

VALIANT AIR COMMAND
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Statement of Purpose

The Valiant Air Command 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 Educational Museum
 Recognized by the Internal Revenue Service

EXECUTIVE AND SUPPORT STAFF

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MUSEUM AND GIFT SHOP

OPEN 7 DAYS A WEEK - 9AM TO 5PM

Closed Thanksgiving, Christmas and New Year's Day

Adults \$20.00 - Senior or Military \$18.00

Children 5 to 12 years old \$5.00

Children under 5 years old - No admission charge

Special Tour and Family Rates Available

To order AirShow Tickets online:

<http://vacwarbirds.ticketmob.com/event.cfm?id=49304>

The UN-SCRAMBLE Team

Ron Davis - Phyllis Lilienthal - Genie Owens

1st Quarter - Jan, Feb & Mar

Submission deadline - Mar 27th NL Published - April 6th

2nd Quarter - April, May & June

Submission deadline - June 25th NL Published - June 30th

3rd Quarter - July, Aug & Sept

Submission deadline - Sept 25th NL Published - Sept 30th

4th Quarter - Oct, Nov & Dec

Submission deadline - Dec 24th NL Published - Dec 31st

Please note: Items submitted after the submission deadline will not be published or will be published the next month if applicable.

Please call us if you have an email address change. We want you to be sure to get your copy of the Un-Scramble.

We have commissioning a new website at WWW.VACWarbirds.net. This will be the principal and official site for the organization.

Future Events - 1st Quarter - 2015

(Dates are subject to change or cancellation - Please confirm all dates before attending)

1Jan-----New Year's Day (VAC closed)
 10 Jan---Fly-in Breakfast
 10 Jan---AirShow Meeting (Noon)
 20 Jan---Board of Director's Meeting
 14 Feb---Fly-in Breakfast
 16 Feb---Board of Director's Meeting
 12 Mar---AirShow Media Day (Main Hangar)
 13 -15 Mar----AirShow (South End of Airfield)
 14 Mar---Fly-in Breakfast CANCELLED
 17 Mar--- Board of Director's Meeting (Probably will be cancelled - call before going)

COMMANDER'S REPORT

There's a lot happening right now at your Valiant Air Command. The hottest news is that we were just informed the legendary US Air Force Demonstration Team, the Thunderbirds, will perform at the 2015 TICO Warbird AirShow. The Thunderbirds were here two years ago; their return so soon is evidence of the wonderful job our VAC Directors, staff, volunteers and community leaders did making their visit a success.

Of course there is more than one side to this good news. The Thunderbirds'

logistical requirements far exceed any other airshow act we see. We will rely heavily on our friends at Patrick AFB to once again provide the team's required support. We are already scrambling to arrange dozens of different aspects of our preparation, and we have a brand new 98 page Thunderbirds Support Manual to guide us. Lots of "You WILL do this" requirements for us to meet. So if you want to get in on the ground floor, let one of our Directors know what you would like to help with.

Of course, all this does cost money – lots of money. We need a solid base of finances to manage this effort. Please contact us if you can help with this part of our preparation.

We do have some more news. We've made some leadership changes to take our organization to the next level. Karl Holly and Norm Daniels have joined the Board of Directors as Operations and Facilities Officers, respectively. They each bring superb qualifications to those positions. Jim Owens moves from Facilities Officer to Maintenance Officer, and Bob Boswell from Operations Officer to Executive Officer. I'm looking forward to a renewed energy and sense of purpose as these Officers interact with our carry-over Directors.

Unfortunately, part of moving on is saying goodbye. We lost our dear friend and longtime Facilities Officer Norm Lindsay last month. Our condolences and prayers go with Gaye and all their family.

You will see Bud Evans' retirement comments in this newsletter. We owe Bud a huge debt for his many years of service, and wish him many more years of health and happiness.

Hoping your Holidays were warm and wonderful.

Lloyd Morris,
Commander

Executive Officer Bud Evans Resignation

This letter has been written several times during the past few years and I have withdrawn it at Lloyd's request. However I have looked in the mirror too many times and have seen the old fashioned "Hood Ornament" looking back at me. For those of you who are too young to remember automobiles had fancy ornaments that decorated the front of the hood and identified the manufacturer. Most were a non-functional part of the automobile and were for looks only. I have been in that position for the last few years filling a position that requires an active working part of the smoothly functioning board of the Valiant Air Command. Although I don't add any beauty to the museum I am in other respects the "Hood Ornament" and unnecessary member filling a job that requires a vibrant active Board member. Lloyd Morris has taken this museum to a status of a world recognized aviation museum. All of the Board Members have and are dedicated to their specific sections of the managing and hands-on workings of the museum. They all produce the many things that make the museum run smoothly and continue to grow. I have been unable to spend the time and required effort during recent years to properly perform the job required by the position of Executive Officer that Lloyd and the organization deserves. The job requires an assistant who can relieve him of some of the burden he has had to shoulder during recent years. It has been an honor to have served with the many Board Members and the many volunteers who give so much of themselves to make the Valiant Air Command Museum and Air Show the success we see today. It is with a deep feeling of pride that I feel for having been a small part of the process of building this monument displaying the

