British, along with additional British contracts for the Grumman fighters known as Martlets in Royal Navy service.

On December 25, 1940, a pair of Royal Navy 804 Squadron Martlet 1s scored the first aerial victory for a U.S. aircraft in British service when they shot down a Luftwaffe Junkers Ju 88 bomber over Scapa Flow. At the same time, F4F-3s were being manufactured for the U.S. Navy and Marine Corps as well, and those fighters held the line against the Axis powers when the United States was dragged into the war by the Japanese attack on Pearl Harbor.

While it has often been said that the Wildcat was outclassed by enemy fighter planes such as the Japanese Mitsubishi A6M Zero, the German Messerschmitt Bf 109E, or the Dewoitine D.520 operated by the Vichy French in North Africa, that was actually more a matter of perception than reality. In terms of low-speed maneuverability, there is no doubt that the Japanese Zero was the class of the field in 1941 and 1942, but the Wildcat's top speed was actually comparable to that of the Zero and the Dewoitine, and the fighter was not much slower than the Bf 109E, which was in use during 1941 and 1942. Furthermore, in terms of ruggedness, armament, and reliability, the advantage went to the Wildcat.

The CAF's FM-2 Wildcat running up its engine aboard the USS Carl Vinson prior to launching from the deck of the aircraft carrier for a Fleet Week 1995 San Francisco Bay flyover.





Replica .50-caliber Browning machine guns in the left wing of the CAF's FM-2 Wildcat.

In 1942, the first Wildcat to sport folding wings, the F4F-4, was introduced into service. That feature essentially doubled the number of Wildcats that could be based aboard aircraft carriers. Armed with six .50-caliber Browning machine guns in the wings, and fitted with additional armor and self-sealing fuel tanks, the F4F-4 was heavier than its predecessor, trading about 10 mph in speed and some handling qualities for the increased ruggedness. Furthermore, though the F4F-4 carried two more machine guns than the F4F-3, the total number of rounds that could be carried was actually less (a total of 1,440 rounds versus 1,720). Since a quartet of hard-hitting Browning .50-caliber machine guns proved to be more than adequate for the opposition of its era, especially the lightly armored Japanese warplanes, most Wildcat pilots at that time actually preferred the four-gun armament.

For the first year and half after the Japanese attack on Pearl Harbor, Navy and Marine Corps Wildcats flown by pilots who were essentially getting on-the-job training held the line against a numerically superior force of Japanese warplanes flown by experienced combat pilots. Although seven of its 12 F4F-3 Wildcats were destroyed on the ground (and one other was damaged) during the first Japanese attack against Wake Island on December 8, 1941 (being on the other side of the international date line from Hawaii, this attack actually occurred on the same day as the December 7 attack on Pearl Harbor), over the next two weeks the remaining Marine Corps Wildcats of VMF-211 were credited with shooting down eight Japanese airplanes and sinking the Japanese destroyer *Kisaragi* before the island was finally overrun by the Japanese. The Navy's first ace of World War II, Lt. jg. Edward H. "Butch" O'Hare, was credited with shooting down five Japanese Mitsubishi G4M "Betty" bombers in a single mission as they attempted to attack the USS Lexington (CV-2) on February 20, 1942. Meanwhile, other Navy pilots began their paths to ace-dom during the Coral Sea and Midway battles of May and June 1942. But Navy and Marine Corps Wildcat pilots really began to take full measure of the Japanese during the Battle of Guadalcanal in 1942 and 1943. At least 16 U.S. Navy Wildcat pilots became aces in 1942, along with 30 Marine Corps pilots, with the top scorer being Marine Corps Capt. Joseph Jacob Foss, who was credited with 26 aerial victories. At the same time, Royal Navy Martlets on convoy escort duty began to blunt the German Focke-Wulf Fw 200 Condor "scourge" that had been devastating the Allies' merchant ship convoys. Overall, the little Grumman fighter was credited with a 6.9-to-1 victory-to-loss ratio during World War II; not bad for a fighter that was supposedly inferior to most of its contemporaries.

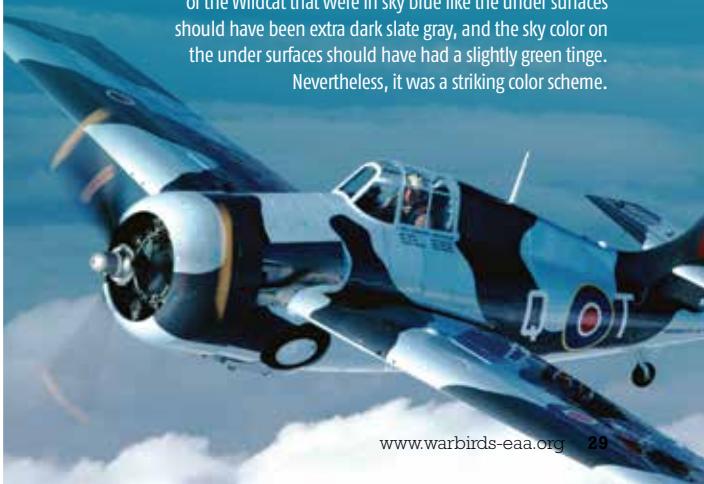
1943

By mid-1943, the faster and more capable Grumman F6F Hellcat began to replace the Wildcat in frontline service. However, the Wildcat was still very useful aboard U.S. and British escort carriers for anti-submarine and ground-support missions. So to free up the Grumman production line for Hellcats, the government turned production of the Wildcat (as well as the Avenger torpedo bomber) over to the Eastern Aircraft Division of General Motors, which designated its Wildcats FM-1 and FM-2. The FM-1 was basically equivalent to the F4F-4, though it was armed with four .50-caliber machine guns. However, after producing 1,127 FM-1 Wildcats for the U.S. Navy and the British Royal Navy, GM revised the basic design to come up with the FM-2, with the only external difference being a taller vertical tail. But powered with a turbosupercharged 1,350-hp Wright R-1820-56 Cyclone engine and weighing about 450 pounds less than the FM-1, the FM-2 Wildcat offered a somewhat improved performance. The FM-2 could also carry two 250-pound bombs or six 5-inch rockets under its wings.

