



Tennessee Valley Flyer

4th Quarter 2016

www.afa-huntsville.org

What a busy year it's been...



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Galaxy of Lights 2016

by Rick Driesbach



Come share the season with the AFA at the **GALAXY OF LIGHTS**. Once again this year, your chapter will be supporting the annual Galaxy of Lights event at the Huntsville Botanical Garden. Our night to support is Wednesday, 21 December from about 4:30 to 9:30 PM. We still need a few more volunteers. Chapter members, spouses and teenage children are welcome. Rain or shine, warm or cold, we will provide traffic control, collect entry fees, and of course wish everyone a Merry Christmas and a Happy New Year! Volunteers bring a dish to share and there is lots of fun and camaraderie during the evening! We end up helping the community and getting our chapter's name in front of 700 or 800 carloads of holiday visitors! If you would like to volunteer, please contact Rod Fried rodneyn.fried1@gmail.com and Rick Driesbach, rick.dreisbach@gmail.com no later than **13 December**.



In the Hands of Strangers

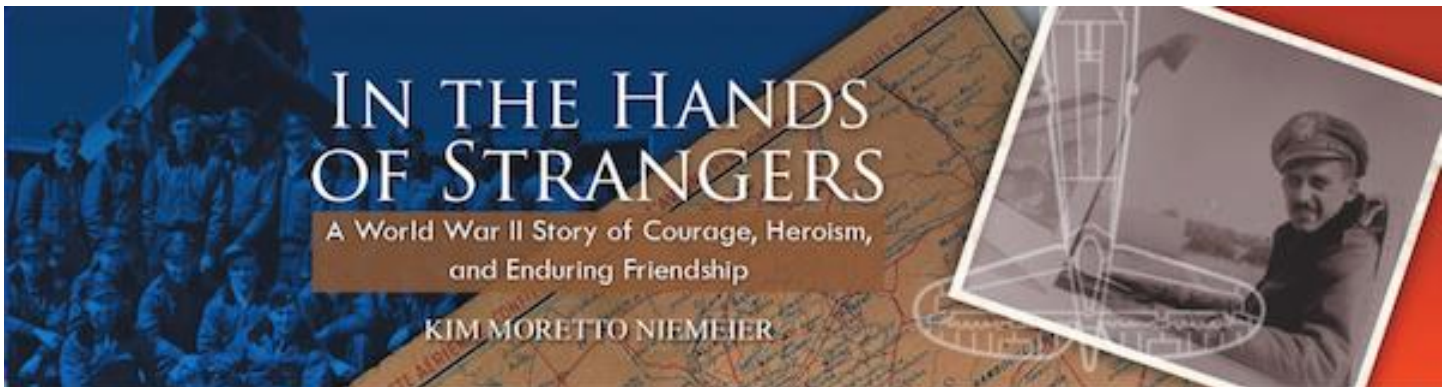
AFA Chapter 335 1st Quarter Luncheon

Mark your calendars: on February 23rd, the Tennessee Valley Chapter of the AFA has the pleasure to host Ms. Kim Niemeier when she will speak about the heroism her father displayed during WWII as described in her book, In the Hands of Strangers. From her website:

“On June 12, 1944, six days after the D-Day invasion of Normandy, U.S. fighter pilot Fred Moretto is ambushed by German Messerschmitt 109s. Barely escaping his burning P-47 Thunderbolt, Lieutenant Moretto parachutes into the French countryside where villagers working for the Resistance conceal him from the Germans for two months in a bread oven, a secret perch in an attic, and a hayloft.

In 1993, nearly 50 years later, Kim Moretto Niemeier convinces her father to return to France. Reuniting with the people and the places where he survived against all odds re-invigorates his French Connection and launches Kim’s 20-year odyssey to uncover the dramatic details of her father’s inspiring story.”

We will meet at the Redstone Federal Credit Union Atrium on Wynn Drive at 11:00. Look for sign-up details in your e-mail right after the New Year. RSVPs will be required.



US Air Force 69th Birthday Celebration

by Rick Driesbach

Our chapter celebrated the 69th birthday of the United States Air Force once again this year with a social at the Jackson Center in Research Park on 24 September. Thirty-six members and guests enjoyed good old fashioned, informal Air Force camaraderie including heavy hors d'oeuvres and a cash bar. During the evening, standard toasts were offered to the Commander-in-Chief, the Air Force Chief of Staff, and others. John Phillip created and presented an entertaining video collage of pictures provided by attending members, showing

themselves at earlier times in their Air Force careers. Sam Liburdi spoke to the group about his efforts to have the Association of Air Force Missileers hold their 2018 national meeting in Huntsville. Finally, a rousing verse of the Air Force Song was sung by all, and a birthday cake was cut with an Air Force Academy Saber by the youngest and oldest (Skeet Vaughn) members present. Planning is now underway for how the chapter will celebrate the 70th birthday of the U.S. Air Force next September.

