



UN-SCRAMBLE



The Official Newsletter of the Valiant Air Command, Inc.
6600 Tico Road, Titusville, FL 32780 - (321) 268-1941
website: <https://www.valiantaircommand.com/>
email: warbirds@valiantaircommand.com

3rd Quarter Review - July, August, September • 2023

Have you seen our new working flight simulator?



MUSEUM AND GIFT SHOP - OPEN 7 DAYS A WEEK - 9 AM TO 5 PM

Closed Thanksgiving, Christmas and New Year's Day

Adults \$22.00 - Senior 60+ or Military \$20.00 - Students 13 to 18 years old \$10.00

Children 5 to 12 years old \$5.00 - Children under 5 years old FREE - Special Group Tour Rates Available

Statement of Purpose

The Valiant Air Command Inc. was formed to perpetuate the history of aviation, to encourage gathering of men and women in camaraderie, research and Warbird restoration, to serve as an educational tool for young and old alike; and to assure that the memory of those who gave their lives in service to their country shall not perish.

501(c)(3) Non-Profit Organization Museum Recognized by the Internal Revenue Service

Future Events • October, November, December • 2023

Oct 14 Fly-In / Drive-In Breakfast, Museum, 8-10
Oct 14 VAC BOD Meeting, 12 Noon
Oct 28-29 Orlando Air and Space Show
Nov 7 Election Day
Nov 11 Veterans Day
Nov 11-12 Veterans Day Open House, Fly-in lunch 11 - 2
Nov 23 Thanksgiving - Museum is closed

Dec 9 Fly-In / Drive-In Breakfast, Museum, 8-10
Dec 9 VAC BOD Meeting, 12 Noon
Dec 16 VAC Member Appreciation Xmas Dinner
Dec 25 Christmas - Museum is Closed

Please check the VAC website or with the event for last minute changes before going!!!!
(<https://www.warbirdairmuseum.com/>)



Commander's Report

Norm Daniels, Commander
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The Official Newsletter of the Valiant Air Command

1st Quarter - Jan, Feb & Mar • **Submission deadline - Mar 24th** NL Published - April 1st
2nd Quarter - April, May & June • **Submission deadline - June 24th** NL Published - June 30th
3rd Quarter - July, Aug & Sept • **Submission deadline - Sept 24th** NL Published - Sept 30th
4th Quarter - Oct, Nov & Dec • **Submission deadline - Dec 22nd** NL Published - Dec 31st

Editor: Phyllis Lilienthal

Unscramble Crew: Louise Kleba and Lorraine Juhl

Photo Credits: Bob Boswell, Randy Black, Norm Daniels, Marvin Juhl,
Lorraine Juhl, Phyllis Lilienthal, Hawk Moore,
Peter Stetson and Larry Titchenal

Please note: Items submitted after the submission deadline will not be published or will be published the next quarter if applicable.
The Editor reserves the right to not publish submitted items.

To members, volunteers, and friends, the 3rd quarter of this year has quickly passed. I would be remiss if I did not gratefully thank all the docents, restoration team, facilities team, office, and gift shop staff, all volunteers, and the Board of Directors who continued to work for weeks while the heat inside the hangars hit the 99-degree mark with a heat index at 111 degrees plus on some days. Our visitors were most complementary and appreciated the personal attention they received.

We were most fortunate that Hurricane Idalia passed by with some heavy rain, but no damage or losses. Two major projects are in the works: 1. A new roof for your main hangar: work began on 9/1/23 and was completed by 9/16/23. A special thank you to Kevin Daugherty, Director of Airports, Christina Kinard, Director of Finance, and Justin Hopman, Director of Operations for their assistance in navigating and coping with the roof insurance issues. 2. Event Center plans completed. We were issued a permit to begin ground clearing and tree removal while waiting for final approvals from St. John's Water Management District before construction can begin. Ground clearing and tree removal commenced on 9/18/23. St. John's late requirements will require more stormwater remediation to account for airport stormwater runoff impacting our construction site. The engineering and scope of work for these additional requirements are in process.

The simulator created by Melvin Juhl continues to be a draw; he and his team are in the process of crafting another simulator. Our STEM Program for young people is in full swing with Dan MacAlexander and Louis DePaemelaere (Air Traffic Controller), setting and executing the curriculum, we have a long waiting list of parents wanting to enroll their children in these classes.

Malcolm Cater and Christine Reynolds have spent time these past months fine-tuning and enhancing our

memorabilia displays to further tell the stories of their significance and application during the "war" years.

The PX Gift Shop team led by Maureen Larney continues to excel in merchandising products, sourcing new items, and inventory control.

This issue of the Unscramble was edited and formatted by Phyllis Lilienthal who continues to provide the time and input necessary to produce a class one newsletter that deserves a "thumbs up" from all the Board members.

Visitor Count Information: January through August 2022, 14,618 - January through August 2023, 21,970. The visitor counts show an increase for the year through August compared to the same period last year and reflect the results of aggressive marketing and select advertising spending to a wide range of potential visitors. We do have competition and plan to continue this practice. At the same time, we experienced cost increases in wages, insurance, merchandise, maintenance, and repairs. We are entering the 4th quarter of this year with an expected annual drop-off in visitor counts.

Tracy Bohrmann, Finance Officer continues to manage all fiduciary aspects of the finance position relating to accounts payable/receivable, inventory levels, banking transactions, grant funding, payroll tax preparation, capital spending and forecasting our financial position.

Bob Boswell, XO is in the planning process of assembling all the parts and pieces that *Continued on pg 3*

Commander's Report

Continued from pg 2

make up an Airshow. Complex issues include contracting performers, logistics, coordination between the FAA and Airport Authority requirements, and meeting all the needs of Military Aircraft appearance. Add tents, chalets, parking, aircraft movement schedules, fuel, safety, and manpower tasks. To assist Bob in his many endeavors Kenita Bushee is returning to assist Bob helping him prepare for the September Dance, November Open House and the December dinner as well as airshow documentation and documents.

Bob and Jolene Clark are working diligently with Avenue Event Group to secure more client events. He is also crafting a special donation letter that covers our capital needs for expansion.

Richard Jones, Personnel Officer continues to promptly provide solutions to employee, docents, and volunteer questions. Richard, as our IT expert, was instrumental in the timely moving of our sensitive internet antenna from the top of our building to the side of the building without loss of signal. This move was required due to the new roof being installed on the main hangar. Along with Richard, Louise Kleba, our recording secretary, also manages many other facets of our communication programs. The tasks include badging, internal and external communications, and other information generation relating to membership and volunteer questions and issues.

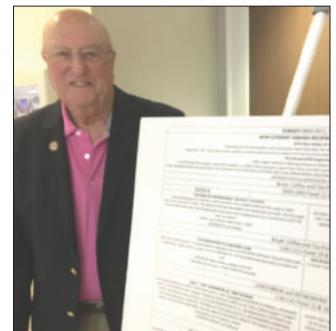
Marvin Juhl, Procurement/Restoration Officer has been scheduling restoration projects, a moving target at best, along with many sub-projects, examples: creating aircraft engine mounting stands for engine display and acquiring parts and pieces as needed for other aircraft in the process of restoration. Marvin has been able to acquire, at no cost, hard-to-find missing pieces for our F-104 Starfighter and other aircraft. This summer, scheduling work has been a challenge with limited manpower available. Marvin is anxiously waiting for our volunteer snowbirds to return to fill the ranks. The next aircraft in line to come out of restoration and ready for painting by master painters, Larry Mathis and Tom Wilke is our Fouga Magister. The job of making the Fouga ready for paint included stripping old paint, mitigating rust and corrosion, and repairing metal panels, and took our restoration crew members many hours.

Leigh Lewis, Flight Officer has successfully negotiated several more revenue flights for our C-47

Tico Belle. The performance of our aircraft at recent events has generated calls for repeat appearances. Our volunteer pilots continued to operate the aircraft at commendable levels as reported by customers. Repeat performance requests even with fuel price increases are a testament to our mechanics John Makinson and Dante Roccatani. We have not had to cancel any bookings due to mechanical issues.

Christopher (Hawk) Moore, Facilities Officer, and the volunteer team have outdone themselves in the number of tasks taken on and completed. Example: the sheer number of aircraft movements in and out of hangars made necessary by the reroofing project as well as juggling equipment and aircraft moves to accommodate client events has been noteworthy, especially with the heat and humidity issues. All our tugs, forklifts, bucket lift, and scissors lift usage were in constant motion. Thanks to Joel McGinley for keeping all the equipment operating. Roger Tonovitz led the charge and replaced all the old-style commodes in the Main Hangar restrooms with modern fixtures including new sink faucets. He engineered and was able to add a much-needed commode in one of the men's bathrooms. Additionally, he and the crew changed all the old-style hangar light fixtures to cooler operating LED lighting during the roof installation.

David Shores, PR/Marketing Officer continues to successfully market our museum by targeting advertisements and using social media sites to showcase what the VAC is, and what it offers. The constantly changing messages and photographs are timely and updated thanks to Martin Pring. Our museum has been honored by the Air Force Historical Foundation by inviting us to not only attend their Symposium Conference in Denver, they also asked us to prepare and present at one of several scheduled panel discussions. David stepped up and presented at the Symposium.



Terry Rush, Maintenance Officer, is easing back from medical leave. Dante Roccatani has been appointed Acting Maintenance Officer along with John Makinson and will continue to work at Terry's direction; as such the C-47 Tico Belle and our other flying aircraft continue to be scrupulously maintained and are fully flight-worthy and ready for missions and appearances.



Executive Officer's Report

Bob Boswell, Executive Director
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Summer is gone and Fall and Winter are on the way.

We had a busy Spring and Summer hosting many events and enjoying an increased number of visitors.