history of the profession I was fortunate enough to be a part. Thank all of you who have been so patient with my slowing participation in the workings of the organization and I leave the Board, after nineteen years, with a comforting knowledge that the museum is in good hands. I have no intention of leaving the V.A.C. and will continue to write my stories for the Unscramble Newsletter if the Board wishes me to.

Submitted this day 11 November 2014.

Norvin C. "Bud" Evans

EXECUTIVE OFFICER'S REPORT

HAPPY NEW YEAR!

2014 WAS A GOOD YEAR FOR THE VALIANT AIR COMMAND. Our program to host an increasing number and variety of special events coupled with our push to look for ways to increase our advertising foot print has combined to bring additional visitors to the Museum. One of these events is the monthly fly-in breakfast from 8 to 11:00 AM on the second Saturday of each month. Chef Larry provides the pancakes, omelets and all the sides. Everyone has to pay for the meal, however you don't have to fly-in to enjoy the breakfast and meet the pilots. Your Membership Card gets you into the museum for free, so drive on over for a visit and see all the changes. Our largest turnout so far has been just over 100 participants.

THE TICO BELLE CONTINUES AS OUR FLAGSHIP participating in several key aviation events including supporting the National Parachute Test Center at Dunnellon, the Stuart Air Show and the Ft Myers Aviation Day in the fourth quarter, 2014. In the future we plan to fly a passenger flight at 11:00 AM each month in conjunction with the fly-in breakfast. Additional weekend passenger flights will be flown as required. Make

reservations by calling the Museum Gift Shop. For that special person or special occasion we have Gift Flight Certificates available.

The F-86 SABER JET and the A-4 SKYHAWK have both supported several aviation events this past year. Our near term goal is the return of our TBM to flight status. We plan to fly all three of these great Warbirds and many others in our March AirShow.

Speaking of our AirShow, the TICO WARBIRD AIRSHOW 2015 is less than 90 days out—13-15 March, and The USAF THUNDERBIRDS will be headlining our event. Media Day will be Thursday morning, 12 March at the Warbird Museum Main Hangar. Capping the day will be a Dirty Flight Suite BBQ at the same location hosted by the VAC for AirShow Volunteers & Participants. Friday night the VAC will host the VAC Members and AirShow Participants' Dinner & USO Show. We will have a 1940s Big Band for music and dancing. This dinner is FREE TO VAC MEMBERS, however, advanced reservations, made by calling the Gift Shop (321) 268-1941, they are mandatory since this dinner is catered and we need an exact number. Many changes will be in place for our Warbird AirShow. In addition to the Free Entry for VAC Members we have added a VAC Members Hospitality Chalet. Be sure to have your membership card with you. Another new change is the addition of Reserved Box Seats on the show line. Each box seat area will contain 6 seats, and box seat areas can be combined for larger parties. Along with advanced discount tickets, these box seat areas can be reserved in advance on line at our airshow ticket and information page. Along with our expanded carnival there will be a special

activity area hosted by the YMCA for the younger children that will be called the "Kids Zone". There will be many other improvements that I am sure you will appreciate.

WE NEED MANY MORE VOLUNTEERS! Member and Volunteer involvement is the key to AirShow success. Solicit your friends and neighbors to become a Volunteer. Go to our web site: www.vacwarbirds.net and link over to our Volunteer Page. Fill it out and send it; we will contact you. Our next Volunteer AirShow Organizational Meeting will be held at Noon in the VAC on Saturday, 10 January in the Museum Library. Hosted lunch will be provided.

Bob Boswell,
Executive Director

FACILITIES OFFICER'S REPORT

I appreciate the confidence of the Board Members in nominating and confirming me as Facilities Director.

During the next several days I will poll for items to be addressed that are mandatory, time sensitive and those that are wish list items.

On the front burner now is remediation for emergency lighting, Power washing main hanger doors to remove mold and mildew and correcting a roof leak in the Vietnam Hangar.

If anyone has items they want included please let me know.