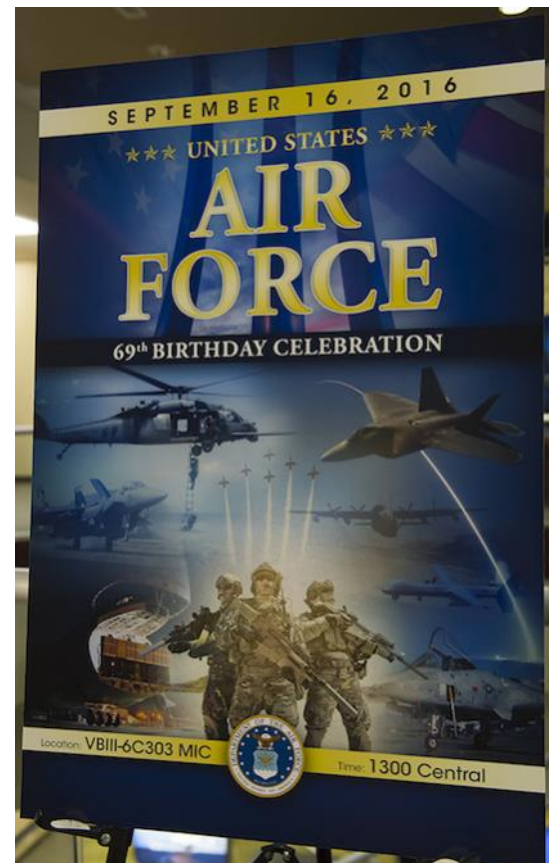
US Air Force Birthday Celebration at MDA

by JP Pennell

Every year, the Missile Defense Agency celebrates the United States Air Force birthday with a ceremony for all USAF Active Duty, Retired, Reservists, Guardsmen, and Veterans to salute the many great accomplishments of our service. Brig General Bill Cooley, MDA's Program Executive for Programs and Integration, served as the host of the event, held on September 16, 2016. This year's celebration was attended by more than 50 airmen, past and present, as well as a number of senior MDA leaders. The ceremony included messages from the Air Force Chief of Staff and the Chief Master Sergeant of the Air Force, comments from BG Cooley, the traditional cake cutting by the most junior and most senior Active Duty members, and a rousing rendition of the Air Force Song.



Brig Gen Bill Cooley, MDA's Program Executive for Programs and Integration makes the first cut of the cake with the most senior and junior active duty members at the event.



Tut Fann USAF Birthday Celebration

By Scott Patton

Team - thank you all for your support for this year's celebration of the Air Force's Birthday at Tut Fann - especially Guy Broadhurst (and his excellent cake), Bailey Erickson-Nichols (seen helping our oldest Airman forward), Maria Lalaine Macalinga (our youngest Airman), Carl Penaranda (who brought some AF tokens & other items as handouts), John Phillip (who took some great pictures and still looks good in his uniform), and Jack Royster (our presiding officer for the event). Thanks again to Jim Porter for loaning us his sabre to cut the cake.

While my count may not be accurate as we had some Veterans coming in late (including our "real" oldest Airman - Raymond Glover (96 - joined in 1940 and served through WWII) - but not in time to cut the cake), I believe we had around 15 Veterans at the event. Narsh Benson (87) was our oldest Airman again this year at the time of the cake cutting - you can see him in the pics.



The Huntsville Veterans Day Parade – My Favorite Experience with Alabama Patriotism

By John Phillip

You would think that after spending a career in the US Air Force, I would have a good sense of patriotism. I think I do have a solid sense of patriotism; however, I must confess that it has been more on a professional level, more in my head – unlike the patriotism that is seen at the Huntsville Veterans Day Parade, which is from the heart.



I have been fortunate to participate in the Huntsville Veterans Parade with our AFA chapter for about six years. I have found that I always experience some incredible Alabama patriotism on a very personal level that would definitely soften and strengthen the heart of any veteran.

I saw a young mother with a three year-old and five year-old on the sidewalk. Each child had created a colored drawing that had some simple design and the message of “Thank You”. As I walked by them, the mother waved at me and intently said “Thank you for

your service”, while encouraging her children to also wave at me and say “Thank you”. This was a very moving display of personal patriotism for me.

Here is a mother who had likely given some explanation to her children at home about honoring veterans for keeping their country safe. She encouraged them to make a drawing to take to the parade and guided them to graphically express that appreciation in a drawing. Then, this mother also encouraged her children to hold-high their drawing and wave to all the passing veteran groups in the parade. I was really amazed at how this mother was transferring a valuable sense of patriotism to another generation. It was so simple and so profound. Most impressive, there were many such families along the parade route showing their respect to veterans in the same manner.