Our museum is quickly becoming the venue of choice for weddings, reunions, and corporate events. Most of these events are held in the early evening, after normal museum hours and that necessitates additional volunteers for set-up/take-down, food service, tour guides, and parking directors. We are always looking for volunteers who can help with these events. This is an opportunity to get out of the house for a few hours a month and support the museum while enjoying the evening and meeting new people.

Our second Saturday monthly early bird (8-10 a.m.) Fly-in/Drive-in breakfast continues to bring in a great number of patrons. At the September breakfast, we had 34 aircraft fly in, and Jolene served 285 meals, an increase over June and July. There were two authors there signing their books and Chuck Julian performed several demo flights in his Red Baron Biplane with the wing walker waving from the top of the wing. Bring a friend and come out to enjoy the fun.

After working together in mutual support, the Museums of Brevard, Inc., the 20+ active museums in Brevard finally became chartered as a 501(c) (3) non-profit organization. Known as the MOBsters, they offer diverse educational programs, events, and exhibits and are a great destination for community groups and families. They now have a color flyer available at each location with information about each of the museums. The VAC is a prominent and active participant in the MOBsters.

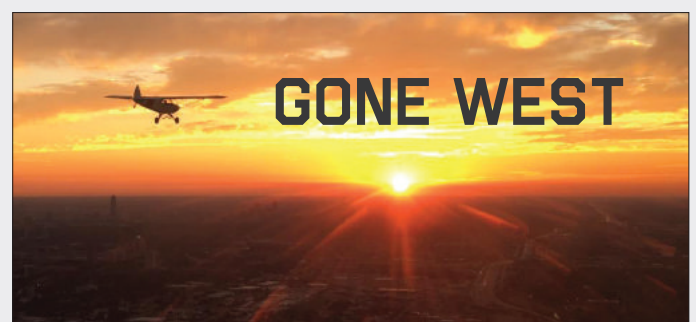
The Board of Directors has been working on several new programs to reward active volunteers. One of the first implemented is a membership program where volunteers can log work hours that lead to an annual VAC Membership award. Another program, for active members, is a member aircraft ride program where members can sign up for a flight on one of our museum aircraft. Details of this program will be released soon. Also implemented this past year is our Annual Volunteer/Member Appreciation Dinner each fall; free to the active Member +1, or active Volunteer, and the same for our annual Christmas Dinner. All of this is in addition to our published member benefits and is an effort to reward our members and hard-working volunteers.

For multiple reasons, we had to postpone our planned 2024 air show to March 16-17, 2025. This will be a Saturday and Sunday AirShow, with Friday being Media Day in the morning, practice in the afternoon, and a casual reception in the museum on Friday night. Mark your calendars. More about the AirShow later.

On a very positive note, we welcome both Terry Rush and Kenita Bushee back from medical leave.



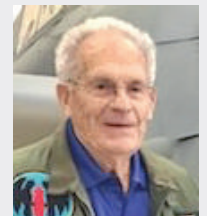
Deborah Webster, Research & Analytics Director from Florida's Space Coast Office of Tourism visits with Bob Boswell, VAC's XO.



Mel Abbott

2023

The Valiant Air Command lost long-time member and volunteer, Mel Abbott.



Mel was a retired US Marine Corps pilot. He flew the F3 Skyknight, F3J through F4J Fury, AD Skyraider, A4D Skyhawk, and F8 Crusader. John Glenn broke the transcontinental speed record in an F8U-1P Crusader in 1957, flying from Los Angeles to Brooklyn in 3 hours and 23 minutes. Mel bested John Glenn's record flying time in an F8 from Cherry Point MCAS to the west coast a short time later but was unable to claim it due to it not being officially timed.

He was a snowbird, and often served at the museum on Sunday mornings, and in front of our F8 at air shows.



GONE WEST

Ronald Coleman Dixon

July 20, 1939 - July 26, 2023

The Valiant Air Command has lost long time member and volunteer, Ron Dixon. He passed away 20 July 2023 at the age of 84.

The family chose to celebrate Ronald's life privately.



Robert "Bob" LeCount

2023

Robert LeCount passed away after several weeks in the hospital.

Bob has been a docent with the VAC for 6 years. For those that can't put a name to a face, here is his profile pic.

He will be missed by all those who knew him at the Valiant Air Command Warbird Museum.



Christopher Robert Noble

June 20, 2023

The Valiant Air Command lost another valuable volunteer. Suffering complications after heart surgery, Chris Noble passed away June 20, 2023.

Chris joined us as a Docent in January of 2022 and served a little over 211 hours during his time with us. He was always caught with a smile while performing his duties as a Docent and could often be found happily washing "the airplane of the week".

A funeral Mass was held at St. Agatha Church, 432 Adams St, Milton, MA on July 14th at 10:30 am.

The family expressed their gratitude to the Valiant Air Command Museum for giving Chris a purpose and passion.

In lieu of flowers, please consider a donation in Chris' name to Valiant Air Command, Titusville, FL 32780, or the American Heart Association.



FLYING WEST

I hope there's a place, way up in the sky,
Where pilots can go, when they have to die-
A place where a guy can go and buy a cold beer
For a friend and comrade, whose memory is dear;
A place where no doctor or lawyer can tread,
Nor management type would ere be caught dead;
Just a quaint little place, kinda dark and full of smoke,
Where they like to sing loud, and love a good joke;
The kind of place where a lady could go
And feel safe and protected, by the men she would know.

There must be a place where old pilots go,
When their pain is finished, and their airspeed gets low,
Where the whiskey is old, and the women are young,
And the songs about flying and dying are sung,
Where you'd see all the fellows who'd flown west before.
And they'd call out your name, as you came through the door;
Who would buy you a drink if your thirst should be bad,
And relate to the others, "He was quite a good lad!"

And then through the mist, you'd spot an old guy
You had not seen for years, though he taught you how to fly.
He'd nod his old head, and grin ear to ear,
And say, "Welcome, my son, I'm pleased that you're here.
"For this is the place where true flyers come,
"When the journey is over, and the war has been won
"They've come here to at last to be safe and alone
From the government clerk and the management clone,
"Politicians and lawyers, the Feds and the noise
Where the hours are happy, and these good ol' boys
"Can relax with a cool one, and a well-deserved rest;
"This is Heaven, my son -- you've passed your last test!"

Author:
Capt. Michael J. Larkin

Dedicated to:
Capt. E. Hamilton Lee



If you know of a Member or Volunteer who has passed away, please let an Officer at the VAC know, and give us as much information as you have so we can honor them.



Procurement Officer's Report

Marvin Juhl, Procurement Director
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Restoration, Preservation, Preventive Maintenance

Restoration is the treatment that should be followed when the expressed goal of the project is to make the artifacts appear as they did at a particular - and at its most significant - time in its history. Also, it is commonly defined as the reconditioning of an artifact from its original condition to return it to like-new or better condition.

Preservation is any maintenance action that will prevent (or slow) any artifact system from degrading over time due to inactivity.

Preventive Maintenance is a cost-effective means of extending the artifact service life.

Preserving and restoring historic aircraft is a challenging but rewarding task for warbird museums. It requires a combination of technical skills, historical knowledge, and ethical principles to **ensure the authenticity and integrity** of these flying machines. It requires every volunteer's responsibility to keep safe all artifacts from harm, avoiding Injury, destruction, or decay. So that makes Valiant Air Command Warbird Museum - a conservator, custodian, guardian, and protector.

Act of Keeping from Destruction

Assess the Condition: The first step in preserving and restoring historic aircraft is to assess their condition and identify their needs. This involves inspecting the structural, mechanical, and aesthetic aspects of the aircraft, as well as documenting its history, provenance, and significance. Based on the assessment, a conservation plan should be developed, outlining the goals, methods, and resources for the preservation and restoration process. The assessment should also consider the environmental factors, such as humidity, temperature, light, and pests that may affect the aircraft's preservation.

Clean and Stabilize: The next step is to clean and stabilize the aircraft, removing any dirt, dust, corrosion, or damage that may compromise its appearance or function. This may involve gentle washing, brushing, vacuuming, or wiping of the surfaces, as well as applying protective coatings, lubricants, or sealants to prevent further deterioration. Cleaning and stabilizing should be done with care and caution, using appropriate tools, materials, and techniques

that do not harm the original fabric or finish of the aircraft. Any cleaning and stabilizing actions should be recorded and documented for future reference.

Repair and Restore: In this article, we will explore some of the best practices for preserving and restoring historic aircraft, based on standard museum guidelines. The third step is to repair and restore the aircraft, restoring its original or intended appearance or function. This may involve repairing or replacing damaged or missing parts, repainting or refinishing surfaces, or reassembling or reconfiguring components. Repairing and restoring should be done with respect and accuracy, using original or compatible parts, materials, and techniques that match the historical and technical specifications of the aircraft. Any repair and restoration actions should be reversible and distinguishable from the original parts, materials, and techniques and should be clearly marked and documented.

Display and Interpret: The final step is to display and interpret the aircraft, presenting it to the public in a meaningful and engaging way. This may involve selecting a suitable location, setting, and context for the aircraft, as well as providing information, signage, or multimedia that explains its history, and significant features. Displaying and interpreting should be done with responsibility and relevance, using appropriate methods and media that enhance the understanding and appreciation of the aircraft, without compromising its preservation or authenticity. Any display and interpretation actions should be reviewed and updated regularly, based on feedback and research.

VAC has been actively involved in the restoration of historic aircraft. Through the efforts of the volunteers and staff, aircraft that might have been lost, are resurrected to a static display and some to a flying possibility which are now among the museum collection. Each project is unique.

One will quickly learn that things rarely go as planned. Parts might be difficult to source or take their turn in the machine shop, or there may be delays in getting the component through professional services. You might also fall into the familiar pattern of redoing jobs that were completed first and as you become more proficient, the standard of your earlier efforts is no longer good enough. So you do it again.