Norm Daniels,
Facilities Director

FINANCE OFFICER'S REPORT

Dearest Membership,
I have been here quite a few months now and while I have tried to make it a point to introduce myself to all the lovely volunteers, I have not formally introduced myself to the membership.

Now, many of you may not know this but I

was asked to be a part of VAC on Valentine's Day this year and inducted into the BOD the following Tuesday. I will admit it was a bit daunting to suddenly be a part of such a big organization and suddenly within a month be responsible for the AirShow finances. So, I was baptized by fire and have been moving very fast since.

Now Ladies and Gents, I wouldn't change a thing! I truly enjoy being at VAC. It is with a happy heart I write to you and beg for forgiveness for not writing sooner. Honestly, words really aren't my forte. I am a businesswoman by trade and a true numbers girl by heart. I have been analyzing the museum, looking for ways to improve. Mostly because I believe, there is always room to improve. I wholeheartedly want the museum to succeed and am doing my best to make that happen, even if at times it is unpopular.

And sometimes we have to make a decision to try something new. One of our new ventures is an online store and a new point of sale system. The online store (a true work in progress) will reach beyond Titusville and the new point of sale is cutting edge. It will improve efficiency by a wide margin and help me gauge profitability on a micro level.

I have also been sticking my nose where it doesn't belong, suggesting ideas to my fellow directors. There is nothing like being the new girl and poking around in someone else's sandbox. Thankfully, the fellas know I mean well and have been generous with their attention. They truly are a good bunch and I feel blessed working with them.

Thank you for letting me be a part of something special.

Have a very Merry Christmas and a safe Happy New Year!!!

Hugs & Kisses,
Shan Rubin
Finance Director

MAINTENANCE OFFICER'S REPORT

Tico Belle - Our flagship the C-47 "Tico Belle" has a dedicated crew of volunteers that are continuously attending to her needs and well being. We are all very proud to have the opportunity to support a distinguished WWII veteran as the "Belle"

A few months ago just after takeoff, the right engine failed a few miles north of our airport. Lady luck was with us, we were able to reverse course and land her safely. We shut the right engine down after taxing off the runway, but by then it was too late to save the engine.

Fortunately with the help of Tom Reilly and our dedicated crew of volunteers, after a few months of hard work the engine has been replaced and she is flying again.

Today we had a visit from the FAA to complete an inspection of the "Belle". The FAA was pleased with our progress and gave us the go-ahead to continue.

Many times we forget to say to our hardworking volunteers "thank you" for without you it would not be possible to keep these veterans flying.

TBM - Our TBM-3 has been undergoing a complete restoration for more than five years now. We can finally see the light at the end of the tunnel. There are a few items remaining. Currently Todd Grothouse, our AP/IA, is going thru the plane with a fine tooth comb. Todd is very thorough and when he is finished we can be assured we have a safe compliant airplane. Parallel to Todd's inspection we are working with the FAA on return to flight documents required. Both efforts can be done at the same time and either can be completed independent of each other. We are looking forward to our TBM

flying in our next air show.

We have been extremely fortunate to have two separate FAA teams working with us on both the C-47 and the TBM. They are very knowledgeable and have been very supportive.

A-4C Skyhawk - Another of our Museum's assets is the A-4C Skyhawk. This is also another distinguished war veteran.

Phil Ricker cares for our A-4C along with Joey Kurimai. Phil has been with the A-4C all through its restoration to the present. The A-4C has been attending scheduled events for several months. Recently it went to Jacksonville Naval Air Station for their annual air show. In the future we will be keeping you informed of the A-4C's schedule and activities.

Jim Owens
Maintenance Director

OPERATION OFFICER'S REPORT

Welcome to the New Year. I hope your Holidays were great, with lots of fun stuff under the tree!

Let me start by introducing myself. Many of us have met, particularly if you're involved with our aircraft and hangar facilities, as well as some of our past AirShows. I came onboard with the VAC back in 2010, and am now assuming the Operations Officer duties from Bob Boswell, as he moves up to the Executive Officer position.

I'm one of your fliers here, with the orange and white T-28C Trojan. It has recently been painted to match one of the birds I learned to fly, as a Navy Ensign back in early 80's. So now the pilot's a bit thicker, and the plane is less oily than back in those days. I spent 7 years on active duty, conducting electronic reconnaissance in the Mediterranean, North Atlantic, and Baltic regions as an Aircraft Commander on the EP-3E, followed by a tour in the A-

6 Replacement Air Group (RAG) flying the Navy's TC-4C, a highly modified version of the Gulfstream 1. I moved on into the airline community, joining Delta Air Lines in 1986, where I work as an Airbus A-330 Captain.