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Each year a number of our chapter members walk along side of our four vehicles that make up our parade entry. We are usually in an Air Force uniform or wearing some kind of an Air Force cap or shirt (or maybe even something like a B-52 crew member helmet). Some of us also try to interact with the parade observers. I have tried to shake the hand of any parade observer on my side of the street who was wearing a military uniform or even a ball cap with some military patch. Also, I would offer my thanks to the person for their military service.

I have a strong sense that our Veterans Parade is possibly the only connection that some of these veterans have to their past military service. It is also reasonable that the simple handshake and an expression of appreciation for their past service is the only one-on-one experience that many of these veterans receive. I say this because, after shaking the hand of an elderly veteran wearing a ball cap with a WWII patch and offering my thanks, he made a labored effort to stand from his chair and saluted me. With tears in his eyes, he said, "Thank you, Sir, for recognizing me." I was amazed at how a simple greeting and handshake would make such an impression.



F-35 Scale Model generously provided by the Lockheed Martin Corp.

We can take great pride in our AFA chapter's efforts to organize our parade entry and participate in the Veterans Parade. We can be proud that over 20 members participated in this year's parade. You could hear our Air Force song from one of our trucks. You could see our colorful 4' by 6' AFA banner in the bed of another truck. You could see a beautiful model of an F-35 aircraft on another truck. It was also very obvious that our blue-oriented group was appreciated by the parade observers who were cheerfully recognizing our previous service to the United States Air Force.

Finally, to top off this wonderful patriotic event, many chapter members go to lunch after the parade. We traditionally move to a social setting at our favorite restaurant that is "noted for the great food" it offers free to veterans on this special day.

The sense of patriotism at this parade is alive and well, coming from the hearts of many wonderful citizens. And, it is growing into the next generation. I look forward to participating in the Huntsville Veterans Day Parade for many years to come.

Plotting the Flight Plan for AFA

By Russell Lewey, South Central Region President

What is it like to set the path for the Air Force Association (AFA)? Each September, we get together to build the flight plan for AFA. This past September, I led eight other AFA members (four of us from the Tennessee Valley) as we represented Alabama at AFA's National Convention. We actually started on Thursday, 15 September, with a dinner at Old Ebbitt Grill in downtown Washington DC with congressional leadership and their staffs. Hosted by the Montgomery AFA Chapter, this dinner is an excellent way to meet and discuss in a social setting issues and positions to advocate for a strong aerospace defense and to support our Airmen and their families. Friday we follow-up with a more formal office call, talking with those who couldn't make the dinner.

AFA's official schedule started on Saturday with smaller group meetings. There was a State and Regional Presidents meeting that provided an opportunity for AFA senior leadership to provide some insight into the business portion of the meeting and to hear from the field. At the same time, the Aerospace Education Council (AEC) was meeting, where many got their first introduction to Tennessee Valley's own Greg Ennis as AFA National Teacher of the Year.

The formal business session was launched right after lunch on Saturday. In addition to myself as Alabama's State President, the Tennessee Valley AFA Chapter also had Greg Ennis, Bryan Bennett, and Lee Alford in attendance. One of the main areas of focus for this year's convention was AFA's financial health. AFA, like many other non-profits, is seeing a decrease in revenue with expenses going up. Larry Spencer, AFA National President, has implemented several steps to get our budget back in the black. Cuts in chapter support payments and matching grants, reduced meetings and travel budgets, and staff cuts are not

popular, but necessary if AFA wishes to continue to be relevant in the coming years. Saturday's business session was then wrapped up with those running for various senior positions having a chance to speak to the group and then individually during a question/answer session.



Greg Ennis (c) receives Teacher of the Year Award with (l to r) Dick Bundy, AEC Vice Chair, George McLaren, Rolls Royce External Communication Mgr, David Dietsch, (Former) Field Ops Vice Chair, and Scott Van Cleef, (former) Chairman).

Clearly the highlight of the convention was the evening's Awards Dinner. This year's was especially enjoyable as the Tennessee Valley Chapter took no less than five awards and saw our Teacher of the Year, Greg Ennis, formally introduced to AFA. This is the first year that Rolls Royce would sponsor AFA's Teacher of the Year, so that made it even more special. The dinner is also the introduction of Air Force's Outstanding Airmen for 2016. You can't feel anything but pride and respect when meeting these leaders and hearing all that they are doing.