There's always someone out there who has solved the problem you are facing

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Procurement Officer's Report

Continued from pg 6

and can often offer a simple solution to what seems a daunting stage of the restoration. The classic aircraft industry has never been in better shape and pretty much everything you need is out there – from tools and consumables, quality parts for an enormous range of aircraft, advice, online tutorials and even training to gain those much-needed specialist skills.

Can't stress enough how many man-hours a restoration can consume. Volunteers spend multitudes of hours restoring a classic aircraft, mainly depending upon the extending condition in which it is in. Also realistic is how long the restoration is going to take just in preparation for the project, then we've got cleaning, stripping, disassembling, corrosion prevention, repairs, reassembly, painting, etc.

Restoring aircraft involves many processes, some of which you may already be well versed in, while others might be new. Aside from good old monkeywrenching, and depending on how much of the restoration you're prepared to take on, you'll need to develop all your skills, document, organize, and take notes.

When stripping the aircraft down, don't forget to label everything and take many photographs showing how components fit and, more importantly, how the wiring loom and any pipework runs along the airframe and through the engine bay. The wiring behind the instrument panel can look like a cat's cradle gone loopy, so label and photograph all the connections each time a switch or instrument is disconnected.

But be warned: taking something broken and rusty and restoring it to better-than-new condition is a highly addictive process. This may well be your first restoration, but get through it and it certainly won't be your last. Don't lose sight of the fact that aircraft restoration is meant to be a fun process. Nobody is holding a gun to your head to make you do it, so try and enjoy every stage.

Guarantee that when you finally roll the completed project out of the hangar for the first time, one will look back on the restoration process with pleasure and a great deal of satisfaction. Yes, even those hot sweating summer days and cold winter days spent in its final completion day for roll-out.

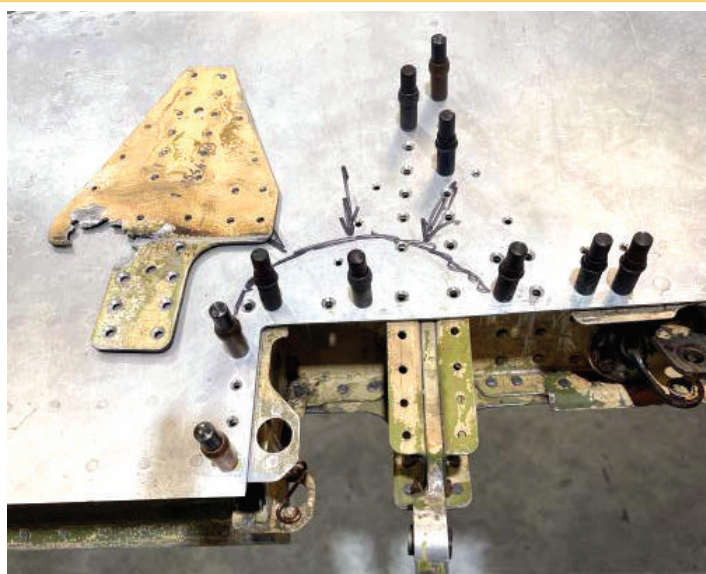


Photo shows the support bracket with corrosion that had occurred under the wing skin

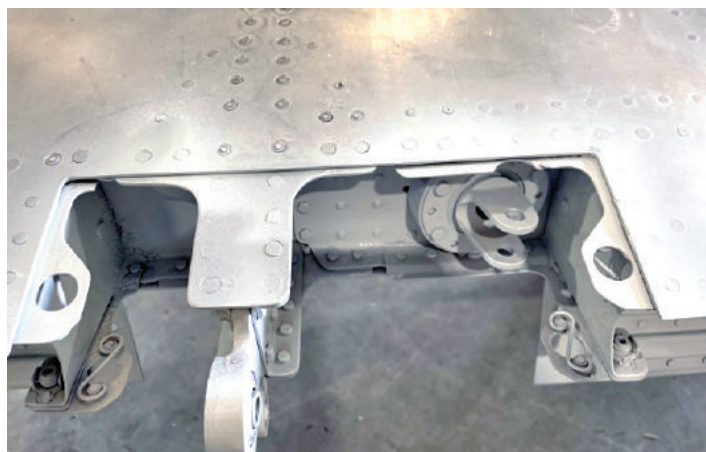


Photo shows a new support bracket manufactured to the same specification, treated and installed, hence restoration



Larry Dickinson and Larry Knoch along with Bob Fillipi (not pictured) are restoring the C-123. They are proudly showing the corroded landing gear door that they remanufactured right down to the correct number of rivets. This is an example of the quality work the restoration team turns out: "Everything is in the details".



P R Officer's Report

David Shores, Public Relations Director
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We finished and distributed a 30-second and a 5-minute video about the museum.

We needed 10,000 rack cards for our distributor (FPIS) to place around Brevard County. The rack cards are very popular.

Our Facebook page has had 18,000 likes recently.

We are 5-star rated on both Yelp and Trip Advisor. Trip Advisor had 423 positive reviews for our museum.

We are planning a dedication ceremony for our new Event Hangar in the near future.

TUI is still sending 5 to 10 visitors per week to our museum.

We will soon sign a contract to have our admission tickets sold by ITT at Patrick Space Force Base.

I just returned from Denver where I represented our museum at a 4 day symposium put on by the Air Force Historical Foundation. Great contacts were made and I received a lead on a possible new airplane. I did a presentation entitled "What Countries were involved in the Vietnam Conflict and what did they do". The presentation was well received.

We are still getting good activity from Groupon.

Congratulations



Robert Varney, former Pilot for Spirit Airlines, completed Delta Airlines training and is now a Delta Pilot ready for duty. He is a long-term member of the VAC and a pilot on our C-47. He is the owner and pilot of the yellow Stearman that is on display in the VAC Main Hangar.

Curator's Corner

By Malcolm Cater

CHANGING OF THE GUARD

Our long-time Curator Jem Golden resigned from his post to spend more time with his family. Jem and Norm Daniels asked if I would take over the position and after a little prodding I agreed to take the job!

Jem and I have known each other for over a decade and we both started as Tour Guides at the VAC on the same day. For the last five years, we have worked together, with others, rearranging and enhancing the exhibits throughout the museum.

Along the way, we've had a lot of laughs remembering our escapades from our younger days. Jem in the US Navy, myself in the British Merchant Marine/Royal Navy Reserve.

On behalf of all who worked with and associated with Jem over the years, we wish Jem and Gail many happy days.

Currently, we are working on creating space for the new simulator to be located in the main lobby. In coordination with Melvin Jhul, we are assisting in setting up a MASH 4077 display in the Vietnam hangar.

A POW/MIA table has been set up to commemorate POW/MIA day on Friday 9/15, initially it will be located in the main entrance, and then located in a permanent location adjacent to the Vietnam wall.

Donations keep coming in at a steady rate and it is a challenge to find space to display and or store them.

Thanks to Christine Reynolds, Chip Chamberlain, modeler extraordinaire, and Jack Bradford who just joined our little group for their help and support.

July 7, 2023 hot dawg day for volunteers



l to r: Cindy Marini, Lynn Jacobs, Lorraine Juhl



The hungry volunteers chowing down

Happening in the Restoration Hangar now



Our Fouga CM-170 Magister is in the Restoration Hangar under going a complete restoration

Full House at the Vietnam Hangar





Gift Shop News

Maureen Larney, PX, Manager
Email: Maureen.Larney@valiantaircommand.com
(321) 268-1941

Hello everyone,

I would like to draw your attention to a new item in our Gift Shop. We have new straw hats specifically designed for our C-47 Tico Belle and other designs too.



We have our Open House coming up on November 11th and 12th. Everyone gets in free. We just ask that you bring a nonperishable food item so we can give back to our community. Groups will get 10% off any single regular-priced item in the Gift Shop (Not valid with any other offers).

Remember to start your Christmas shopping early. It's always free to come in and shop. We are open 7 days a week from 9 am till 5 pm. We will be closed on Thanksgiving, Christmas, and New Year's Day. We may be closing early on Christmas Eve and New Year's Eve. Give us a call if you need information on the days we may be closing early.

We had two Gift Bag winners from the Brevard Zoo Teachers Open House. Please see the photos on this page of the winners. Lorraine attended the event and what a turnout it was! She gave out lots of information about our museum. Thank you, Lorraine!

We have a new cashier joining the team. Her name is Mary, and she is a delight to work with. Now that the team is complete a team photo will be in the next issue.

As always thank you for your support.

Maureen

Gift Bag Winners



A Short Story

By Joel McGinley

On Tuesday I was on my way to the museum and found Brevard County Traffic was preparing the warning signs at the railroad grade crossing! I stopped my car and explained that I had requested them. There was another guy there from the Gas Company to make sure the county guy didn't hit their pipe. I thanked them both for their help. The gas guy took a photo of me with the sign before it was bolted to the post.



Later, I had to go to the auto parts stores to buy some copper washers, so I was able to photograph the installed sign.



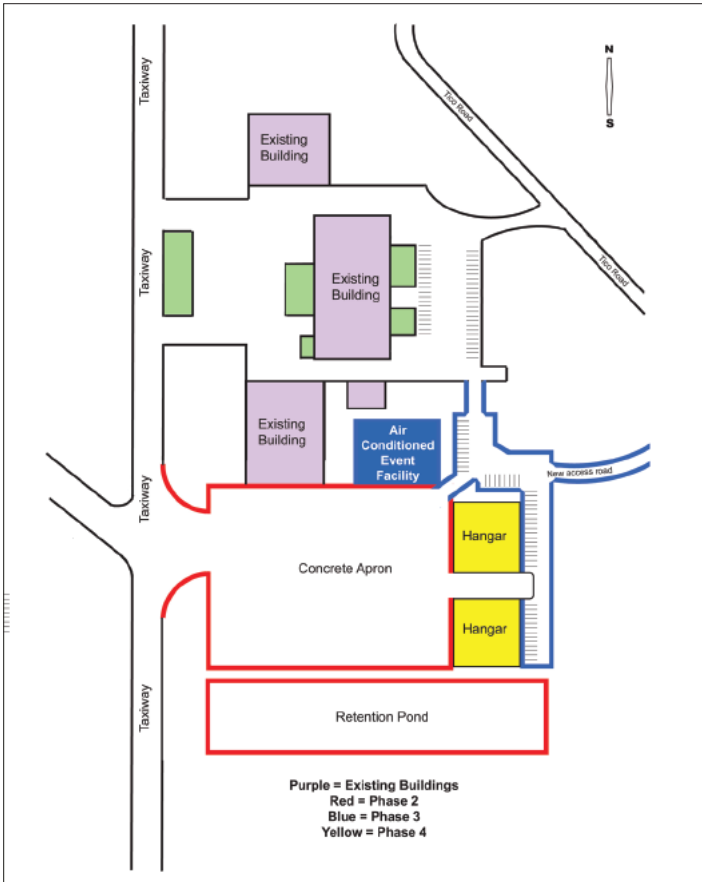
I am happy and relieved. We'll never know if the signs prevent a tragic collision, but I am hoping it helps.