Bob Boswell and I just attended ICAS in Las Vegas, which is the annual AirShow performer's conference. We worked with other air show promoters, advisors, and performers, gathering information, ideas and advice, and worked the floor, to flesh out our upcoming AirShow in March. As you must be aware of by now, our spring AirShow has been selected to host the Air Force Thunderbirds. Great news and lots of fun, but it comes with a price...lots of work. We are still rounding out other performers. I don't want to go into too much detail until we have contracts signed. By the time you read this, we will have obtained some great classic war birds, as well some very entertaining performers for our event. Of course, it also helps that we have such a great selection of aircraft and talent right here in the museum, as well as many of our VAC members who will bring in their own aircraft from other locations.

Be sure to keep checking our website and Facebook pages. They are going to be updated often with announcements, pictures, and videos about our museum and our show, as well as upcoming events that we're involved in. Take the time to visit, "share" and "like" our Facebook updates, and get your friends and neighbors to do that too. One big take away from this ICAS conference, was just how powerful these tools are, and how cheap and easy it is, to take advantage of them. Much of our target audience gets their entertainment ideas from these areas, and the more eyeballs we get on our museum, and our show, the more successful we will be.

While it has been a tumultuous few weeks here, with our shifting of responsibilities, we have the opportunity to make some great things happen in our museum. Our strongest asset, isn't some one individual's leadership, airplanes or money. It's YOU, our members. Personally, I joined the VAC, because I liked the people. Not only because they liked airplanes or built them, maintained them, flew them, or fought in them. It is the chemistry, warmth and camaraderie that captured me... I feel like I am part of this team and it makes me want to come back for more.

We have some "interesting challenges" ahead of us. But we also have very talented and hard working shipmates here, and we can make this a successful AirShow, and museum, by working together. We have common goals and are part of the same family. Within any crew, you will have your discussions, disagreements and "timeouts", but the teamwork and dedication prevails. What we share is unique and hard to duplicate. Not with money, fancy slide shows or business plans... It is something that grew over the years from something small to what it is today... Our Museum. Now, OWN IT!

The door to Operations is always open to you even if you just want to vent. When you cannot find me in my office, you'll find me on the hangar floor, looking over your shoulder, learning about what you do, listening to your thoughts and ideas, or perhaps getting my hands dirty with the team in the maintenance hangar.

As many of you already have done, you would be amazed how much we can learn from other folks, our shipmates working around our hangars. There is a wealth of knowledge, experience, and talent out there. We need to tap into that, and help make our operation grow. I'm looking

forward to being a part of that experience, with you, shoulder to shoulder, side by side, and when you fall behind I will be there, and ask that you do the same for me, if I falter. That is what shipmates need to do for one another, and for our Museum.

Karl Holly,
Operations Director

PROCUREMENT OFFICER'S REPORT

F-100C airplane - After more than a year's effort to obtain an F-100 airplane for VAC Museum display we have made arrangements to move a USAF one from Arkansas. With their coordinated help from the USAF Warner-Robbins Museum personnel and a small donation it was possible to inspect and insure the safe condition of the F-100. Authorization from the USAF in Ohio followed. Arrangements for the VAC to disassemble and transport are now underway. Winter weather conditions may affect the schedule however.

F-100A airplane - Discussions with the Baltimore Glenn L. Martin Museum leading to obtaining one of their two place F-100A training airplanes have now been cancelled.

Hummingbird Glider - The Smithsonian Air and Space Museum has donated an extra glider from their collection to the VAC Museum. The glider, PG-185B, was part of a glider research and production program in the 1980's built by the Nelson Aircraft Company in a motorized two seat version. It will be suspended and displayed in the hangar. The donation included a custom transport trailer and navigation items.

F-16 Airplane - With the efforts of the Grumman Restoration Group the recently acquired F-100 engine nozzle is being installed in the F-16C. This addition will

provide a display profile of the combat aircraft.

Navy Aircraft Inspection - We recently underwent a USN Officer's inspection of all aircraft that are on loan from the USN Museum. The purpose of the program is to insure the museums are properly maintaining the aircraft and acknowledge USN ownership. The condition of the F9F and T-33 was praised.

Aircraft Signs - New display signs for the Canberra and TBM aircraft have been designed and manufactured. Stands for mounting the signs are being reworked for sign installation.

Bob Frazier,
Procurement Director

PUBLIC RELATIONS OFFICER'S REPORT

We had a variety of very enjoyable events happen at the VAC recently. First up was the Rocketman Triathlon, October 12. The 700 runners in this event came up Tico Road, circled our facility and admired several of our airplanes, and continued with their race. A typical feedback (from a gasping runner) was "Best venue ever! Love your aircraft!"