Although the British Royal Navy had called its Grumman fighters Martlets (variants being the Mk. 1, Mk. 2, Mk. 3, Mk. 4, and Mk. 5, with the Mk. 5 being equivalent to the FM-1), in 1944 the Royal Navy standardized the U.S. Wildcat designation, with the Martlet V (FM-1) becoming the Wildcat V and the FM-2 being named the Wildcat VI. GM continued to produce the Wildcat until the end of World War II, eventually manufacturing a total of 1,127 FM-1s and 4,777 FM-2s. Before turning Wildcat/Martlet production over to GM, Grumman manufactured 1,971 of the portly fighters.

While the Royal Navy markings once applied to the CAF's FM-2 Wildcat were authentic, and the camouflage pattern looked good, the original camouflage colors should have been a three-tone dark sea gray/extra dark slate gray/sky combination. For some reason, the areas on the upper surfaces of the Wildcat that were in sky blue like the under surfaces should have been extra dark slate gray, and the sky color on the under surfaces should have had a slightly green tinge.

Nevertheless, it was a striking color scheme.





The cockpit of the CAF's FM-2 Wildcat.



Mike Polley performing a flyby over Cable Airport with the CAF's FM-2 Wildcat after it had been refinished in VC-27 colors and markings.

With the end of World War II, production of both the Wildcat and Hellcat was halted. However, while the more advanced Hellcat continued in service with the Naval Air Reserve into the 1950s, and a number were also adapted for use as radio-controlled target drones and even used as unmanned flying bombs during the Korean War, the Wildcat's service essentially came to an end at the end of the war. In fact, the last Wildcats manufactured went straight from the production line to surplus status. However, that apparently meant that Wildcats were more available for sale to the public in the first years after the war. Today, about 17 Wildcats are currently still flyable, and another 20 or so are on static display around the world. On the other hand, only about six F6F Hellcats are currently flyable (another half-dozen are reportedly under restoration), and 10 are on static display.

Manufactured by GM's Eastern Aircraft Division at Baltimore in August 1945, FM-2 Wildcat Bureau Number 86819 was immediately declared surplus. The fighter reportedly wound up being employed as an aerial bug sprayer in Pennsylvania and the Pacific Northwest for a number of years before being damaged in 1958 while owned by Butler Aviation of Redmond, Oregon. The airframe then went through several different ownerships. Charles Nichols' Yankee Air Corps collection (now known as the Yanks Air Museum) of Chino, California, obtained it in 1981. The Wildcat spent some time with the Confederate Air Force's Air Group One at Ramona, California, and David Tallichet's Yesterday's Air Force at Chino, California, before receiving a certificate of airworthiness on January 24, 1987, and making its first post-restoration test flight on April 24, 1987. Registered by Nichols as N5833 in 1988, the Wildcat was finally purchased by Bob and Claire Reiss of San Diego and donated to the Confederate Air Force (now known as the Commemorative Air Force) in 1989.



Mike Polley dismounting from the wing of the CAF's FM-2 Wildcat after a flight at Cable Airport.



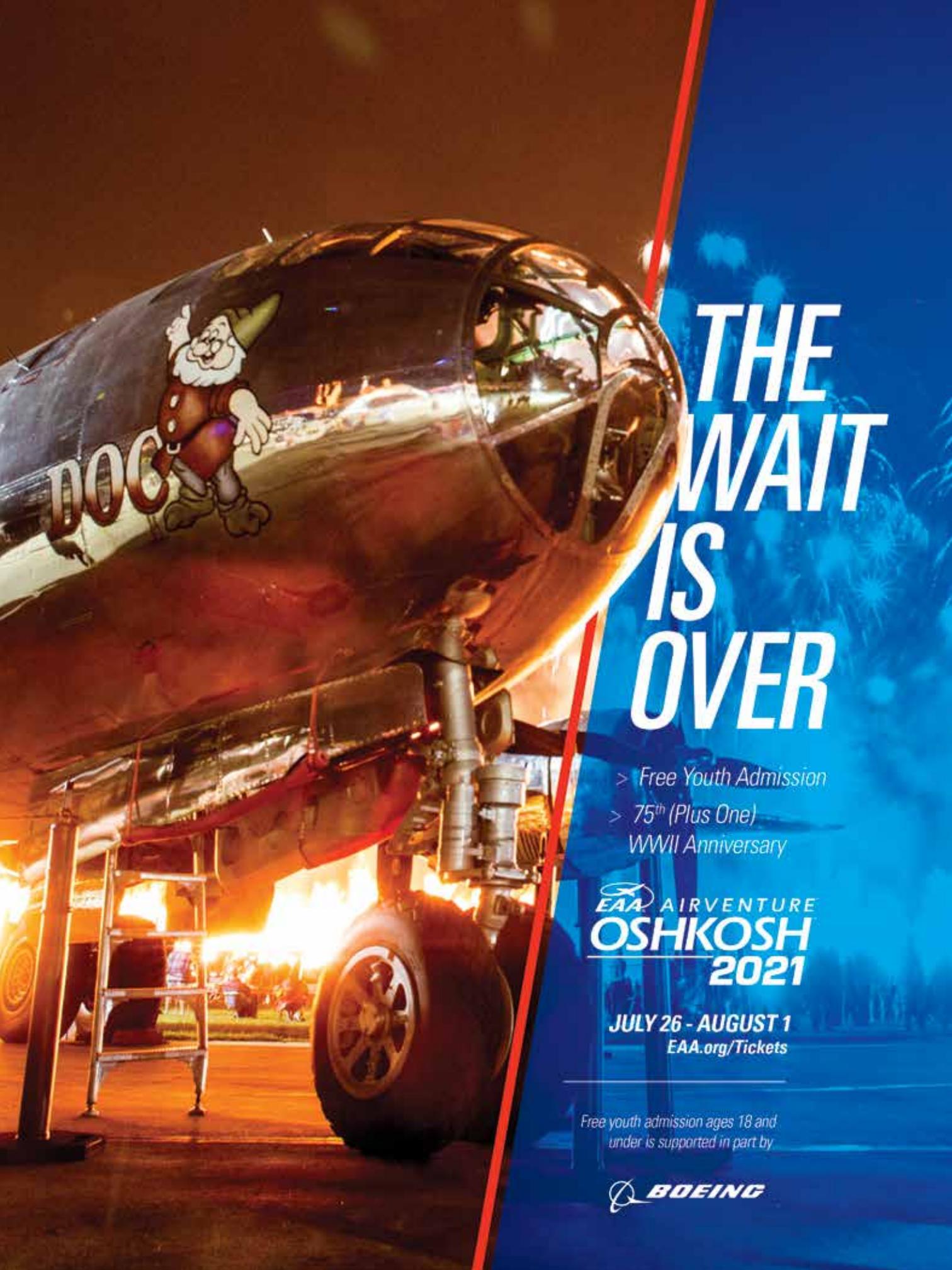
The seat and headrest in the CAF's FM-2 Wildcat.