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("Plotting the Flight Plan for AFA" Continued from page 8)

Sunday comes early with a morning service at the Air Force Memorial, where we hear the names of AFA members who have passed away the previous year. By mid-morning the business session is back at it with the election of our new officers. This year's senior AFA leadership positions are held by:

Chairman of the Board: Whitt Peters
Vice Chair of the Board for Field: Mac Macaloon
Vice Chair of the Board – Education: Dick Bundy
Secretary: Tim Brock
Treasurer: Steve Lundrum
Central Area Directors: Terry Cox

The latter part of Sunday focuses upon approving AFA's Statement of Policy for 2016 and the Top Issues. The weekend wrapped up with a very enjoyable educational and social event hosted Lockheed Martin. Those who attended the reception had the opportunity to see several of Lockheed's products, including the chance to fly an F-22 simulator and wear the latest "state of the art" helmet developed for the F-35 fighter.

All and all, it is a great weekend of camaraderie and a chance to set in motion the plan for all of AFA for the following year. We are always looking for individuals to participate; it is not too early to throw your hat in for the 2017 Convention. This will be the Air Force's 70th Birthday, so it is sure to be very special!

Civil Air Patrol Update

By Skeet Vaughn

The chapter sets aside funds each year to make a \$100 award to one deserving cadet in each of the CAP units in our AOR. In April, our chapter POC, Skeet Vaughn, contacted the Gadsden CAP AL 075 Composite Squadron, the Redstone Composite Squadron, and the Muscle Shoals Composite Squadron advising them of this opportunity. Skeet has received acknowledgement from the Gadsden Squadron Commander, but is still awaiting replies from Redstone and Muscle Shoals squadrons. Skeet will continue to remind them of this opportunity, and that chapter members are always available to present AFA Medals to cadets at CAP award ceremonies.



Tennessee Valley Chapter Collaborates with AIAA to Honor Veterans

By Ken Philippart; Images by Lisa Philippart

Tennessee Valley Chapter 335 collaborated with the Greater Huntsville Section of the American Institute of Aeronautics and Astronautics (AIAA) to jointly honor our veterans in the month of November.



AIAA Greater Huntsville Section arranged a private tour of the US Veterans Memorial Museum in Huntsville for November 5 and invited AFA to participate in honor of our veterans. AFA members Joe Viviano and Ken and Lisa Philippart accepted the invitation and joined AIAA for the tour.

The tour began with an overview of the museum. Opened by private collectors as a non-profit educational institution in 2001 right after 9/11, the museum has an extensive collection of 30 military vehicles including the Ford Pygmy, the oldest known surviving example of the vehicle that became the Jeep. Along with other Jeep models, the collection also contains a variety of military trucks, halftracks, tanks, watercraft and aircraft. Following the orientation, Rob Robley, a Korean War and Vietnam War veteran and retired US Army CW4, guided the group through the museum, explaining the significance of the exhibits while mixing in interesting personal anecdotes from his three decades of



AIAA and AFA members during the tour

military service as an EOD specialist.



Joe Viviano in front of the CAP display he helped create .

After the guided tour, the group wandered the museum on its own before traveling to the Jackson Center to participate in the 50th Anniversary of the Vietnam War event. The group visited the anniversary exhibits including chapter member Zig Jastrebski's River Rats fighter

pilot display. For some of the younger AIAA members, this was the first time they had talked to a Vietnam War veteran and they were fascinated by Zig's war stories. The event concluded with lunch and the opportunity to meet and greet other veterans.

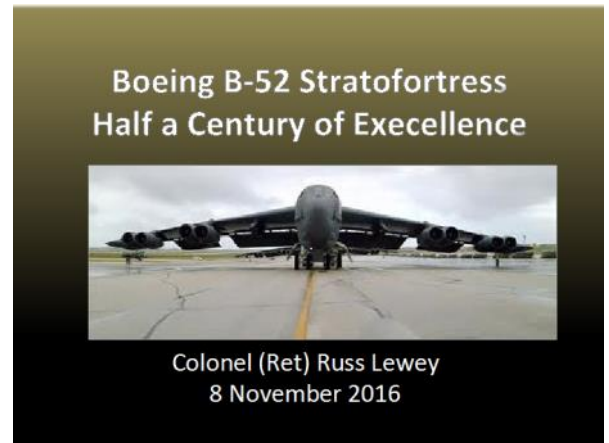


Zig with his flight suit and equipment.

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The following week, South Central Region President and Alabama State President Colonel (retired) Russ Lewey, spoke to AIAA at the Greater Huntsville Section's monthly luncheon. Russ' talk was titled, *"Boeing B-52 Stratofortress: Half Century of Excellence."* AIAA invited Russ to speak in the month of November to recognize Veterans Day, the third year in a row that the Tennessee Valley Chapter has supported AIAA's November lunch presentation. Russ' multimedia presentation covered the long and illustrious history of the B-52 from its design and development to operations during the Cold War and into the 21st century along with his personal anecdotes about flying the BUFF. A lively question and answer session allowed AIAA members to gain more insight into military aviation and operations and broadened the perspectives of the mostly-engineer audience.