We then hosted a wedding rehearsal dinner on October 23. Phyllis has posted pictures of the extraordinary decorating job that Virginia, Ann and our many volunteers did. The family was ecstatic! We followed that two days later with a Space Coast Honor Flight fundraising dinner. One again, our volunteers went "above and beyond" to create a memorable event.

We were then asked by Titusville Mayor Jim Tulley if we could host a dinner for the Space Coast League of Cities. We worked with the Mayor, a longtime and enthusiastic supporter of the VAC, and hosted a wonderful event on November 10. Most of the elected

officials in the county were represented. Many thanks, again, to Virginia, Ann and our many volunteers.

Somewhere in there, on November 7 and 8, we held our own Veterans Day weekend Open House. Many thanks to the aviation experts and aficionados who donated their time, to the pilots and aircraft owners who entertained us, and to the automobile clubs and nature lore experts who participated.

I'm adding this at press time: go back and read my fellow directors' reports. Wow! We have some terrific Board members and each has his or her own very engaging writing style. I'll take a lighthearted dig at our "new kid" Shan Rubin. She writes like she's Mary Poppins. Believe me, wonderful personality notwithstanding, she is "loaded for bear" when it's time to talk about how to manage and improve YOUR organization.

Wishing you the happiest of Holiday Seasons, and a healthy, happy and prosperous 2015!

Ron Davis,
Public Relations Director

RESTORATION OFFICER'S REPORT

F-16 VIPER

The tail pipe has been attached to the after-burner assembly. It is ready to be installed into the fuselage.

F-86 SABRE JET

Reconstruction of the nose assembly continues with the fabrication of new doublers and added gussets to support the new skin assemblies that were fabricated.

CANBERRA (B-57)

The main entrance door has finally been completed with the addition of a new fabricated replacement skin. We ordered a new lock assembly and installed it in

the door. Work is still ongoing on the repairs to the lower aft fuselage tail bumper area.

F11F-1 TIGER

The new canopy glass was removed from its storage container. Work has begun on fitting it to its structural frame. The work on installing the attachment bolts for the right wing is on going

George (Dutch) Graefe,
Project Restoration Officer

FROM THE GIRLS IN THE PX

Another year gone and we are still going strong. The old saying "The older you get the faster it goes" is so true. We are so excited to have the Thunderbirds back for our Air Show. Our goal here is that this Air Show is going to be our biggest and best show ever. Can't believe it is only two and a half months away, guess I better get moving and start ordering things, right Lloyd; he loves it when I order lots of stuff. We have a lot of new items in the Gift Shop, so please stop in and see us.

Our prayers and well wishes go out to Pam and hope she gets better soon, we need her back at the museum to keep us all inline.

May all your good wishes come true in 2015. God bless you all.

Hope to see you soon.

Pam & Anita

F-105D THUNDERCHIEF PROGRESS

Since the last update work has progressed as follows: All the missing tail section panels including the drag chute door have been installed. Missing hinge covers for the speed brakes have been installed. Final corrosion issues on the top and leading edge of the left wing have been addressed and ready for first coat of primer. The pilot's seat has been

removed stripped of old paint, primed and painted. Refurbishment of the instrument panel as well as the cockpit is well underway. The gas fill probe has been released from its bay. The probe bay has



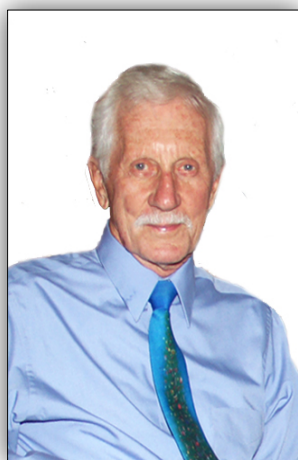
been cleaned, primed and painted. The bomb bay gas tank has been removed for painting and will be reinstalled once the bomb bay and bomb bay doors have been cleaned, primed and painted as applicable. Next items are to complete tracing the wiring to power wing lights, beacons and marker lights. Once the F105-D has been pulled outside the hangar we will remove the canopy for refurbishment and fix the fiberglass rot at the top of the vertical fin.

Norm Daniels

DEAR FRIEND GONE WEST

Norbert "Norm" A. Lindsay 1938 - 2014

The Valiant Air Command is deeply saddened by the loss of our lifetime member Norbert "Norm" A. Lindsay. Norm was a dedicated, loving and hardworking member. He served as Facilities Officer on our Board of Directors for a number of years. Norm



passed to his Father's home on 15 November 2014 after a brave battle with cancer.