Currently, the Commemorative Air Force maintains about 170 warbirds, which are distributed among 71 units, most of which are designated as air bases, wings, squadrons, or detachments. However, a few CAF warbirds, including FM-2 Wildcat 86819, are individually assigned to sponsor groups – basically one or more individuals who maintain, operate, and display the assigned warbirds. Over the years, 86819 has been operated by a number of different sponsor groups, with the current group consisting of CAF Cols. Mike Polley, Chris Schaich, and Mike Pfleger. Since Polley is based in California and Schaich and Pfleger are from Arizona, the Wildcat spends part of the year at Cable Airport in Upland, California, and part of the year at Falcon Field in Mesa, Arizona.

On July 25, 2020, Mike Polley flew 86819 from Cable Airport to NAS North Island, California, where it was one of about 20 warbirds craned aboard the USS Essex (LHD-2) for shipment to Hawaii to take part in events at Oahu commemorating the 75th anniversary of the end of World War II. However, that was not the first time 86819 had sailed aboard a U.S. Navy ship. In August and September 1995, the Wildcat sailed to and from Hawaii (along with 11 other warbirds) aboard the USS Carl Vinson (CVN-70) to take part in activities commemorating the 50th anniversary of the end of World War II, and a month later the Wildcat was back aboard the Carl Vinson at NAS Alameda, California, to take part in 1995 Fleet Week activities in San Francisco Bay. During both of the Carl Vinson trips, the Wildcat actually launched from the deck of the carrier, recovering at NAS Barbers Point and NAS Alameda for subsequent flying activities.

As if that were not enough, 86819 was raced in the Unlimited class of the 2017 Reno National Championship Air Races by Mike Pfleger, finishing third in the Bronze Class as raceplane No. 41. So far, this warbird has led a rather exciting life, and there seems to be a lot more left in this Wildcat for warbird enthusiasts to see and enjoy. ✈



THE WAIT IS OVER

- > Free Youth Admission
- > 75th (Plus One) WWII Anniversary

 **AIRVENTURE**
OSHKOSH
2021

JULY 26 - AUGUST 1
EAA.org/Tickets

Free youth admission ages 18 and under is supported in part by

 **BOEING**



EDITOR'S NOTE: In this issue you will find stories on both the F4F/FM2 Wildcat and P-39 Airacobra. Both played a vital role during World War II and held the line against the Axis until we shored up our defenses and built up our air forces. The brave men who flew these early fighters have all gone west since I interviewed them almost 20 years ago. But their memories and heroic accomplishments live on and shall never be forgotten. – JB

KILLER

'CATS AND SNAKES



COMBAT MEMORIES OF P-39
AND F4F/FM2 GUNFIGHTERS

BY JIM BUSHA

GRUMMAN F4F-3 WILDCAT

PILOT: MEDAL OF HONOR RECIPIENT
1ST LT. JAMES E. "ZEKE" SWETT, USMC
VMF-221
GUADALCANAL
APRIL 7, 1943



"In November 1942, I had been assigned to VMF-221, not as an original member of the squadron but as one of the group of replacement pilots for the men who had gone through holy hell at Midway. They had lost a tremendous number of pilots and planes on the tiny Pacific island as they stood and fought the Japanese. After training in Hawaii, I was sent to Guadalcanal where our squadron was based at an airstrip known as Fighter-2. We were assigned Grumman F4F Wildcats to defend the skies around Guadalcanal.

"The Wildcat was a good old bird — not very maneuverable, but it was rock solid, almost fortress-like. The Wildcat could absorb a tremendous amount of punishment and dish it out at the same time. The F4F was very sluggish in a turn compared to the Zero, which could fly rings around us. Our main goal in survival was to avoid a turning battle with the Zeros. But in war, that was easier said than done.

"I flew my first combat hop on April 1, 1943, protecting the sky over Henderson Field while an air battle raged off in the distance. Needless to say, I didn't get to fire my guns that day, but I made up for it on my next mission. On April 7, I led a flight of eight Wildcats on an early morning sweep over the Russell Islands and saw nothing. As I was leaving the area, I received a call from the fighter director stating that a very large flight of Japanese planes was headed our way, but it would be a few hours until they arrived. I took my flight back to Fighter-2, refueled and rearmed, and then we went back up again and found the same thing — nothing! We flew back to Fighter-2, refueled, and my ordnance man shoehorned an additional 15 rounds of .50-caliber ammunition into my six gun bays. Off we went a third time, and as we were climbing past 15,000 feet, we ran smack dab into a hornet's nest of Japanese fighters and dive bombers.

A U.S. Navy pilot demonstrates the use of an inflatable raft in the event of a ditching. Unfortunately the Wildcat had the buoyancy of a brick.



"THE WILDCAT WAS A GOOD OLD BIRD — NOT VERY MANEUVERABLE, BUT IT WAS ROCK SOLID, ALMOST FORTRESS-LIKE. THE WILDCAT COULD ABSORB A TREMENDOUS AMOUNT OF PUNISHMENT AND DISH IT OUT AT THE SAME TIME."