AIAA Greater Huntsville Section Vice Chair Naveen Vetcha presented Russ with the Section's challenge coin and thanked the Tennessee Valley Chapter for supporting the section's veteran outreach and educational activities.



AIAA Greater Huntsville Section Vice Chair Naveen Vetcha (l) with Russ Lewey, AFA South Central Region President.

Twelve O'Clock High: My Flight in a B-17 Flying Fortress

By Ken Philippart; Images by Lisa Philippart

My bucket list recently got shorter after I had the opportunity to fly in a B-17 Flying Fortress. Like many of my generation, I grew up watching World War II movies. Since I loved the sky, I gravitated towards flying films like *Thirty Seconds Over Tokyo*, *Tora Tora Tora*, and *Flying Leathernecks*. One of my all-time favorites was *Twelve O'Clock High*, the Oscar-winning story of Eighth Air Force B-17 crews flying strategic bombing missions over Germany. Gregory Peck starred but the B-17 was a worthy co-star, elegant but deadly, graceful yet tough. "Fly in a B-17" got added to my list of "Things to Do Some Day" pretty early in my life. My subsequent career in the Air Force, including studying the leadership lessons in *Twelve O'Clock High* during professional military education courses, kept a B-17 flight on my To Do List for many years.

Fast forward four decades. While poking around the Experimental Aircraft Association's website one Sunday afternoon, I noticed that the EAA's B-17G *Aluminum Overcast* would be at Lunken Airport (LUK) in Cincinnati giving rides over the Labor Day weekend. I also realized that my wife, Lisa, and I would be in Dayton, Ohio that weekend for our granddaughter's first birthday. Dayton is less than an hour north of Cincinnati. I mentioned this to Lisa and also casually (yeah right!) mentioned I had always wanted to fly in a B-17. Lisa didn't react but apparently took the not-so-subtle hint since on my birthday a few weeks later, I opened my card and found a reservation receipt for a ride on *Aluminum Overcast*. Best wife and best birthday ever!

We arrived at LUK early, the day before Labor Day. We weren't sure where to go until we spotted *Aluminum Overcast* gleaming on the ramp in the early morning sun. The annual Lunken Airport Days were just starting and there were other warbirds on the ramp. But *Aluminum Overcast* was the star and it seemed like a beam of light was shining straight down on the B-17. I felt like a kid on Christmas morning.



It was early so the crowds hadn't arrived yet. A few ground crew were milling about. One pointed me to the EAA trailer for checking in. I walked over and dutifully handed over my flight reservation. Without looking at it, the volunteer smiled and said, "I've got you on the list Ken." I was taken aback that he knew my name until I remembered I was wearing my Air Force A2 leather jacket for the occasion and he had just read my nametag. I was handed a waiver to sign. I noted the standard language about the inherent risks of flying, but saw nothing about Luftwaffe fighters or AAA (antiaircraft artillery) so I signed.

My group was to be the first flight of the day. Ten of us were ushered to the aircraft and allowed to take pictures as the ground crew readied *Aluminum Overcast* for flight. We were given a brief history of the Boeing B-17, including its design, advanced-for-the-day wing truss construction and operational history. We learned that *Aluminum Overcast* was a B-17G-VE model, one of 2,250 produced. The aircraft was delivered to the Army Air Forces in May 1945, too late to see combat. We learned her post-war history, how she came

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to the EAA and how she got her name. There was probably a lot more information that I was too excited to remember.



A preflight of the aircraft and safety briefing followed. Our pilot noted that *Aluminum Overcast*, like many warbirds, holds an Experimental air worthiness certificate. He explained what that meant to assure the more nervous in our group. He also relayed he had 16,000 hours of pilot in command time, including several hundred in the B-17. He pointed out the aircraft exits, including the lower nose hatch, aka the Twelve O'Clock High hatch, where the young and limber would swing themselves up into the aircraft. He reminded everyone that the aircraft was designed as a machine of war, not for

comfort, and to beware of sharp edges that could cut you and equipment that could smash your shins or bump your head. That much hasn't changed in military aircraft even today. He warned us not to grab the exposed control cables overhead as we moved about the aircraft since, if we did, we'd be in effect flying the aircraft and probably cut our hands in the process. And he explained operation of the military-style seatbelts that often baffle the uninitiated. Then we posed for the obligatory group picture by the aircraft nose.