Norm was born on 18 April 1938 in Pittsburgh, PA. He served in the U.S. Navy and was retired from the Air National Guard. He also retired after 36 years as Regional Station Manager for US Airways.

His love was not only for our warbirds, but also for antique trains and antique automobiles. His love for them brought "Planes, Trains and Automobiles" to our Memorial Day Open House and Veteran's Day Open House. Norm was the catalyst for the local car clubs to show their cars at our Annual AirShow.

Norm is greatly missed by his wife, Gaye, his children and grandchildren as well as his many friends here at The Warbird Museum.

Our thoughts and prayers go out to Gaye and their family members.

David Rees,
Personnel Director



WAR STORIES & WAR MEMORIES

The Un-Scramble will publish War Stories and War Memories from VAC members when and if there is space available. We reserve the right to reject any submissions for any reason. The Editor.

AVIATING WITH EVANS

Strange Aircraft

During my eight years of active flying as a pilot I flew some very unusually configured aircraft. Among some of the most memorable of those were the NF-100F Super Sabre and "The Sandcrab". In the mid 50's I was an Experimental

Test Pilot in the Fighter Test Operations

at Wright-Patterson AFB, Ohio. We had many modified fighter aircraft which required a special checkout in each aircraft. No two F-86's had the same cockpit instrument



and some had external stores or airframe modifications. We had F-89's, F-94's, F-101A's, F-84E, G and F's, F80's and F-100's were among the modified fighter aircraft in which we had to test many experimental systems. Of all the strange configurations I'm certain that the strangest was the NF100F with a very high sink rate approach to landing system to be evaluated and refined. There were mods made to this nice flying supersonic aircraft that would make the F-100 North American Aviation Company designers turn purple. To start with the rear cockpit was completely filled with what at that time was "State of the art" computers. There was a visual display projected on a special windscreen for the pilot to follow during the very, very steep angle approaches to landings. To enhance the pilot's ability to make those very steep angle landing approaches several airframe and engine mods had to be made. The normal speed brake which is mounted on the bottom of the fuselage was replaced by a very large "Dive brake" which tripled the size of the standard speed brake. It had holes throughout its surface and was so large that it could not be lowered while the aircraft was on the ground as it extended below the level of the landing gear. The wing and landing flaps were modified to include the air flow being blown down over the flaps which kept the lift component over the wing reducing the stall speed. (Such as is used on the

F104). The most radical modification was the removal of the Pratt-Whitney J-57 Jet engine afterburner and the installation of a "Clam-shell" device which deflected the engine exhaust forward. (That later many aircraft use as "Thrust reversers"). It added a few feet to the length of the aircraft and gave it an odd appearance. On approach and landing all these modifications vastly reduced the aircraft speed. It also added a significant distance for take-off roll. This configuration was made to create a flight path that the "Heads-up" approach guidance system that could be used for a power-off glide path for Space craft such as the USAF Dinosaur and NASA's Space Shuttle. (Which were only on the drafting boards at that time). Flying this unusual machine was a real challenge for the Test Pilot. First of all just getting off the ground with no after-burner and the other devices made it a demanding chore because of the slow rate of initial acceleration and long take-off roll before reaching lift off speed. The mission profile was to climb to about 15,000 feet and set up a long approach reaching a point about 3 miles from the approach end of the runway. At that point all the drag devices were deployed and the pilot flew the profile directed by the "Heads-up" display projected on the special glass in front of the windscreen. From the pilots' perspective it was a very unnatural feeling which challenged the pilots' natural visual control responses when flying steeply towards the ground. All your senses told you that you are diving towards the ground at an unrecoverable angle. The aircraft is shaking like a dog just getting out of a lake and your flying senses are convinced that you can't pull out without crashing into the ground where your "Guidance" system is directing you. During the first portion of the test program the system

was programmed to level out at a higher than ground level landing spot but as the test flights progressed it was lowered to a full touch-down on the runway. I was not the primary test pilot on this program so I only flew a few of those demanding test flights but it is an experience I will always remember. In later years I flew several simulated approaches and landings in the "Space Shuttle" simulator and the simulation was very close to those experienced in that odd-ball NF-100F.