— 1ST LT. JAMES E. "ZEKE" SWETT

"My God, there were airplanes all over the sky, and we were outnumbered 20 to 1. At least none of us had to fight over which airplane we went after! We dove our Wildcats headlong into them, and everything hit the fan almost immediately! I hit a Val dive bomber right away, and I stayed with the pack of them, looking for my next target. The Vals didn't notice me as they concentrated on some Allied ships in the water below. I began to pick off the Vals one at a time and got a few more before I was hit by some friendly fire from one of the ships below. I took a direct hit in the right side wing, and that knocked out my outboard gun and left a big hole in the center of my wing. I still had five .50-caliber guns left as I went back to splashing some more Vals. I had just shot down my seventh Val for the day by attacking him like all the others — from the rear.

"As I went after my eighth Val, I became overconfident as all get-out and attacked this guy from the side. The Val's rear gunner let me have it square in the nose as my windshield and oil cooler absorbed many of the rounds. Splinters of glass sliced into my face as I closed in on the Val and let him have it from about 50 feet away. I killed the rear gunner and got the Val smoking before I ran out of ammo. I knew I had to get the hell out of there before the Zeros swarmed all over me.

"I tried for Guadalcanal and was only 600 feet off the sea when my prop stopped dead, sticking up like the middle finger in my right hand. I didn't even have time for a quick prayer as I slammed the Wildcat into the water below, sinking 30 feet with her before I was able to free myself from the harness. By the time I got to the surface, the Coast Guard cutter was already steering my way and picked me up. I was in the water for about 15 minutes total, which was longer than it took me to shoot down the eight Vals. On October 10, 1943, I was 22 years old and was presented the Medal of Honor. I was asked if I wanted to go back home and meet President Roosevelt. I declined the offer, stating there was a war on and I would like to stay and finish the job of winning it with my squadron."

LT. SWETT CONTINUED HIS COMBAT FLYING IN F4F WILDCATS AND RETURNED FOR ANOTHER TOUR IN F4U CORSAIRS. HE EVENTUALLY ENDED THE WAR WITH 16 AERIAL VICTORIES.

GossHawk
UNLIMITED INC.

VINTAGE/WARBIRD RESTORATION & MAINTENANCE

45 Years Aviation Mechanic Experience
20 Years with Champlin Fighter Museum



T-28, P-51, Fw 190, T-6, B-17, L-29, PB4Y-2, Me 262, Stinson V-77 and a wide variety of other aircraft

3184 N. Rockwell Ave.
Casa Grande, AZ 85122
Phone: 520-423-2622

David Goss, President
info@gosshawunkunited.com
www.gosshawunkunited.com

BELL P-39-Q6 AIRACOBRA

PILOT: 1ST LT. PETER A. MCDERMOTT, USAAC
82ND TAC-RECON
PORT MORESBY, NEW GUINEA
1943



"I was known as a 'wise guy' and I'm sure being from Brooklyn, New York, with an Irish accent and name didn't help me much! I enjoyed flying almost every airplane I had been in, but the P-39 was a real lousy airplane; simply put, it was a dog. But this dog could take a beating and still bring me home, minus some important pieces! After months of training, I and the rest of the survivors from my class were given a blessing by the brass, and we became Tac-Recon pilots. In November 1943, I was sent to a far-off place in a country called New Guinea. I thought I'd finally made it to where the action was, and now hopefully I would be given a real fighter plane to help win this war.

"When I saw the P-39s on the flightline at Port Moresby, I could have killed myself. I wanted to be in fighters, not in the 'dopey' P-39. Adding insult to injury, New Guinea was covered by jungle and foliage. This wasn't the barren wasteland of North Africa that we were trained to take pictures of; needless to say, we didn't use our cameras very much. We did use our guns and cannons a lot, however, as we went looking for the Japanese hiding in the jungle. The P-39 carried two .50-caliber machine guns in the nose and four 20 mm machine guns in the wings. It also carried a large

cannon that fired through the propeller spinner. On paper, the cannon appeared to be a good idea, and it sure looked menacing sticking out of the nose, but in operational use, it was a joke.

"Eventually, I got my own P-39, probably because no one else wanted one, so I named it *Brooklyn Bum II*. I did this in honor of my mother and father back home who were faithful Brooklyn Bum Dodgers fans. I never saw any Japanese airplanes in the sky, only crashed ones in the jungles below. Our missions became so routine, shooting up the same targets and using the same tactics, that at times it became boring for me. On one mission, I had a little fun with my wingman. He pulled into a Lufbery circle, and I was right behind him as he set himself up for his gun run. When he made his turn in, I cut right under him and my prop was mere feet away from the belly of his P-39. I waited for him to fire, and when I saw his tracers going off, I fired all my guns at once. My bullets whizzed underneath and out in front of him as he pulled straight up and began screaming over the R/T, 'Ack ack, ack ack.' I couldn't stop laughing at the shrill tone in his voice. When we landed, he damn near punched me out!"

Peter McDermott at the controls of his *Brooklyn Bum II*.



"EVENTUALLY, I GOT MY OWN P-39, PROBABLY BECAUSE NO ONE ELSE WANTED ONE, SO I NAMED IT *BROOKLYN BUM II*. I DID THIS IN HONOR OF MY MOTHER AND FATHER BACK HOME WHO WERE FAITHFUL BROOKLYN BUM DODGERS FANS."

— 1ST LT. PETER A. MCDERMOTT



TOP: Lt. McDermott points to his namesake.

BOTTOM: P-39 pilots and ground crews pose with a side door of a P-39.



THE WILDER WILDCAT

PILOT: JOE D. "JODY" MCGRAW, USN
THE BATTLE OF LEYTE GULF
OCTOBER 25, 1944



"I was sent on a CAP flight with eight other Wildcats as the Japanese fleet retreated. Orbiting at 12,000 feet, four of us got vectored to a small group of bogies coming in at 10,000 feet and passing through clouds; I counted 15 Val dive bombers and 12 Zeros. If this was a 'small raid,' we were in big trouble!