Thoroughly briefed, it was time to board the aircraft. Lisa wished me a pleasant flight and walked away to take pictures. We used the aft door. Entering via the nose hatch wasn't an option but most of us weren't young or nimble enough to want to try it anyway. I'd been secretly advised by one of the ground crew to board early and grab one of the primo seats, the radio operator's or navigator's stations. But I was too busy snapping pictures and forgot the advice. I boarded late and got a seat by the waist guns. I settled into familiar, canvas military seating and buckled up. I'd expected the aircraft to be hot. Military aircraft always seem to be hot. But it was a cool morning and tolerable.

The smells brought back a flood of memories from my Air Force days. Military aircraft have a unique smell, a combination of fuel, ozone, canvas, sweat, and unidentifiable scents emanating from big iron that has baked on hot ramps for years. *Aluminum Overcast* still smelled like a bird of prey.

After everyone was seated, the pilots coaxed the engines to life. Clouds of blue smoke billowed by the waist gun windows as the four 1,200-horsepower Wright R-1820-97 engines coughed to life. Radial engines are notorious for smoking upon initial startup. Lisa told me later she saw so much smoke she thought an engine might have been on fire. But that's normal.

The noise was not as bad as I expected. Besides being hot, military aircraft are often very noisy. I

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declined the offer of earplugs and didn't regret it. It was loud but quieter than modern turboprops. Conversation was possible without screaming.

Overhead, I noted the flight control cables, as warned about, and could see them moving as the pilots waggled the control surfaces.

The pilots taxied to the run up area and brought the Wright Cyclones up to power. It was loud but not intolerable. The aircraft shook and strained at the brakes as if yearning to take flight, but no more than other piston engine aircraft.

Run up complete, the brakes were released and the aircraft lumbered onto the runway centerline. A brief pause, throttles firewalled, and the old warhorse ambled down the runway. Acceleration was better than expected and pushed me backward. Of course, we were sans the 6,000 lb. typical bomb load and were flying light. The tail came up only slightly and we lifted off from almost a 3-point attitude.



We departed the traffic pattern and when we reached 2,500 feet, we were allowed to move about the aircraft. The air was smooth. The Flying Fortress lived up to the name and felt rock-steady. Several of us took the opportunity to pose for pictures holding the .50 cal. waist guns, imagining what it must have been like to see attacking Luftwaffe fighters in-bound. A light rap on the fuselage skin revealed how little metal stood between the crew and 20mm shells. The sober look on

our faces revealed we were beginning to better understand the threats the crews faced on missions.

The B-17 is unpressurized, a fact confirmed by the numerous drafts throughout the aircraft. It was a pleasant summer day and we were at low altitude so were quite comfortable. But it was not hard to imagine how cold and uncomfortable the crews would have been flying 8 hour missions at 25,000 feet where the outside air temperatures were 35 degrees below zero, exposed skin stuck to cold metal and blood quickly froze. Cold, fatigue, fear and the strain of combat would have made for very different experiences.



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Heading forward, I tried the radio operator and navigator seats, checking out the equipment and the views outside. Easily passing through where the top turret would have been, I shimmied along the catwalk above the bomb bay towards the flight deck. The catwalk was narrow, not as long as I had envisioned, and while it would have been easier to traverse when I was 20, I navigated across without incident, noting the dummy bombs below as I passed over.



Reaching the flight deck, the first thing I noted was the view. The aft crew stations were not claustrophobic by any means but the view was much better up front. The next things I noticed were the modernized flight and navigation instruments. The flat screens and GPS detracted from historical accuracy but were wise concessions to safety since *Aluminum Overcast* routinely travels cross-country. Federal aviation regulations do not allow passengers to operate the controls but it was easy to picture oneself behind the yokes with a fistful of throttles piloting the big bird.

A tap on my shoulder interrupted my reveries. It was my turn to slide down to the bombardier's position. I crawled on my hands and knees with as much grace as I could muster, again realizing that would have been an easier task 30 years ago. Entering the aircraft's nose, my first impression was, "Wow!" Sprawled below were farmland, woods and the Ohio River, with nothing but a Plexiglas nose in front of me. No doubt this was the best seat in the house. I snapped many pictures then took the bombardier's seat, peering into the Norden bombsight and imagining I was the lead ship on a bombing run. The spectacular view came at the price of being completely exposed. I can only imagine how it must have felt to be perched up front as Messerschmitts and Focke Wulfs swarmed or flak burst all around. Brave men indeed!

Reluctantly relinquishing the bombardier's seat to the next in line, I slowly headed aft, soaking in the sights, sounds and smells once again, trying to engrave the experience into my memory.

All too soon, we were signaled to strap in so I settled onto a seat slightly forward of my takeoff position. After a rather airliner-like approach and a slight flare, the mains chirped on the runway quickly followed by the tail wheel settling to earth.