Editor's note: Joel McGinley is the VAC volunteer who maintains and repairs all of our rolling equipment {Tugs, crane, and other motorized equipment} He is our go-to safety person. Joel noticed that the Florida East Coast Railroad modified their railroad crossing at US1 and Golden Knights Boulevard, one of 3 roads leading to our museum. Driving over the crossing at anything more than 5 MPH will give the suspension on your vehicle and driver a real test.

VAC Event Center

A Dream

A Dream Coming True



We are at phase 3 (Blue)



Look what's coming



Before work started



Artist's rendition



Artist's rendition



The start - clear the land

My Red Baron Ride

By Phyllis Lilienthal

As the VAC's Lead Photographer, Editor of the Airshow Magazine, and Editor of the VAC Quarterly Newsletter, I got to go on a lot of plane rides. One of my most memorable rides was with the Red Baron Squadron Aerobatic Team shortly before they disbanded on December 3, 2007.

I was invited to go on one of their practice flights the day before the airshow. My pilot, John strapped me in, gave me instructions, and then climbed into the pilot's seat.

I was put in the slot plane; the slot plane can leave the formation without affecting the flight. I was told I could direct John on where I wanted to go to get the best angles for photos...Wow, here I am telling a Red Baron Pilot to go up a little, down a little, and like that. That capability allowed me to get some great shots.

John told me I could let him know if I was getting sick and he would pull out of the formation. He also pointed out where the barf bag was. They did some maneuvers a few times and I was getting ready to cry "Uncle" when John came on the radio and said they were done and heading back to the airfield...Whew. When we got back I was invited to go to lunch with them...needless to say, I politely declined.

That was an experience I will never forget. I hope the following photos will give you a sense of what a ride with the Red Barons was like.

There is a Stearman in the Red Baron colors on display at the museum. This is a working airplane and is not always at the VAC Warbird Museum



My pilot John giving me instructions



Mirror strategically place so the pilot can keep an eye on the passenger...I can keep an eye on him too



The 'slot plane' would normally be flying where the red X is. He left that position so I can get some photos



YES, they do fly that close.

Continued on pg 13

My Red Baron Ride

Continued from pg 12



I am starting to get used to flying that close



I asked John to go up so I can get a down looking shot. My wish is his command



View from the cockpit of the slot plane



Going up, I think it is time to stop taking photos and hang onto the camera



Plane information on the dash



It is an awesome sight to see these formations



Gas gauge



Dash placard



More skillful flying



End of the flight and my required photo with the pilots. I didn't get their names as I was feeling queasy and wanted to get to my car

Fighting 114 The “Aardvarks”



By Doug Matthews

U.S. Navy Fighter Squadron 114 (VF-114) was activated in 1945. In the 1950s, it transitioned from prop-powered fighters to jets and moved to Naval Air Station Miramar, San Diego. In 1961, it transitioned to the McDonnell F-4 Phantom II, becoming the first deployable Pacific Fleet fighter squadron to do so. At this point, VF-114 also changed its name and insignia to an Aardvark, apparently inspired by the resemblance between the F-4 and the cartoon character Aardvark in the “B.C.” comic strip. VF-114’s first cruise with the F-4B began in September 1962 as part of Air Wing 11 on board the USS Kitty Hawk CVA-63.

The F-4 Phantom II was an incredible aircraft. Designed as an interceptor, the USAF also ordered it under the moniker F-110! Later, under Secretary of Defense McNamara, the designation of aircraft was changed and all orders, USN or USAF, were McDonnell “F-4” Phantom II. It was to be a great interceptor of inbound USSR bombers attacking either the fleet or the mainland. With a top speed of Mach 2, the tandem two-seater was manned with various combinations of two pilots/systems operator/copilot and could carry multiple munitions. Then Vietnam occurred and our front-line “interceptor”- was then to be employed as a “fighter”. It did well in both air-to-air combat and air-to-ground bombing. Production ended in 1979 after over 5,000 were built-2,600 for the USAF, 1,200 for the USN and Marine Corps, and the rest for multiple foreign countries.

Known to the aviators as “Fightertown USA”, NAS Miramar was the site of the first “Top Gun” movie starring Tom Cruise. “Fightertown USA” it surely was! There were perhaps twelve F-4 squadrons, four F-8 Crusader squadrons, and an A-4 squadron. From the time that you cleared out of the departure on takeoff to the time that you touched down on landing, you had to keep your head on a swivel! Very rude and wannabe fighter jocks would “bounce you”, meaning attack for a mock dog fight! Upon landing on the longer runway, your last 3,000’ paralleled the F-8 gun alignment building, a huge structure where each F-8 would be parked at the entrance and the techs would fire off its machine guns for alignment. Along the entire length of the runway-side of the building, in bold capital letters, was “WELCOME TO FIGHTERTOWN USA”! We were so

proud and honored to be there!

Upon graduating from Annapolis in June 1967, I took a delayed set of orders to flight school in order to serve as a gun-boat skipper in South Vietnam for a year. The new “gunboats” were PBRs (Patrol Boat River). I knew that, like Korea, the Vietnam War would be talked about for the rest of my life and I wanted to be there, “in the belly of the beast”, to experience what it was like and in a way, see how combat really was and how I would do. I was based in the Mekong Delta area and our mission was mainly “interdiction” (patrolling and looking to engage bad guys) with occasional support sorties in support of the SEAL team detachment at our base. Upon arriving at the base, I was welcomed aboard by the skipper, Captain Paul Grey! An aviator, Captain Grey was the hero of the book and movie “The Bridges at Toko-Ri”!

After twelve “interesting” months in the country, I proceeded to flight school in Pensacola. Graduating number 1 in my class of back-seaters, I got my first choice-F-4 fighters at Miramar! I completed the F-4 transition/training squadron VF-121 (“RAG” for Replacement Air Group) in the fall of 1970 as the VF-114s were selected to transition from F4Bs to F4Js. VF-114 had just returned from another Pacific combat cruise, having lost flight crews to death or P.O.W status. As is usual during the homeport “turn-around” period between cruises, roughly half the flight crews, having completed their second cruise, departed the squadron for shore duty. This meant that 14 of the 28 aviators would be replaced. A few of the “newbies” would be seasoned flyers rotating back from shore duty, but the majority were fresh from the RAG and had perhaps only 100 hours or so in the F-4. As one of the fourteen new guys (7 front seaters and 7 back seaters), I was welcomed warmly. At the time, I thought it was due to my incredible aviation abilities, but I later felt that it might have been more along the lines of the “fresh meat!” category. Quite humbling for a fighter jock! The two-man crews are matched up with one aviator being a veteran of at least one combat cruise and one “newbie”, the idea being that the vet will help the new fellow get around carrier ops and combat duties. Three months before we are to deploy, the pairings are posted and we are short a veteran. This means that one crew will have to be TWO NEW GUYS! The higher-ups placed their bets on the two best new guys to fly together and somehow, they select John and me! We are now paired and will fly 95% of all *Continued on pg 15*

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further flights as a crew.

All crews dutifully and gladly trekked (OMG by airline!) to St. Louis to take delivery of fifteen brand new F-4J Phantom II fighters, the latest and best in the world! Back at Miramar, we determinedly went to work learning how to employ the F-4J as the U.S.’s newest fighter/bomber. We did air-to-air simulated dogfights, bombing missions to the practice bomb range, live missile shots over the Pacific, and since we had radar, the occasional intercept of a “friendly bomber”. Following many hours of both day and nighttime flights, we then “carrier-qualified” meaning five-day and five-night carrier landings and launches.

November 1970, we boarded the supercarrier CVA-63 USS Kitty Hawk at Naval Air Station North Island, San Diego, and departed for Southeast Asia a/k/a Vietnam. I am sure all the tactical flight crews had strong emotions wondering how this cruise would end for them. Aboard to complete the Carrier Air Wing 11 contingent was our sister squadron of F-4J’s (VF-213 “Black Lions”), two A-7 Corsair II squadrons, an A-6E Intruder squadron, a KA-3 Skywarrior detachment of four for airborne refueling, an early radar warning E2B Hawkeye detachment of four, three UH-3 rescue helicopters and an RA5 Vigilante detachment of three for photo-reconnaissance.

Life aboard an aircraft carrier is as good as it gets in the U.S. Navy! With the Air Wing onboard, the population reaches about 5,500 with over 70 aircraft! There is a big flight deck and just below, a huge hangar deck for storage and maintenance. The ship is like a small city, support spaces include a post office, store, barber shop, medical clinic, etc. All closed-in areas are air-conditioned. Flight crews for the most part have two-man staterooms with a sink. Showers and bathroom facilities are down the hall. Each squadron-ready room shows a movie nightly when flight ops are not going on. As usual, food onboard a USN ship is great! Especially the ice cream!