"We were on a perfect intercept at their 11 o'clock and 800 feet higher. Turning hard left, they didn't see us as we made our run into them. We took out the four lead Vals on the first pass, as each of us got one. Looking up, I saw the Zeros push over and come zooming down after us. My division leader was hit immediately and cannon shells raked his Wildcat. I pulled up and did a little corkscrew through the Zeros. Then I rolled over at the top, pulled through, and was in perfect position above and behind the Zero lead and his wingman. I let loose with a long burst and flamed the wingman, hitting his engine and wing root before he exploded.

"The Zero lead exploded with anger and came after me with a vengeance! He snapped that Zero up on its nose, whipped it around, and came back at me with his thumb down on his cannon button. As I pulled the Wildcat into a knife-edge turn, I thought, 'I don't want to be a statistic on some government report.' Skidding with right rudder, I turned back on him. All of his cannonballs passed right behind my tail. I had to make a

very tight turn on this guy, and I pulled 4g to get it around. The Zero pilot knew he was fighting a Wildcat, but he didn't realize that it was a 'wilder Wildcat.' He underestimated my plane and me and didn't make that world-famous super Zero turn.

"I got around on him and put a quick burst into his engine before he could unload his cannon on me. I had smoked his engine as we scissored back and forth tightly on each other. He jerked his stick back, and I thought he was going to ram me. I pulled back hard on my stick, and he missed me by mere feet. I still have a crick in my neck from that SOB! I whipped the Wildcat into another tight turn in an attempt to put this guy down, as he was dangerous and obviously an old hand. He did a split-S and dived for the cloud. As I dived into him, he cleverly turned back under me. I looked up and back and saw two of his buddies — one on the right, and the other on the left trying to cut me off. I took a long shot at the smoking Zero and split-S'd out of there; I didn't like the odds!

"Suddenly the sky was empty, and I had never felt so alone. One minute there were airplanes everywhere, and the next, nothing. By the time I found my wingman and our leader's wingman and got back to USS Manila Bay, it was getting dark. I had flown 11-1/2 hours of combat, and that's a helluva long day in a Wildcat!"





"BY THE TIME I FOUND MY WINGMAN AND OUR LEADER'S WINGMAN AND GOT BACK TO USS MANILA BAY, IT WAS GETTING DARK. I HAD FLOWN 11-1/2 HOURS OF COMBAT, AND THAT'S A HEL-LUVA LONG DAY IN A WILDCAT!"

— JOE D. "JODY" MCGRAW

RIGHT: Wildcats ready to launch from a straight wood plank deck.

LEFT: A Japanese ship under attack during one of the many battles in the Pacific.



Aeroproducts Propeller Regulator Overhaul

Exclusively from Marsh Brothers Aviation!



2 week overhaul or immediate exchange

- Install all new seals and O-rings
- Rebuild all internal components
- NDI of all geared parts (if required)
- Clean, paint and test for leaks
- Perform dynamic functional test
- Ship in customized shipping container

1.800.263.6242 | info@marshbrothersaviation.com

www.MarshBrothersAviation.com

MB 
Marsh Brothers
Aviation

'SNAKE CHARMER'

PILOT: MAJ. MELBOURNE "MIKE" WILSON, USAF (RET.)
1943

"In May 1943, while I was a cadet at Luke Field, I began a love affair with the most beautiful, curvaceous, shapely girl I had ever laid eyes on. She was small and petite compared to the rest, but in my eyes, she was drop-dead gorgeous. She also had a name that matched her personality. She was called the Bell P-39 Airacobra.

"All through flying school they asked us to put down our top three choices of what planes we wanted to fly after graduation. Each and every time I put 'fighters' and next to that 'P-39s.' I left the second and third choices blank. I couldn't get her out of my mind.

"My eyes took a walk all over her as I drooled all over myself, strolling up to the flightline for my first hop in the Airacobra. I found it comfortably snug sitting in the cockpit. My shoulders almost touched the doors on both sides of me, and a big Allison engine was cocooned behind me with a 9-foot shaft running under my feet through the center part of the fuselage out to the propeller. The most radical design on her was the use of tricycle landing gear; S-turns were now a thing of the past!

"There were two kinds of people who flew the P-39 – those who hated it and those, like me, who loved it. When the war broke out, all we had were P-40s, P-39s, and F4Fs to fight with. Although superior class fighters were still being developed, the P-39 had such a streamlined design, it could outrun a P-40 by almost 25 mph.

"After a blindfold checkout, I was released from the bonds of Mother Earth and roared down the runway with unobstructed forward vision. I thought I had died and gone to heaven! My flight was absolutely fabulous. The P-39 was very quick and easy on the controls. All I had to do was breathe on the stick and it would do whatever I wanted it to do.

“During my flight indoctrination in the P-39, I also saw the dark side of my new mount. As a bunch of us were out rat racing, chasing tails across the countryside, right side up and upside down, trying to clobber each other, I got behind a guy and pulled through a 4g turn. The combination of prop wash and high g’s snapped me into the most violent spin I had ever experienced. It almost felt like I was tumbling rather than spinning out of control as I was twisted through the sky. I fought to rein her in and wrestled her back under control: This Cobra had one helluva bite!

"After a whopping 60 hours in P-39s, I was now combat-ready. I was also given some choices: I could pack my bags and join a fighter unit in the South Pacific or Europe, or I could stay and instruct, teaching new students the finer points of Airacobra flying. The lure of combat was tempting, but I was having so much fun in the P-39, I didn't want the party to end! I stayed.

"On one particular flight, though, I wondered if I had made the right choice. Launching as a three-ship flight out of Portland, Oregon, I had a P-39 student chained on either side of me. Our formation was tight, and we were heading out for a little tow-target shooting over the Pacific. Climbing through 10,000 feet, I looked back to check on my wingmen and found the guy on my left was gone.

"How in the hell could I have lost a guy in only 10,000 feet?! I was busy on the radio calling Portland Tower and trying to find the missing guy as I swung into a big, wide turn. I looked right, left, and right again, and now the other guy was gone, too! None of these guys said a word to me; they just disappeared.