As we taxied to the ramp, I noticed a crowd had gathered. As *Aluminum Overcast* squeaked to a stop

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and we tumbled out, applause erupted, a greeting that World War II Airmen would have richly deserved but never received upon completing their missions. Huge smiles adorned the disembarking passengers' faces and before we scattered, we snapped more pictures and chatted about the flight. Only then did I learn that the young man who had been sitting next to me had recently graduated from Air Force Undergraduate Pilot Training and received his wings. His father had purchased the flight for him as a gift.

As the next group of passengers filed past for their flight, we discovered that the elderly gentleman in the new group was a former B-17 pilot who had not flown since the war. He nodded to me and the newly-minted Air Force pilot as he passed, a symbolic passing of the torch across three generations of Airmen, bound together by a 70 year old flying legacy of his war and his generation.



For the next hour, Lisa and I wandered the open house exhibits, my feet on the tarmac but my heart still in the air. We came upon a booth where an elderly gentleman dressed in US Army Air Forces khakis was signing books. We paused to investigate when a very pleasant woman noticed my Iraq/Afghanistan Veteran ball cap, motioned and said, "Come over and meet Herb." She was Herb's wife and Herb was WWII B-17 pilot Lt. Herb Heilbrun. Herb was 96 but his handshake was firm and his eyes steely. I thanked him for his service and he thanked me for mine. Unspoken understanding flowed between two old warriors. There is a shared experience among those who have seen the ugliness of war even across generations, separated by decades and very different wars. My eyes welled up and Herb's did too. Neither needed to say more. I purchased the featured book, *Black and White Airmen: Their True Story* by John Fleischman, the story of Herb and his friend John Lehr of the Tuskegee Airmen. Herb inscribed the book for me, a treasured keepsake of the day.

The day started as a simple desire to fulfill a childhood dream of flying in a B-17. But it ended as much more: the opportunity to better understand what the Greatest Generation—our parents, grandparents and now, great-grandparents—did when they were young and saved the world. Their experiences and their sacrifices became that much more real from touching their warplanes, standing their battle stations, and hearing their stories. They have earned our respect and our admiration. As engineers, we love the technology and wonder of our flying machines. Let us not forget to also love, honor and remember those who've taken them into harm's way.

I started this article by saying I could finally scratch "Fly in a B-17" off of my bucket list. But I now realize that was premature. I don't want to cross it off my list. I want to do it again.

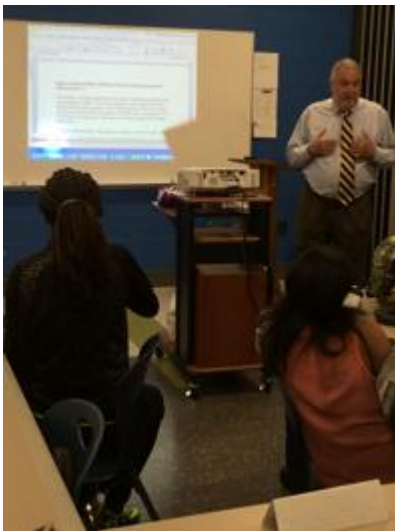
Mae Jemison High School Aviation Fundamentals Program

By Russell Lewey, FlyQuest Aerospace Education Director

FlyQuest, an AFA Community Partner, recently completed a 10-week, after school program at Mae Jemison High School. Entitled, "Aviation Fundamentals", this is the 4th year (first at Mae Jemison) that FlyQuest (with AFA help) has been inspiring young people to consider aviation careers. A total of 15 students completed the program this past November. Unique to this class, 13 of the 15 students were female and two-thirds of the students were 9th graders.



The first class from Mae Jemison graduates from FlyQuest's Aviation Fundamentals Program



Col (USAF Ret) Bryan Bennett, AFA member, provides insight on what it is like to fly for the Air Force.

The program is designed to provide insight into aviation careers such as pilot, aircraft maintenance, air traffic control, and airport operations. They receive training in classes such as aerodynamics, aircraft components, radar, and communications. In addition, they hear from individuals who have worked in the aviation community. Col (USAF Ret) Brian Bennett spoke to the students about Air Force Flight Training and an Air Force career. Matthew Zwack, an aero-engineer with NASA, gave the students an appreciation of what it takes to design and develop future aerospace vehicles. The students were treated to a visit to Huntsville Executive Airport to see "first hand" various aircraft components. For that class, retired Navy Pilot, Andy Foster, flew his sport plane all the way from Houston for the students to view and touch. WHNT News 19's own Meteorologist, Cristina Edwards, taught the weather class and then had the students put what they learned into practice in the studio as they did their forecast in front of the "green screen". A day-long visit to Huntsville International Airport culminates the program. Here they spend time with

Public Safety, the tower, Signature Flight Support, Science Engineering Services (SES) to view an Apache and Blackhawk, and fly FlyQuest's 6 degrees of freedom, full-motion simulator.