Our first test as a complete Air Wing was en route in Hawaii for an “ORI”-Operational Readiness Inspection. All squadrons were involved in a practice “Alpha strike” on a target with over 70 aircraft-an incredible feat and something exciting to watch and participate in! During this 3-day exercise, the fighters would alternate “defending” the carrier or bombing a

target.

Night carrier operations are exceedingly stressful. The launch involves being catapulted into a black hole from a deck about 60’ above the sea. Below is a frothing sea of more darkness and possible death. The carrier turns into the wind to help the takeoffs (launches) and landings (recoveries). The recoveries were even more stressful at night. There ahead of you is the blackness of the night and the sea without any horizon. The carrier will have minimal lighting and once you initially pick it up visually on approach, it actually appears as a very small group of lights in the distance. You dutifully aim your plane at the lights, waiting to acquire the “meatball” (the landing mirror guidance device on the flight deck). (NASA once did a study with flight crews wearing sensors and recording devices in order to see the stress levels on a typical mission over North Vietnam. Surprisingly, or not, the highest stress was a night carrier landing!) On the final night of the O.R.I., the last event was an all-aircraft “night-strike” mission, then into port for fuel and ammo and on to Vietnam! This night’s mission proved unusual and unforgettable!

First off the carrier would be the fighters, two squadrons totaling 24 F-4Js, loaded out to the max! That meant four AIM-7 Sparrow missiles, four AIM-9 Sidewinder missiles, six Mark 82 500-pound bombs, and a 600-gallon extra fuel (drop) tank. The gross weight for takeoff would be 58,000 pounds, requiring afterburner use. There are four catapults-two up front on the bow (a “port/left” catapult and a “starboard/right” catapult). Then midway back along the ship’s port (left) side (the waist) and angled away from the ship’s centerline by 11 degrees are two more catapults, again a port and a starboard catapult.

My fighter is in the first launch of the night and one of the four fighters they positioned on the four catapults. Specifically, we were put on the port waist catapult. The carrier launches simultaneously from the bow and waist catapults. I am paired as usual with John and we are launched first. It was a “good cat shot” from 0 to 140 knots within 150 feet and three seconds! At night! (from the end of the deck on launch, if we get a “bad cat shot” and are descending or slowing, I have two seconds to initiate ejection for us both before we impact the sea). As soon as the acceleration stopped and we were airborne, the tower chief (“Air Boss”) comes on the radio in a bold voice: “Off the port catapult, you’re on fire! Eject!”. I say *Continued on pg 16*

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to John on the intercom; “Boy, those guys are f***ed!”. Being young and bulletproof, it never occurred to me that the Boss was addressing us. I just “knew” he meant “those guys” off the bow port catapult! Plus, never having been on fire, things seemed normal!

In our world-the confines of the cockpit-we launch with our eyes glued to the instruments, especially at night! We’re not looking at the scenery and are slightly hunched forward scanning all data. A God-like voice came on the radio (the ship’s captain, an aviator, has a red handset for emergency radio transmissions and his voice is a deep baritone). He had quickly realized the Boss, in his excitement of seeing this flaming fireball meteor depart the flight deck, had forgotten to mention WHICH port catapult! “OFF THE PORT WAIST CATAPULT-YOU’RE ON FIRE-EJECT!”.

Upon the call, I sit bolt upright and am drawn to the right wing and then both wings. Well, the “wing” definitely had the shape of a wing but was solid flames! I immediately ejected us both! We were perhaps only 300 feet above the black foreboding sea! The crashing waves whipped by the wind await us as we hear and see our massive aircraft carrier swerve uncharacteristically to the right and away from us. Stories of pilots being run over by the carrier come to mind! At the end of my upward rocket seat trajectory, I have completed the follow-on tumbling (kind of like a one-and-a-half dive in the tuck position) and am descending, hanging in my parachute, facing forward, and looking at our previously intended path of departure. I see the fireball of our jet but no second chute for John. Seconds later, the jet explodes in an incredible burst of missiles, bombs, and jet fuel! I hear shrapnel whizzing by! Then-kerplunk! Into the cold bottomless night sea, I go and the chute descends to cover me! I am wearing all the flight and survival gear, nothing “swim-like”. A harness with various hardware, a .45 caliber pistol and ammo, flight boots, helmet, gloves, strobe light, radio, mask, and a suddenly very, tiny life vest! I inflate the vest and start ridding myself of the clinging nylon parachute. With success, I am free of it and floating in heavy seas but exhilarated at being alive and but for a very sore back, all in one piece! Feeling so insignificant bobbing there in the ocean and hoping I am not attracting sharks, I activate my should-mounted rescue strobe light, hoping to be

found by the chopper quickly. I am in the water for a long thirty minutes thinking about the probable loss of John, when the rescue helicopter hoists me aloft, and as my eyes reach the floor level of the chopper, I see John sitting opposite the entry door with a thumbs up! Aboard the carrier, all flight operations had been stopped after our “launch” for an investigation. Our chopper is greeted by the ship’s captain, the Air Boss, our squadron skipper, and the doctor. We are escorted straight to the medical facilities for examination. The next morning we are “debriefed” for an accident investigation and report and then to the ready room to brief the squadron.

The doomed F-4J now at the bottom of the Pacific Ocean is memorialized in the Matthews Family Vietnam Memorial Hangar. Ship “205” (shown below) was meticulously restored by our VAC volunteers!



Upon arrival days later at “Yankee Station” (the location of the carrier group off the coast of North Vietnam), we complete the last intelligence brief and get our first mission assignments. After all this training, we are going to war! While for me and those veteran second-cruise guys in the squadron, it is not our first time, it is nonetheless a time when your alertness is high and you wonder how this nine-month cruise will go. The previous deployment of VF-114 had gone badly with deaths and POWs. As we suit up in the ready room after the endless mission and flight-leader briefs, I am sure each of us wondered how this and every flight will end. Did we get our “affairs in order”? Will the launch and recovery go ok? Will we live through it? Will I be in prison as a POW tonight being tortured? Will we get a MiG? How tough will the SAMs (Surface-to-Air Missiles) be?

There will be several types of missions for the fighters. 1. BARCAP-“Barrier Combat Patrol”-involves orbiting between the carrier and the *Continued on pg 17*

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hostile territory to protect the fleet from incoming enemy attack; 2. Bombing an air-to-ground mission where we will be loaded out with the maximum of six Mark 82 500-pound bombs, transit inland, and check in with the FAC (Forward Air Controller). The FAC will be low and slow in a prop observation plane and will direct our bombing patterns, either in support of “friendlies engaged” or as interdiction against enemy forces found; 3. Photographic Reconnaissance Escort-Two fighters will escort and defend if needed, an RA5C Vigilante during its route around north Vietnam gathering photo intelligence; 4. Alert 5-During periods between flight operations when there will be no fighters airborne on BARCAP, two fighters with crews in the cockpit are positioned on two catapults and able to be launched within five minutes. (not much fun on the 2 am to 6 am shift!); 5. Alpha Strikes!-An all-aircraft launch for a strike on a north Vietnam target, usually Hanoi or Haiphong harbor. Each carrier (there are two on Yankee Station), will launch close to 70 aircraft on an Alpha Strike. The fighters usually provide support defense for the attack bombers but can also divert and look for MiG fighters. The enemy’s predominant fighter is the MiG 19 and the MiG 21. So, we’ll be up against MiGs and SAMs! Due to the range to the targets and back, plus the heavy loads, airborne refueling (“tanking”) will be required, usually from a KA3B tanker or a specially configured KA6E Intruder.

The fighters will usually fly one combat mission most days. The two carriers often alternate flight operation schedules with one on days, and the other on nights. By the end of the first “line period” of about a month in action, one carrier will take a break for a few days and proceed to a port for replenishment of fuel and ammo. The Philippines is common, but we did see Hong Kong once and Japan once.

With a temporary halt to the bombing of the North and after several days of getting oriented to the area, we commence bombing missions over the south of Vietnam. The FACs are great and give us good control. But the bad guys on the ground-well they definitely are not happy to see us. Our greetings consisted of ground fire from small arms and often 37 mm anti-aircraft cannons! Boy, there’s nothing more exciting than a night bombing mission and in your steep 45-degree bomb run into a black pit of a night, seeing these large

fireballs come whizzing by the canopy. (On the next cruise, VF-114 would lose an aircraft and crew to just such opposition).

And so it went for nine months, BARCAPS, bombing, escorting the photo RA5s, alert 5s, and post-maintenance test flights for a 30-day line period, then into port for a few days and back out to Yankee Station! After our accident, there were no more aircraft lost on Kitty Hawk, either to “Operational Hazards” or to enemy action. The bombing halt lasted our entire cruise and we do not “go north”, so we are extremely fortunate! I end the cruise with 134 combat missions, one accident/ejection, and a cool custom-made flight suit from Hong Kong! (we all got one!).

On our return to San Diego, half the crews rotate to shore duty (me to F-4 instructor duty at Miramar), new guys arrive and a five-month “work-up” will be done, then back to Yankee Station where the bombing halt had been lifted and things got hot! VF-114 will sadly lose two F-4s with four crew killed.

In the 1970s, the VF-114 Aardvarks would transition to the Grumman F-14 Tomcat. Eventually, the squadron was decommissioned as part of the post-Cold War draw down of forces on April 30, 1993.



Photo of the F-4J that is at the bottom of the Pacific Ocean





Facilities Officer's Report

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The Facilities team continues to stay busy with supporting event setup, aircraft movements out of the hangars and on the tarmacs, event teardown, aircraft movement back into the hangars, facilities infrastructure work (including bathroom, electrical, lighting, and HVAC), and support to other VAC teams.