"I brought the nose up and was passing through 15,000 feet in no time. I swung the P-39 up and over the top and dove straight down, looking for my two runaways. As I passed through 10,000 feet, it felt like a sledgehammer had hit me in the tail. The P-39 began to shake and vibrate so violently, I felt like a BB in a tin can. It pitched up so quickly that I blacked out and was now unconscious.

1943 Bell Aircraft ad.



"THE P-39 WAS TOUGH AND AGILE, AND IT WAS ONE OF THE BEST FIGHTERS IN WHICH TO FLY FORMATION. BUT IN BATTLE IT WAS HORRIBLE IN A TURNING FIGHT WITH MOST OF ITS ADVERSARIES. I FOUND THIS OUT FIRSTHAND WHEN I BOUNCED A NAVY WILDCAT OVER CALIFORNIA, AND THAT SUCKER TURNED INSIDE OF ME IN LESS THAN A HALF A TURN."

— MAJ. MELBOURNE "MIKE" WILSON

"When I came to, I was back at 15,000 feet upside down with the nose up. I rolled it back over and eased the throttle back in, when all of a sudden I got smacked again and pitched up to vertical. Off came the throttle and I plodded along at 10,000 feet, trying to figure out what the hell was wrong with her. Adding to my fun was the oil temperature gauge, which was now in the red. It was time to head for home.

"I didn't have to worry about anybody else in my flight; they had left me long ago! I quickly learned to keep the airspeed below 200 mph. Any faster and the roller-coaster ride would start again. I could have bailed out, but I wanted to find out what had happened so others could learn from whatever the hell was wrong with this airplane. I called Portland Tower and told them I had a severe emergency and was going to land — or at least attempt to!

"I touched down pretty hot at 130 mph and shut her down as I coasted along the 5,000-foot strip. When I got it stopped, a crew chief jumped up on my wing and said, 'Hey, lieutenant, whose prop got your tail!?' My jaw dropped when I looked to the rear. The whole left-side elevator was gone except for the shaft. The horizontal stabilizer and the vertical stabilizer were bent and buckled along with the rudder. What a wild ride that was!

"When my nerves began to settle down, I figured out what had happened. During my headlong dive from 15,000 feet, the entire left elevator began to flutter and departed the P-39. It had warped all the tail surfaces, including the tail cone. I was close to 500 mph during my dive when all of this happened. I also received some 'tail damage' of my own; the major, my boss, chewed my ass off! As for the whereabouts of my missing students, they both had lame excuses.

"The P-39 was tough and agile, and it was one of the best fighters in which to fly formation. But in battle it was horrible in a turning fight with most of its adversaries. I found this out firsthand when I bounced a Navy Wildcat over California, and that sucker turned inside of me in less than a half a turn. I leveled my wings and used my speed advantage to get the hell out of there. The only way to survive in combat flying a P-39 was to 'hit and run,' and then run as fast as you could! The P-39 had become outdated with the introduction of P-47s, P-51s, P-38s, and F6F Hellcats.

"After 500 hours of instructing in P-39s, including skip-bombing, gunnery runs, and aerobatics, I fell in love all over again. This time I fell for the P-39's bigger sister, the P-63 Kingcobra. She was one hot number!" ✕



Spring SAVINGS!

ALL SUMMER CLOTHING IS

30% OFF

USE COUPON CODE **SPRING30**
AT THE CHECKOUT

**WARBIRDS NIFTY
NEAT TANK**

\$13.99 - \$15.39

~~\$19.99 - \$21.99~~



*Offer valid through April 30, 2021

SHOP SPRING MERCH AT EAA.ORG/SHOPWARBIRDS



**HAWAIIAN
WWI
SHIRT**

\$37.09 - \$39.89

~~\$52.99 - \$56.99~~



**YOUTH
HAWAIIAN
BOMBER SHIRT**

\$20.29 - \$23.09

~~\$28.99 - \$32.99~~



**LADIES B-17
SUGAR SKULL
TANK**

\$13.99 - \$15.39

~~\$19.99 - \$21.99~~



**BUD ANDERSON
COMMEMORATIVE
OLD CROW T-SHIRT**

\$18.19 - \$22.39

~~\$25.99 - \$31.99~~



**SLEEVELESS
HAWAIIAN SHIRT
WITH FLOWERS**

\$24.49 - \$25.89

~~\$34.99 - \$36.99~~



**SLEEVELESS
HAWAIIAN SHIRT
WITH FLOWERS**

\$24.49 - \$25.89

~~\$34.99 - \$36.99~~





THIS MONTH'S MYSTERY

THE FEBRUARY MYSTERY WARBIRD was the Grumman AF-2W Guardian, often mistaken for a Douglas AD-4W.

Clint Johnson reported the following on the Guardian:

"The mystery bird is a Grumman AF-2W of the VS-37. The AF-2S and 2W were a hunter-killer group for anti-submarine warfare. The W version had a large search radar in a belly dome. The S version carried two anti-submarine torpedoes internally, an APS-31 attack radar on the right wing, and a searchlight on the left wing. The AFs began as XTB3F-1s, which had Pratt & Whitney Double Wasps up front and Westinghouse 19XB jets in the tail. The jet [engines] was deleted after the prototype."

"The first TB3F had a single vertical stabilizer. However, with the addition of the radome, two smaller vertical stabs were added for stability. The Guardian has the distinction of being the last operational carrier-based tailwheel aircraft acquired by the Navy. However, the Skyraider was the last to be in service. The A2D Skyshark was also a taildragger, but it was never operational. The Guardian was replaced by the Grumman S-2 Tracker, nicknamed the 'Stoof,' and was last flown in the Navy Reserve. A few still exist, but I don't believe any are still flying."