Another of the strange aircraft I tested was named the "Sand Crab" by



those of us involved in its' design and testing. It was the result of several design changes made to the original configuration as a "Proof of Concept" program to design an aircraft that could operate out of sand that was too soft to walk in. We contracted Robertson Aircraft Company in Everett, Washington to radically modify the skeletal O-2 to the design we finally ended up flying. Following my 10 test flights at Everett, during which several mods were made to the first design, we moved to M.S.U. where we contracted the Mississippi State University Aero-Engineering department to help with design changes, engineering test support and continue design changes. Their help was also essential to my flights taking off and landing from the sand runway they had built. I made three flights in and out of the sand runway and then 42 more flights out the desert in Saudi Arabia. There has probably never been an aircraft

designed, built, flown, modified several times and all completed as rapidly as was that of "The Sand-crab"! The idea was conceived in April, first flight in August, flight out of the sand after several major aircraft re-deigns, transported and demonstrated in Saudi Arabia all before the end of the year. It is the only program that I have been associated with that had money available any time it was needed. Not only did we build and fly the "Sand crab" but highly modified and flew two other "proof of concept" aircraft and took them to Saudi Arabia along with the "Sand Crab". I had full control of all the flight testing and ended up as acting President of The BRICO Company when the president of the company became very ill and unable to manage the program.

N. C. "Bud" Evans ©

AN UNUSUAL DINING IN DINNER

By Joseph Reus, Major, USAF Ret.

One Monday morning at roll call with our B-52 squadron at Bergstrom AFB at Austin, Texas, my name was mentioned and told to see the wing commander. Having no immediate duty, I told the aircraft commander of our crew that I'd head over to headquarters to see what the Colonel wanted.

As soon as I arrived I was called in and told to take a seat. The CO said that at the next Dining In I would introduce our visitor and guest speaker, the Chief Of Staff of the Danish Air Force, who was on a U S tour and would visit our base after touring Offutt Air Force Base, Headquarters of the US Strategic Air Command. I was used to the Colonel's small jobs like this, such as writing small pieces about various selected individual for the press and the like, and introductions.

The CO handed me a small slip of paper with a Colonel's name and a telephone number at the Pentagon Air Force Headquarters. He got up, walked around his desk, patted me on the shoulder and said, "Major, make sure you accurately get all the info on this man's background, he's an important visitor."

I walked next to the Adjutant's office to use his phone; called the number I had, and got the Colonel whose name I'd been given. I told him why I called and he said he had everything I needed. The Adjutant handed me a legal pad on which I carefully wrote down all of the details about our distinguished visitor-to-be. On return to our squadron HQ I typed up the needed resume.

When the evening for the Dining In arrived, everybody who wasn't on duty showed up for the command performance in mess dress uniform with all badges, miniature ribbons, spit and polish, because the Strategic Air Command (SAC) took this all very seriously and followed it religiously. All male and female officers were required to attend. There were no others except honored guests.

When we were called into dinner, we each went to our places and stood at attention while the senior staff and the honored guest were shown to their seats. I'm sure everyone was as startled as I was by the appearance of the Air Chief Marshal, Commander of the Danish Air Force. He wore the red and gold badges of rank over a light tan uniform, similar to the Royal Air Force (RAF), but amazingly his head was covered mostly by bandages, except for his eye glasses- and his left arm was encased in a matching tan sling.

Everyone was staring; there was not a sound in the room. The Colonel rose and walked to the mike. He introduced his

staff, then said, Major Reus, come forward and introduce our honored guest. I arose, walked forward and completed the introduction properly, but I was probably on autopilot the whole time.

The Air Chief Marshal with difficulty struggled to his feet, slowly walked to the microphone, and began by telling us he had been in a taxi accident in New York. The limousine which had been scheduled to pick up himself and his aide did not show. To arrive on time at the Waldorf where he was to speak they had to use the taxi. He spoke English with somewhat of a British drawl as if he'd been educated in England, but with a German accent. Because of what happened afterwards I don't actually remember much of what he spoke about the Danish Air Force's rebuilding after WWII, but after about five minutes or so he made a few comments that didn't seem to fit in - they were humorous, then they began to actually be funny. The officer audience first grinned, then looked at each other- as if "what's going on."

Then he said, "I probably don't need this anymore." He reached up and pulled away a large part of his head bandage. He looked vaguely like someone you knew. Now his accent fell away and he talked like a local Texan. When he pulled away the remaining head bandage and took his arm out of the sling, we finally all recognized "Cactus Pryor" a local TV personality and comedian. The only "Danish" he ever saw was at the bakery. The room exploded into laughter, along with him. This Dining In lasted much longer than usual when Cactus did one of his comedic turns and we all had the longest laugh we ever had in SAC. It was also the only comedy held at a Dining In.

Everywhere I went on Bergstrom AFB for weeks and weeks all the other officers remembered I'd been the "pigeon."

Joseph Reus, Major, USAF Ret.
Restoration Volunteer

Editors note: This is a classic example of the greatest generation. It will be published in the 2015 AirShow Program, but you get to read it here and now.