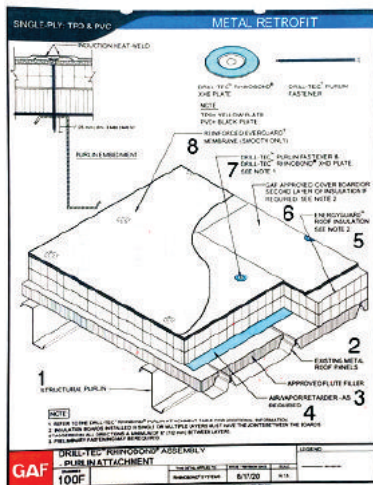
Tom Etter, David Shores, Terry Nies, Roger Tonovitz, Joel McGinley, Jim Bowers, Larry Dickinson, Greg Goetz, Curt Reus, Rob Shaw, Dan McAlexander, Ray Roberts, Bob Walters, and newbie Josh Heithaus provided outstanding support to the team over the past quarter. Large event support included the June, July, August, and September Fly-in and Drive-in Breakfasts, the Christine Perduto Wedding, the Ladybird Academy tour, the Space Coast Car Show, the Alpha Troop Association Tour, and the Smith Anglin Financial Client Appreciation Event. OH-6 Cayuse visitor for Alpha Troop Association Tour on 14 September 2023.



The huge Facilities news of the quarter is the Thermoplastic Polyolefin (TPO) retrofit of our metal roof for the Main Hangar . . . the first major update to the roof since the hangar was built in the 1980s.

To understand the anatomy of our new TPO roof: TPO Roof layers over the existing roof.

The roof contains 1) existing structural purlins under the roof, 2) existing metal roof panels (existing fiberglass skylights were covered with metal skins, caulked, and fastened to the purlins), 3) an approved (styrofoam) flute filler was added to fill the metal roof valleys and to make the roof flat, 4) an additional air/vapor barrier was not required, 5) 1½ inch EverGuard roof insulation, 6) GAF approved cover board or second layer was not required, 7) 8-inch Drill-Tec purlin fasteners were used to attach Drill-Tec RhinoBond plates



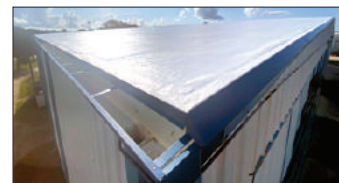
through ALL layers to the underlying purlins every 6 or 8 inches (depending on roof location) across ALL purlins, and 8) reinforced EverGuard membrane (TPO) was installed as the final (top) layer of roof. The TPO was then heat-adhered for 15-20 seconds to each of the hundreds of



Drill-Tec RhinoBond plates (they look like pucks) using a RhinoBond machine. RhinoBond machine and heat adhesion process. The previous ridge vent was corroded and leaving it on the roof would have allowed water intrusion under the new TPO roof. Norm Daniels and Hawk Moore agreed with Midwest Roofing's recommendation to remove it and cover the gap with metal before covering it with the same layers and TPO and integrating it into the rest of the roof. With this complete, the roof is sealed from top to bottom and side to side. The ridge vents and old gutters were recycled at Dominion Metals in Cocoa for additional VAC revenue.

With the removal of the ridge vent, we will assess the need for additional airflow. The museum has several large exhaust fans and will consider adding them to the north and south walls of the hangar. If anyone wants to donate an additional "Big Ass Fan," we can install it in the north side of the hangar to complement the one already in the south side of the hangar above our C-47 Tico Belle. The infrastructure is already in the hangar and ready to receive an additional fan.

The R-value of the TPO roof is much greater than the old metal roof. R-value is used as a measurement of the effectiveness of thermal insulating materials. The hangar will be cooler in the summer and warmer in the winter.



New roof North side



New roof South side



Covering skylights on roof before TPO installation

Here's the genesis of the roof *Continued on pg 19*

Facilities Officer's Report

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project since July: Norm Daniels and Hawk Moore met with Midwest Roofing on 6 July so that they could go up on the roof again to re-measure the gutters and valleys between roof metal sheets. They also left us with examples for the gutter metal, closely matching the existing gutters, flashing, and downspouts. Norm and Tracy approved the Roman Blue steel color match. Midwest Roofing ordered a test case for the gutters before placing the final order. They came back with the test material, and we had a pre-construction meeting to include VAC staff, Justin Hopman from Titusville-Cocoa Airport Authority, and Midwest Roofing.

Norm Daniels and Hawk Moore met with Midwest Roofing, Justin Hopman, and Christine from the Airport Authority again on 1 August for a pre-construction roof meeting. We planned to move aircraft out of each half of the hangar under where they were working. We used the South tarmac for temporary aircraft storage during this time to not impact any flying operations on our main tarmac. We planned out aircraft movement and placement and where materials were stored on the North driveway and the South driveway. Parking was affected with material staging and work and everyone was flexible during the project. Tom and Rob Shaw moved the bomb loaders from the driveway to the tarmac to make room for the materials. Hawk took Midwest Roofing back on the roof with the man-lift to check flashing angles for final metal fabrication.

On 24 August, the Facilities team started preparing for our re-roof effort, but Hurricane Idalia postponed that plan. The Tiger Moth, L-4, S-51, and SBD were moved into the Restoration Hangar. The Me-208 was moved into the grass next to the South throat. The XP-82, C-45, and yellow Stearman were moved to the Vietnam Hangar. The Dr.1 was pulled to the front of the main hangar and the new owner, Mike Goodman, came and dismantled it, loaded it, and transported it to Tampa to restore it to flying condition. He plans to bring it back to VAC once he has it flying again. With the possibility of Hurricane Idalia looming, we temporarily moved the T-34, Mig-17, F-9, T-33, and RU-21 into the Main Hangar. Marvin Juhl and the Restoration Team shoe-horned the Me-208 into the already full Restoration Hangar. On 29 August, the aircraft we could not fit inside hangars were prepped for Hurricane Idalia using tugs and tow bars for the F-105, F-100, C-123, F-5, and Canberra. We borrowed

the Entwistle (#9) tug from the FBO for the Canberra. The S-2 Tracker was secured with a large mobile forklift and straps. The T-2 Buckeye was strapped to the tarmac with tie-downs in front of the main hangar.

Florida High-Speed Internet (FLHSI) moved the high-speed internet antenna from the roof to a pole installed on the side of the building with the assistance of Tom Etter, Curt Reus, and Hawk Moore and the use of our JLG man-lift on the outside and the Advent Lutheran Genie manlift on the inside. The antenna mast brackets were bolted through the red iron of the Main Hangar through the metal skin.

We had planned to receive roofing materials on 29 August, but with all the unknowns from possible high winds with Hurricane Idalia, the museum and Midwest Roofing decided to postpone the main delivery of lightweight ISO and EPS materials until 1 September. On 29 and 31 August, we received some of the gutters and flashing materials from Midwest Roofing. On 1 September the materials arrived on three large semi-trailers. The materials were split between the North and South driveways. The roofing crew started that morning and worked Friday, 1 September, Saturday, 2 September, and Monday through most of Friday, 4-8, and 11-14 September. The crews covered the skylights with metal skins. They caulked the metal skins to the existing roof and fastened them through the existing metal roof to the purlins across the entire roof. Another crew started installing the gutters along the northside roof. The rains hit hard on Friday, 8 September, so they had to quit early with lightning in the area. The crews have been amazing and until the 8th, weather had been perfect. The weather held out until they finished on 14 September. The City of Titusville came and signed off on the completed roof permit on 15 September. On 16 September, Tom Etter and Curt Reus did a FOD (Foreign Object Damage) walk with magnetic bars and checked the grass for aluminum around the Main Hangar after the roof project was complete. The roof manufacturer, GAF, will come to complete a detailed inspection of the new roof on 27 September so that they can extend the 20-year roof warranty to the Airport Authority and VAC.

Back to the last quarter of work completed by Facilities, the Space Coast Car Show on 1 July was a huge hit. According to Brandon Norton, the event coordinator, they had between 180-200 cars registered for the event. Tracy Bohrmann's e-mail on 3 July stated the show brought in over \$6K in revenue to the VAC. The Facilities Team moved the F-100, *Continued on pg 20*

Facilities Officer's Report

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F-101, F-105, and F-8 to the backside of the South tarmac and cleared a driveway with cones through the middle of the Vietnam Hangar. The C-47 was backed into the NW throat to the taxiway at a 45-degree angle. The TA-4 was backed in at a 45-degree angle in front of the Restoration Hangar. The Mig-17 and T-34 were backed on to the grass in front of the Vietnam Hangar and the F-5 was moved on to the grass next to the Restoration Hangar to maximize ramp space for the cars.

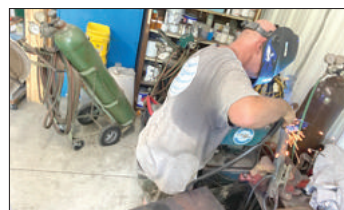


Rob Shaw and Hawk Moore went to Space Coast Steel on 27 July to procure two ten-foot steel angle iron for the blue trailer. Roger Tonovitz, David Shores, Rob Shaw, and Hawk Moore went to Lowes to get supplies for the bathroom renovations and blue trailer retrofit on 22 June. Roger started with the bathroom renovation work on Monday, 10 July.

On 29 June, Jem Golden and Malcolm Cater came to report that there was a lot of water in the Vietnam Hangar memorabilia room. Tom Etter checked the HVAC and the inside and outside units were both

frozen solid. Tom, David, Curt, and Hawk melted and cleaned up at the air handler. Jem and Malcolm cleaned up in the memorabilia room. We used Tom's small wet vac and pulled out water. We pulled 5-6 gallons through the line from the air handler pan. We then looked under the air handler and the box from the intake duct and the air handler had about a foot and a half of water in it. That's what leaked into the memorabilia room. We pulled another 6-8 gallons of water from the box. When we left, the ice was all melted (used a large wet vac to blow over the ice to speed the melting). The air filter had collapsed from the weight of the water and was in the box below the air handler. We fished out the sopping wet filter and it was pretty clean. Tom came in on Friday, 30 June with the Coleman HVAC guy. A relay was stuck, and the unit had run full-time for quite some time and had frozen up. The Coleman tech believed the drain line to the outside was broken. Tom Etter, David Shores, Curt Reus, and Hawk figured out the drain line leak under the floor was in the wall and under the unit. Bob Walter and Hawk ran a new drain line along the north wall to the outside and the system is running well and draining properly.