Along with Clint, Jonathan Apfelbaum, Skip Bartel, Ron Bauer, Morris Baxter, Butch Bejna, Eric Berg, Barry Bertrando, Gary Boutz, Keith Brunquist, Billy Copeland, Lambert De Gravere, John Fisher, Bob Freideman, Scott Gifford, Toby Gursanscky, Bob Hall, Pierre Hartenstein, Bob Hill, Walt Kahn, Kerry Kenner, Larry Knechtel, Hank Kramer, Ken Krubsack, Ed Kurpiewski, Thomas Lymburn, David Macready, Ron Malec, Craig Maternowski, Karl Mickelson, Bob Perry, Jordon Ross, Steve Russum, William Sargent, Bob Saumur, Nolan Schmidt, Dan Schuren, Bill Shepherd, Bob Shepherd, Graeme Smith, Paul Smith, Greg Stone, Paul Talbott, George Van, Jim Williams, and Myron Winchester all correctly identified the Grumman AF-2W.

As for the February trivia challenge, "Name the World War II fighter pilot who flew in combat with two artificial legs and was credited with 22 aerial victories," the following readers submitted correct answers: Jonathan Apfelbaum, Barrie Backer, Skip Bartel, Ron Bauer, Morris Baxter, Butch Bejna, Eric Berg, Barry Bertrando, Gary Boutz, Christopher Brown, Eric Buxton, Bill Cherwin, Tom Condon, Michael Decker, Lambert De Gravere, Regis DiGiacomo, Bill Douglas, John Fisher, Bob Freideman, Paul Fromholtz, Scott Gifford, Toby Gursanscky, Bob Hall, Pierre Hartenstein, Graham Heeps, Bob Hill, Clint Johnson, Walt Kahn, Kerry Kenner, Larry



Knechtel, Hank Kramer, Ron Malec, Craig Maternowski, Karl Mickelson, Dennis Morris, Bob Perry, Hank Povolny, Phil Rogers, Jordon Ross, Steve Russum, Bob Saumur, Nolan Schmidt, Bill Shepherd, Bob Shepherd, Graeme Smith, Paul Smith, Chris Steiner, Paul Talbott, Peter Tyson, George Van, Jess Waguespack, Jim Williams, and Myron Winchester all identified Group Capt. Douglas Robert Steuart Bader of the British Royal Air Force.

Scott Gifford sent in the following on Bader: "The legless fighter pilot is Douglas Bader. He lost both of his legs in the 1930s when he crashed a Bristol Bulldog while attempting a low-level roll. He was successful in returning to the cockpit for the Royal Air Force, flying Hurricanes and Spitfires. As a squadron commander, he championed the changing of fighter formation tactics to a flight of two from a Vic of three. He also was a huge fan of the 'big wing' theory of intercepting enemy formations. While on a fighter sweep over France, his Spitfire collided with a Bf 109. While attempting to bail out, he got one of his legs caught on something in the cockpit. He was finally able to break the leather harness holding his leg on, exited the aircraft successfully, and was captured by the Germans. When the Germans offered to allow the RAF to fly a replacement leg

over in an observation aircraft, the RAF declined. Instead, the leg was dropped in a crate with a parachute during a bombing mission! Douglas was not a 'nice' POW: He repeatedly tried to escape, and the Germans kept taking his legs away from him!"

It should also be noted that responder Bill Douglas actually met Douglas Bader in person back in the '50s. Also, Pierre Hartenstein reported that Russian pilot Aleksey Maresyev also flew in combat with two artificial legs. ✈

» TRIVIA QUESTION

Who was the U.S. Air Force pilot who shot down the first enemy jet aircraft in the Korean conflict?

» Please submit your response by May 14, 2021. Send your answers, comments, or suggestions to me at mysterywarbird@hotmail.com.

PILOT YOUR OWN ADVENTURE CONTEST

SUPPORTED BY
FLIGHT OUTFITTERS



STEP 1
Think of a general aviation flying experience that was fun, adventurous, and inspiring and that was only made possible by the ability to fly.



STEP 2
Use that experience to write a 500-1000 word, true-life, captivating story that enables a reader to relive your adventure.



STEP 3
Submit your essay and 3-6 related images to EAA digitally via an online form or a hard copy by mail.



STEP 4
If we love your story, get ready to win an AirVenture camping experience of a lifetime, or one of several other exciting prizes.

FOR MORE INFORMATION ON THE CONTEST DETAILS AND PRIZES, VISIT EAA.ORG/FLIGHTOUTFITTERS



FROM THE CO'S COCKPIT / SUPPLY DEPOT

CONTINUED FROM PAGE 1

Speaking of excitement, barring an unforeseen change, EAA AirVenture Oshkosh 2021 is not long after SUN 'n FUN. SUN 'n FUN and EAA have been sharing information and will share what worked and what needs to be modified after the event. The EAA risk management department has done and will continue to do risk assessment and is communicating with the divisions to get us all on the same page. No stone is being left unturned.

AirVenture 2021 will undergo some changes, but they will be made to ensure that the event can safely take place and participants will get the aviation experience they have become accustomed to. Bring your confidence and your consideration for your neighbor and fellow aviation enthusiasts as we all gear up for a great event.

Come see me and say hello. I look forward to meeting many of you and finding out about your AirVenture experience and your warbird interests. I will try to make myself available and attempt to remember as many names as possible (and that's very challenging for an old man). 



Sun Air Parts
PRATT & WHITNEY ENGINES
Complete stock of parts, tools, and accessories.