Vietnam

*By Col. Terry Yon
Reprinted from 2010 AirShow Program*



1959 - 1975

Major Bruce “Snake” Crandall
Captain Ed “Too Tall” Freeman

Just one example of the legacy of Vietnam pilots

The theme of this year’s AirShow is “Honoring the Memory” to celebrate and remember the many brave military members who served in the Vietnam War. Pilots, as in all wars, bore a unique burden and helicopter pilots in particular. The UH-1 “Huey” helicopter become emblematic of the Vietnam War and this is just one story that illustrates the many uncommon acts performed daily by common soldiers, sailors, marines and air force personnel during that time.

You’re an 18 or 19 year-old-kid. You’re critically wounded and dying in the jungle in Vietnam. Your Infantry unit is outnumbered 8-1. The enemy fire is so intense, from 100 or 200 yards away, that your own Infantry Commander has ordered the Medi-Vac helicopters to stop coming in. You’re lying there, listening to the enemy machine guns and you know you’re not getting out. Your family is halfway around the world, 12,000 miles away, and you’ll never see them again. As

the world starts to fade in and out, you know this is the day. Then, over the noise of gunfire and explosions, you faintly hear the sound of a helicopter and you look up to see a Huey -- “Snake” and “Too Tall” are coming for you. They are not medical evacuation pilots, so it’s not their job, but they are flying their Hueys down into the intense enemy fire anyway. One by one, they drop in and sit there in the withering machine gun fire, as they load you and others on board. After what seems like an eternity, they lift off and fly you out through a hail of bullets, to the safety of a forward hospital. And, they keep coming back -- 14 more times; taking about 70 of you and your buddies out, who would not have had a chance for survival otherwise. Sound like a Hollywood movie? It was real and actually happened! On the morning of November 14, 1965, Major Bruce Crandall’s unit was transporting a battalion of soldiers by Hueys to a remote spot in the Ia Drang Valley, to a landing zone called X-Ray. After several routine lifts into the area, the men on the ground came under a massive attack from the North Vietnamese Army.

On Major “Snake” Crandall’s next flight, three soldiers on his Huey were killed and three more were wounded. But, instead of lifting off to safety, Major Crandall kept his Huey on the ground—in the direct line of enemy fire—so that four wounded soldiers could be loaded aboard.

Major Crandall flew the men back to base, where their injuries could be treated. At that point, he had fulfilled his mission; but, he knew that the soldiers on the ground were outnumbered and low on ammunition. So Major Crandall decided to fly back into LZ X-Ray. He asked for a volunteer to join him. Captain Ed “Too Tall” Freeman stepped forward. In their unarmed Hueys, they flew through a cloud of smoke and a wave of bullets.

They delivered desperately needed water, ammunition and other supplies and then waited a "lifetime" as more wounded were loaded, even though medical evacuation was really not their mission. If "Snake" and "Too Tall" had stopped there, they would have been heroes, but they didn't stop. They flew back into LZ X-Ray again and again. Crandall flew a total of 22 flights and Freeman flew 14 flights into what they called the Valley of Death. They made those flights knowing that they faced what was later described as an "almost unbelievably extreme risk to their life." Over the course of the day, Major Crandall had to fly three different Huey helicopters. Two were damaged so badly they could not stay in the air; yet, he kept flying until every wounded man had been evacuated. He and "Too Tall" retired from the battlefield only after every need of the battalion had been met.

When they touched down on their last flight, Major Crandall and Captain Freeman had spent more than 14 hours in the air. They had evacuated some 70 wounded men and provided a lifeline that allowed the battalion to survive the day.

Many years later, when told that they were both being considered for the Medal of Honor for their actions that day, Bruce Crandall took himself out of consideration, saying that his friend Ed "Too Tall" Freeman had volunteered to go back into LZ X-ray and that, as Company Commander, he was just doing his duty. Freeman was awarded the Medal of Honor in 2001 - but the story does not end there. After considerable deliberation and strong lobbying efforts, Bruce "Snake" Crandall has finally accepted his long overdue and much deserved Medal of Honor in 2007. Sadly, his friend and comrade in arms Ed Freeman, was snowed in and could not make the White House ceremony. Ed Freeman passed away in 2008. A total of 246 service

members were awarded this ultimate honor during the Vietnam War; 154 of them posthumously. *(By Col. Terry Yan)*

2015 VALIANT AIR COMMAND DIRECTORS



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Special Photo Of The Past Quarter



The A-4 and the newly restored F-86 fly together for the first time. The F-86 rejoins the VAC's flying inventory.

The Un-Scramble Team wish you a very Happy, Healthy and Prosperous New Year

**Happy
New Year!**