Jim Bowers welded the steel beams onto the blue trailer on 1 July. Jim Bowers with Joel's assistance cut cross-beam cutouts and added gussets over the axle of the blue VAC trailer, so the trailer doesn't hit the axle when transiting bumps. The blue trailer is fully operational.



Bowers welding shop



**l to r: Joel, Jim
New Decking for Blue Utility
Trailer with Tom Etter, Curt
Reus, Larry Dickinson, and
Joel McGinley**



Tom Etter and Curt Reus used the JLG gas-powered man-lift to help the sign company move the Matthews Family sign from behind the B-52 to the middle of the front of the hangar in plain view. The man-lift basket refused to turn back 90 degrees after the sign work. Joel was able to quickly troubleshoot the problem to wiring that had come loose from their connectors when the battery was replaced. *Continued on pg 21*

Facilities Officer's Report

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Tom Etter and Curt Reus worked with Edwin Torres from the Event Center Structural Engineering firm who cleaned, fixed, and painted the twenty-three Main Hangar girder bases like new. Only two bases required additional steel to restore the integrity of the girders. Norm did a great job hiring this company to do the work for time and material costs, saving us a lot of money while restoring the structure of the hangar. Curt Reus assisted the steel team and sprayed the tarmac with weed killer. Curt Reus and Tom Etter helped push out the C-47 to fuel her up for the 8 July parachute flight. They also assisted with the swapping out of the Fouga Magister (to the front for painting) and the Cessna 337 Skymaster (to the back) of the Restoration Hangar.

Joel McGinley worked with Pete Jolly and Charlie Hammer from the Restoration Team and Curt Reus, David Shores, Rob Shaw, and Hawk Moore from the Facilities Team to reassemble the Advent Lutheran electric man-lift after the new seals were installed into the long cylinders. Joel McGinley finished the assembly of Advent Lutheran Church's Genie lift. He replaced the wire rope on the loading winch. The church will pay Joel for all the parts that were needed. Joel trained Terry Nies, David Shores, Rob Shaw, and Hawk on the safe operation of the Genie lift.



Joel McGinley testing Genie lift

Ray Roberts completed the white parking lines on the NW side of the parking lot and the yellow curbing on the NW and SW portions of the parking lot on 6 July. He did a great job in the searing heat!

The Facilities team helped Roger Tonovitz with bathroom renovations. Roger and Hawk stayed late one evening and came in early to shut off the museum water supply to replace hot- and cold-water sink valves in four bathrooms and install a water heater supply/shutoff valve in the women's bathroom off the break room. Roger replaced both toilets and the faucet in the ladies' restroom off the break room. In the men's restroom off the break room, he replaced both sinks and faucets and the toilet (with a new toilet seat). Roger replaced the sink and faucet in the ladies' restroom off the artifacts area and replaced the damaged wall tiles that pulled off the wall when the vanity was removed. He also replaced the faucet and toilet seat in the

men's restroom off the artifacts area. The Facilities Team of Roger Tonovitz, Rob Shaw, Curt Reus, Tom Etter, and Hawk completed the demolition work of the shower in the men's restroom off the break room. It was quite an undertaking.



Curt Reus, Rob Shaw

Curt Reus and Hawk went to Buffkin Tile and ordered tile to replace where demolition work was done in the bathrooms. Hawk picked the tile up on the way to the museum one day. While not a perfect match, they are sufficient. Roger repaired the hole in the floor with concrete, shored up the metal wall mounts where the shower was located, and replaced some of the tiles. Roger and Hawk came in early on 10 August to make the necessary changes to the water supply lines before proceeding with the final tile work.

On the JLG cherry picker, Joel also replaced the opaque fuel gauge tubing and marked the last 11 gallons above empty. He also fixed the stuck basket rotate function and cleaned/greased pivot and gears. Joel replaced the failed starter, checked the carb for debris, engine oil & filter changed, and new blades installed on the Bad Boy lawn mower (#26). Joel will get a prior set of blades sharpened/balanced for reuse. He found that the engine hour meter doesn't change. He will change the oil every August, per its history of use. The mower is operational thanks to Joel's diligence. Tug 4: brake problems: Joel ordered a new master cylinder on the internet and bought a new return spring. The brake return spring was installed on 8 August. On the Tico Belle 6-pack golf cart brake problem, Joel removed the right tire. The brake was leaking fluid, so the brake was useless. Joel found new shoes and a cylinder rebuild kit (both hard to find) and bought them. Joel fixed the brakes on the 6-pack golf cart by rebuilding the brake cylinder and seal of the right brake assembly, reassembling, bleeding the system (with the assistance of Bob Boswell), and remaking/restringing the parking brake cable. The 6-pack golf cart was ready for use during the 9 September fly-in drive-in breakfast but was not used. On golf cart chargers, one old 36-volt charger failed (sparked when plugged in). Joel checked all connections, no problem. Probably a circuit board problem. No parts are available, so he bought a modern digital charger for \$100 and it's working well in Motor Pool. Joel, Jim, and Hawk also worked on Tom Wilkey's John Deere tractor flat tire. Plugging the tire did not work, so we had to force *Continued on pg 22*

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the wheel off the tractor axle and remove the rim/tire.

Curt Reus and Hawk assembled the locker for Chuck Julian's Red Baron Stearman along the south wall of the Main hangar.

Ray Roberts did an outstanding job painting the handicapped spaces in front of the museum.



Rob Shaw and Hawk picked up Bob Boswell's 18-foot trailer to use it to pick up the F-14 Tactical Airborne Reconnaissance Pod System (TARPS) down south. The trailer had a flat and a broken cross beam, so we brought it back to the museum after adding air to the tire. Joel and Hawk checked the tire and found a temporary spare to add to the trailer. Joel fixed a loose ball receiver. Jim Bowers welded the support rod and installed the temporary spare. The following

week, Tom Etter and Hawk drove to and from Lantana, FL to pick up the TARPS from Paul Pefley on 28 July. Thankfully the trailer worked well. The following day, Jim Bowers, Joel McGinley, Martin Pring, and Hawk offloaded the TARPS into the Resto Hangar.



l to r: Hawk Moore, Tom Etter

Rob Shaw moved the prop trailer from the tarmac to the driveway. Rob, Terry Nies, and Hawk used pallets to move the S-2 props from the tarmac to North 40 behind the Restoration Hangar. We replaced the Vietnam hangar fluorescent bulb in the men's bathroom. The Facilities team pulled out and returned the XP-82 for engine runs. Greg Goetz assisted Tom Reilly's team with the port engine propeller removal.

The Facilities Team pulled the C-123 engine hoist from the North 40 weeds to check it out. Jim Bowers used the start cart to check out the motor (the hoist has a standard aircraft plug receiver). It works

fine. Jim also fashioned a steel cover and installed it over the control panel. The hoist is operational except the wire rope/cable needs to be replaced. The hoist corrosion is only surface rust. The team plans to do rust mitigation with Ospho rust converter and then paint the hoist as time permits. Since our crane is inoperable, we will have this piece of equipment to handle heavy, high lifting. The team also pulled the B-1 stand out of the North 40 weeds. The tires were successfully aired up and Jim Bowers fashioned a new lunette ring and bar so it could be towed easily. The stand was moved to the South tarmac and Larry Dickinson used it to wash the upper parts of the C-123. Jim Bowers added a temporary set of posts and chains to the top of the stand for safety. Jim plans to weld a more permanent safety structure when time permits.

The USS Boxer tug (#3) had a left-rear full flat on 5 August. Hawk aired it up and it lost about 10 psi in an hour. Jim Bowers, Joel, and Hawk removed the rim/wheel and tried to separate the tire from the rim. It was a no-go. Hawk took the rim to Gattos and they separated the rim from the tire at no charge. We had a hard time finding a suitable 16 x 6.50 tube, but we worked with Gattos for resolution. The rims/tires from the rarely used Harlan tug were installed onto the Boxer tug to temporarily make it operational.

Terry Nies, Rob Shaw, and Hawk moved the spare C-47 engine from the front of memorabilia to the C-47 for the engine swap. Terry Nies and Hawk moved the steel stand from behind the Restoration Hangar to the Main Hangar for the damaged engine. Terry Nies helped Max Hodges and Bill Parks properly plug orifices and plates for shipping on the removed engine. We helped position the damaged engine on the engine mount for shipping.

David Shores, Roger Tonovitz, Rob Shaw, and Hawk helped Charlie Hammer reinstall the F-104 wing tank. Larry Dickinson and Hawk drove up to Holly Hills, near Daytona Beach to pick up mineral oil from Fornell Oil Co. to use to break in the refurbished C-47 engine. Tom Reilly's oil was used instead.

On 10 August, the F-104 was moved to the south tarmac and lined up in Century Series order with the F-100, F-101, and F-105.

Roger Tonovitz continued work on the men's bathroom off the break room. The supply line was re-routed so that the rear-facing connection toilet could be added. Roger had to shore up the structure behind the south wall tile. The floor

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and wall tiles were installed. The new toilet had a broken tank, so Roger had to wait before finally installing the complete toilet. A partition has been ordered and it should be installed by the end of September. Grab bars will also be added to the stall. Roger has done a great job on the bathroom with periodic assistance from all the other Facilities Team members.



Bathroom Renovation before partition

Gattos was able to order a tube for the USS Boxer (#3) tug and fix the tire. Joel McGinley changed the oil and filter in the #3 tug. Hawk was able to procure four low- to mid-mileage used FedEx tires from Chuck's Tires for the #4 tug dually rear wheels/tires (two tires were bald, two were worn). Jim Bowers, Hawk Moore, Tom Etter, and Joel McGinley fought and installed the tubes, flaps, tires, and rings onto the four wheels/tires on tug #4. Joel McGinley, Tom Etter, and Hawk Moore fixed the master cylinder (twice due to a defective part) and bled the brake lines on the #4 tug. Joel changed the engine oil and filter and serviced the air cleaner. Joel and Jim Bowers replaced a noisy/rough alternator on tug #4. The Facilities Team was able to save the museum a lot of money while keeping these assets up and running.