0-TIME ENGINES IN STOCK

R985/R1340, R1340 GEARED
COVINGTON,
AERO RECIP & TULSA

R1830-92, -94, -75
R-2000-7M2 • R2800
VINTAGE RADIAL & ANDERSON

WE BUY PARTS, INVENTORIES
AND USED ENGINES  PH 661-257-7708 • FAX 661-257-7710

CALL FOR BEST OUTRIGHT PRICES
26007 HUNTINGTON LANE • VALENCIA, CA 91355 • INFO@SUNAIRPARTS.COM

R985/R1340 TOP OH TOOL KITS \$250.00
TIME RITE KITS \$325.00
R985 NO BLOW GASKETS
ENGINE MOUNTS
TEMPEST SPARK PLUGS
CHAMPION SPARK PLUGS
NEW R1340 CAMS- CYLINDERS
NEW OHV MAGNETOS- CARBS
STARTERS- GOVERNORS
MANUALS- PARTS BOOKS
FUEL PUMPS-COMPLETE OHC
CYLINDER ASSEMBLIES
R985/R1340/R1830/R2800

EDITORIAL STAFF

Publisher/EAA CEO & Chairman of the Board:

Jack J. Pelton

Executive Director: Bill Fischer

Vice President of Publications, Marketing, and Membership: Jim Busha

Senior Copy Editor: Colleen Walsh

Copy Editors: Tom Breuer, Jennifer Knaack

Proofreader: Meghan Plummer

Graphic Designer: Cordell Walker

ADVERTISING:

Advertising Manager: Sue Anderson / sanderson@eaa.org

WARBIRDS OF AMERICA OFFICERS:

President: Jim Olzacki '21 / Punta Gorda, FL

Vice President: Harold Cannon '22 / Owensboro, KY

Vice President: Bill Gius '21 / Fond du Lac, WI

Secretary: Bill Miller '22 / Bolingbrook, IL

Treasurer: Chuck Marshall '23 / Elkhart, IN

DIRECTORS:

Mike Anderson '22 / Muskogee, OK

Wayne Boggs '23 / Tampa, FL

Connie Bowlin '22 / Griffin, GA

Ed Finnegan '22 / Cary, IL

Sam Graves '22 / Tarkio, MO

Jack Harrington '21 / Port Charlotte, FL

Jud Nogle '22 / Savoy, IL

Eric Paul '23 / Redlands, CA

David Rothenanger '22 / Talladega, AL

John Russman '23 / Lincoln Park, MI

Rick Siegfried '22 / Downers Grove, IL

Fred Telling '23 / Port Orange, FL

Jim Tobul '21 / Jackson, WY

HONORARY DIRECTORS:

Robert A. Hoover (1922-2016)

John Seidel (1928-1999)

William Ross (1923-1993)

DISTINGUISHED WARBIRD LEADER:

Paul H. Poberezny (1921-2013)

FOUNDER:

Walt Ohlrich, Warbird 1 (1928-2014)

COPYRIGHT © 2021 EAA WARBIRDS OF AMERICA, INC. ALL RIGHTS RESERVED

EAA® and EAA SPORT AVIATION®, EAA WARBIRDS OF AMERICA, INC.®, the EAA Logo® and Aeronautica™ are registered trademarks, trademarks, and service marks of Experimental Aircraft Association, Inc. The use of these trademarks and service marks without the permission of the Experimental Aircraft Association, Inc. is strictly prohibited.

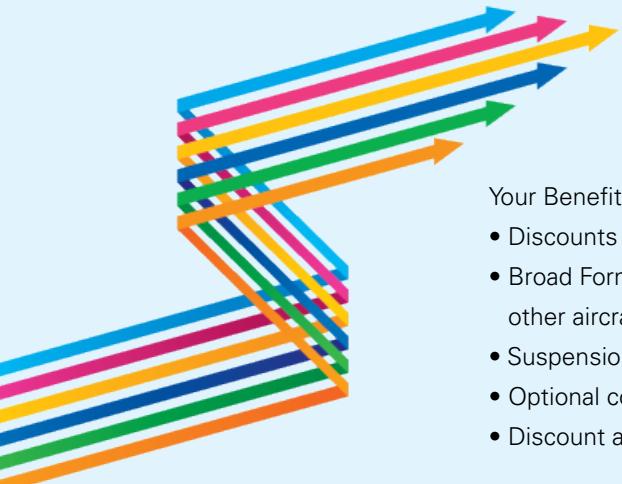
Readers should submit stories to *Warbirds*, PO Box 3086, Oshkosh, WI 54903-3086 or email bfischer@eaa.org WARBIRDS (USPS 428-050; ISSN 0744-6624; CPC#406 12608) is published and owned exclusively by the EAA Warbirds of America, Inc. Division of the Experimental Aircraft Association, Inc. and is published eight times per year at the EAA, PO Box 3086, 3000 Poberezny Rd., Oshkosh, WI 54903-3086, 920-426-4874. Periodicals postage is paid at Oshkosh, WI 54903 and other post offices. Membership rates for the EAA Warbirds of America, Inc. are \$55.00 per 12-month period, of which \$15.00 is for the subscription to Warbirds. All EAA Warbirds of America members are required to be members of the parent organization, the Experimental Aircraft Association, Inc. Membership is open to all who are interested in aviation. Call 800-843-3612.

POSTMASTER: Send address change to EAA Warbirds of America, Inc., PO Box 3086, Oshkosh, WI 54903-3086.



We Know...Aviation

We offer a wealth of experience in all specialty aircraft needs.



EAA Warbirds of America and U.S. Specialty Insurance Company partner to provide quality insurance coverage at very competitive rates.

Your Benefits:

- Discounts for participation in approved ground and flight safety programs
- Broad Form coverages: Emergency off-airport landings / Premises coverage / Use of other aircraft / Personal effects and baggage / Legal defense for loss of certificate
- Suspension of "In-Motion" coverage available
- Optional coverage for instruction, sightseeing rides for hire and airshows for hire
- Discount available for multiple aircraft when the owner is the only named pilot

U.S. Specialty Insurance Company

7950 Legacy Drive, Suite 600, Plano, TX 75024 USA

Tel: 469-633-7400 Direct: 800-777-2378 tmhcc.com/ussic

A member of the Tokio Marine HCC Group of Companies

P-51 Gunfighter from the Commemorative Air Force, photo: Kevin Hong. To obtain coverage in the EAA Warbirds of America Aircraft Insurance Program please have your insurance agent contact U.S. Specialty Insurance Company. Not all coverages or products may be available in all jurisdictions. The description of coverage in these pages is for information purposes only. Actual coverages will vary based on local law requirements and the terms and conditions of the policy issued. The information described herein does not amend, or otherwise affect, the terms and conditions of any insurance policy issued by U.S. Specialty Insurance Company. In the event that a policy is inconsistent with the information described herein, the language of the policy will take precedence.