Jim Bowers helped Charlie Hammer solve the recurring problem of the pump drive slipping on the red-baby Clark forklift (#17). Joel McGinley helped Curt Reus install a remote plug for the battery charger, charged the battery, and aired tires up on Curt's Halftrack. Joel McGinley resurrected yet another donation to the VAC, the mobility scooter Jazzy 6: Joel checked fuses, breakers, etc. trickled charged batteries to bring them from 0.3 and 2.2 volts up to full charge 12 volts plus. The scooter is working, but we're not sure what range it will get. Marvin still prefers his old scooter and it had a flat on 9 September. Hawk Moore aired up the tire, but it went flat. Joel McGinley and Jim Bowers fixed the flat. We need to be careful how many donations we continue to pile onto Joel's plate. He does a monumental job keeping our menagerie of vehicles operating.

Hawk Moore checked with Space Perspective on 21 August to see if they planned to use our tarmac and driveway to transit their capsule as discussed in March 2023. He found out they had a ribbon-cutting

ceremony on the following day and was able to secure some invites for the museum. Norm Daniels, Tracy Bohrmann, David Shores, and Hawk Moore attended the Seely Space Balloon Factory ribbon-cutting ceremony on 22 August 2023. The team was offered tour of the capsule hangar and balloon factory but opted to postpone the tour to schedule a larger VAC tour of their facilities. If anyone is interested in a tour of the Space Perspective facilities, let Hawk Moore know and we will line up a date and time for a tour.



Space Perspective Balloon Factory

Hawk Moore bought #4, #6, #8, and #10 hydraulic caps and plugs for Larry Dickinson and Frank Manion to use to isolate and remove the nose hydraulics for VAC's C-123K Provider. On 8 September, Hawk picked up 10 additional plugs for Larry and the C-123.

On 31 August, the Facilities Team cleared out the north side of the Main Hangar for the re-roofing effort. We removed the tugs, towbars, and forklift from our hurricane preparation. We moved the RU-21, T-33, and F-9 to the south tarmac and placed them to maximize space for the fly-in, and drive-in breakfast on 9 September. Joel McGinley checked all fluids and rear steering lockouts on the Entwistle (#9) tug. All checked out okay before Entwistle tug was returned to the FBO.

Jim Bowers, Mel Juhl, Tom Etter, Curt Reus, and Hawk Moore worked to transport the S-2 simulator from the Main Hangar to the welding area behind Restoration using the big forklift. Jim Bowers proceeded to remove several hundred pounds of steel structure and other parts from the bottom of the simulator. The excess metal was taken to Dominion Recycling for payment along with the ridge vents and roof gutters from the re-roofing efforts. The simulator is now several feet shorter with wheels, making it very easy to maneuver. The S-2 simulator was moved back into the rear of the Main Hangar on 4 September. Mel Juhl and his team are prepping the S-2 simulator to make it into a fully digital simulator for use in the front of the museum near the smaller simulator and Link Trainer. The S-2 simulator was moved over to Restoration for more work and painting on 19 September.

Dan McAlexander, Tom Etter, Curt Reus, and Hawk Moore installed LED lights on the north side of the Main Hangar. Dan McAlexander used a grinder to allow us to close the fifth hangar door from the north in the Main Hangar. While we had

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the man-lift on the north side of the Main Hangar, Curt Reus, Tom Etter, and Hawk Moore added an additional cable over the red iron to add safety to the Hummingbird power glider. The Hangar Door Company came and re-aligned the height of the door on the north side on 7 September, fixing the problem. Roger Tonovitz installed the rest of our LED lights with Terry Nies' assistance into the south side of the Main Hangar.

While installing LED fixtures, the JLG man-lift had issues with hydraulic leaks and the basket level sagging. Jim Bowers isolated a switch problem and wired it so that the basket could be lifted level using the switch. Joel McGinley ordered a new switch and installed it the following week. The hydraulic leak appears to be a cylinder seal leak for the lift arm. Additional diagnosis is required to isolate the problem.

Tom Wilkey continues to do an excellent job with the VAC landscaping (mowing, weed-eating, watering, etc.) with periodic support from Hawk Moore.

Tom Etter applied vinegar to all HVAC drain systems on 8 September. We are still having issues with some water coming from the two new HVAC systems at the back of the Main Hangar. We have not been able to confirm whether they drain into the men's bathroom sink, women's bathroom sink, or supply closet sink by the docent's area. The line appears to go into the wall at the back of the break room and bathrooms/supply closet off the docent's area.

The Facilities Team assisted John Makinson with S-2 Tracker engine preparation for shipping. We used the yellow forklift and large mobile forklift to remove the engine from the engine stand. The engine was rotated vertically 90 degrees and secured to a pallet. Tom Etter helped John with building a box to protect the engine during shipping.

Tom Etter and Hawk Moore cleaned up cones and stanchions after roofers left on 8 September for fly-in drive-in breakfast the following day.

The Facilities team helped pull out Doug Matthews F-86 so it could be moved to the other side of Space Coast Regional Airport for its annual inspection. It should return to the VAC in early to mid-October.

Curt Reus and Hawk Moore helped jump-start an RV-8 from Spruce Creek after the September fly-in drive-in breakfast. Thankfully the aircraft had a 12-volt system and was easily jumped with one of our tugs.

Leigh Lewis, Ops Officer, estimated the number

of fly-in aircraft at 34 and visitors at 280 for the September breakfast.

Roger Tonovitz replaced fluorescent lights in the Vietnam Hangar Hostess room with LED lights. He also replaced 6 metal halide lights with LED fixtures on the 16th and 19th of September in the lower part of the Main Hangar. Now, all upper and lower light fixtures are LED in the Main Hangar.

After the yellow forklift sprung a hydraulic leak from one of the tilt cylinders on the 19th of September, Joel McGinley, Curt Reus, and Hawk Moore removed both tilt cylinders so they could be refurbished. Joel hoped to take them to Central Hydraulics in Cocoa. Joel and Jane McGinley drove to the main repair site near Daytona Beach to facilitate a quicker repair. Unfortunately, Central Hydraulics wouldn't be able to get to the cylinders for two weeks. He brought them back to the VAC. Joel fashioned the tools to disassemble the cylinders. As of 23 September, the cylinders are almost ready for reassembly and installation on the yellow forklift in the near term.

Jim Bowers has worked with Charlie Hammer to fashion steel pieces for two new engine stands for displaying engines in the Main Hangar, in the future.

On 21 September, Joel McGinley and Hawk Moore transported 1,130 lbs of Ni-Cd battery cases for proper disposal to Clean Earth in Melbourne. Thank you to Joel McGinley for heading up this effort and to Pete Masarres, Curt Reus, Tom Etter, Hawk Moore, and others for doing the painstaking preparation of 14 boxes of battery cases. On the same day, Tom Etter, Curt Reus, and Hawk Moore figured out how to fix the left side of one of the Main Hangar doors that would not close past a top rail bracket. The entire left side of the door had to be lowered using the four large bolts and the center jackscrew. Norm Daniels plans to bring back the Hangar Door Specialists the week of 25 September to check out our Main Hangar doors again.

On 23 & 24 September, the Facilities team of Greg Goetz, Tom Etter, Curt Reus, and Hawk Moore assisted Tom Reilly and Bill Parks with the removal, fixing, and reinstallation of the port-side tail wheel on the XP-82. They also assisted with the re-installation of the port-side propeller of the XP-82. Greg Goetz continued to work behind the scenes during the entire quarter keeping our facilities clean.



**Greg Goetz
Tom Reilly
Tom Etter**

Mark Your Calendar



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OPEN HOUSE - 9 AM TO 5 PM
NOVEMBER 11TH & 12TH

Flybys • Displays • Memorabilia
 Food & Drink Available For Purchase
 Food Truck • RC Airplanes
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VETERANS DAY WEEKEND OPEN HOUSE
PLANES - TRAINS - AUTOMOBILES

Free* FOR ALL US MILITARY & VETERANS (PAST & PRESENT)
 Free* FOR FAMILY MEMBERS ACCOMPANYING VETERANS
 Free* FOR ALL FLORIDA RESIDENTS

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(GOOD FOR VETERANS DAY WEEKEND ONLY)

Please bring a non-perishable food donation for a local food bank

Saturday Sunday
9am to 5pm

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VAC MEMBER
CHRISTMAS PARTY
 Vietnam Hangar - Saturday, December 16, 2023

Happy Hour
 5:30pm to 6:30pm
Cash Bar
 Dinner to Follow

Free For Members + 1
 Non-Member Volunteers \$10
 All others \$20

Door Prizes
 Membership(s)
 50/50 Drawing
 Tickets to enter

DON'T FORGET TO BRING YOUR UNWRAPPED TOYS
TOYS FOR TOYS

Tickets are available in advance at the Gift Shop or pay at the door
 Reservations are required by 7 December - 321-268-1941 ext. 4112

Happy Halloween!

October 31st



December 25

Merry Christmas

VAC Closed



November 25, 2022 - VAC Closed

HAPPY THANKSGIVING



HAPPY NEW YEAR!

JANUARY 1, 2023 - VAC CLOSED



One of our newer displays



A beautiful Stearman in the Red Baron Squadron colors is on display in the Main Hangar. This is a working aircraft and will be out flying in air shows and functions, and may not always be on display

Valiant Air Command, Inc.

6600 Tico Road, Titusville, Florida 32780 - 321-268-1941

Website: www.valiantaircommand.com - Email: warbirds@valiantaircommand.com