There is no doubt we've inspired a few to consider a career in aviation, others have gained an appreciation and understanding what it takes to get a plane into the air. It is very rewarding experience for both the instructors and the students. The program is on-going, so if you are interested in learning more about FlyQuest and its mission, go to www.FlyQuest.net.



Cody Garton (r), AFA member, provides instruction as student rolls onto final

Community Partner Spotlight

"Ace" Community Partner



General Atomics (GA) and affiliated companies offer global leadership in the research, design and manufacture of transformative technologies ranging from the nuclear fuel cycle to electromagnetic systems, remotely operated surveillance aircraft, airborne sensors, and advanced electronic, wireless and laser technology. General Atomics Electromagnetic Systems (GA-EMS) group is pushing the boundaries of scientific research to create first-of-a-kind, advanced electromagnetic and electric power generation technologies to help meet the emerging challenges facing defense, commercial and industrial customers worldwide.

GA-EMS' expanding operations in Huntsville, AL are supporting a growing base of engineering expertise dedicated to the design and development of advanced nanosatellites and small satellites, and support for a variety of missile defense systems. Our proven designs, integrated system solutions, and history of operational experience are helping defense and government customers meet critical communications and mission requirements.

Electromagnetic technology is driving the development of weapon systems to enhance our nation's ability to defend against a wide array of threats. GA-EMS is pioneering the development of a multi-mission railgun weapon system which uses electromagnetic force to launch hypersonic guided projectiles from land and sea-based platforms. GA-EMS remains on the forefront of maturing railgun weapons systems to support air and missile defense, counter battery fire, and precision indirect fire.



General Atomics chairman and CEO, Mr. Neal Blue, cut the ribbon to the company's facility in Huntsville, Alabama, May 2016.



Nanosatellites are emerging as a highly efficient, low cost solution for beyond line-of-sight communications. GA-EMS specializes in developing 3U to 6U CubeSats and small satellites up to 150 kg. Our ground-to-space solutions support multi-comms, multi-band, and multi-spectral capabilities, and EO/IR and SAR requirements. With a high degree of configuration and payload flexibility, we help customers expand communications across a broader latitudinal area and deliver timely voice, data and image information directly to users in remote areas of operation worldwide.

Community Partner Spotlight

NeXolve, a wholly owned subsidiary of ManTech International Corporation, is a leading provider of advanced materials and products for aerospace and commercial applications. Nexolve, formally a Division of SRS Technologies, opened the Huntsville facility in 1978 and has been serving NASA, DoD and commercial customers for 38 years. Nexolve focuses on providing total cradle to grave solutions for our customers. Nexolve is recognized for technology development and innovation. For example, Nexolve recently completed delivery of the unique 5 layer tennis court sized sunshield for NASA's James Webb Space Telescope scheduled to launch in 2018. Nexolve is also noted for our advanced polymer materials development capability. The Nexolve materials group manufactures and designs high performance polymer materials for aerospace, electronics, and display applications. The capability of our materials group to formulate new materials for challenging applications enables our team to design products with capabilities significantly exceeding current state of the art performance.



Our offices in Huntsville, AL consist of these state of the art facilities:

- Engineering Development Center
- Spacecraft Assembly Facility (Class 10,000 clean room high bay)
- Materials Development Center (synthesis and formulations)
- Materials Production Center (large-scale synthesis and formulation)
- Film Production Facility (Class 1000 clean room)
- Coating Facility (deposition of metallic coatings)
- Characterization Laboratory (optical, thermal, mechanical characterization)

ManTech
International Corporation®

NeXolve's parent Company, ManTech International, was founded in 1968 to provide advanced technological services to the United States government. ManTech began with a single contract with the U.S. Navy to develop war-gaming models for the submarine community. ManTech is a leading provider of innovative

technologies and solutions for mission-critical national security programs for the intelligence community; the Departments of Defense, State, Homeland Security, Energy, Veterans Affairs, and Justice, including the Federal Bureau of Investigation (FBI); the health and space communities; and other U.S. federal government customers. ManTech's expertise includes cyber security; command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) solutions and services; information technology (IT) modernization and sustainment; intelligence/counter-intelligence solutions and support; systems engineering; healthcare analytics and IT; global logistics support; test and evaluation; and environmental, range, and sustainability services. ManTech supports major national missions, such as military readiness and wellness, terrorist threat detection, information security and border protection.

In 2016 ManTech was ranked #28 in the Washington Technology Top 100 (largest government technology contractors ranked by prime contract dollars), and ManTech was ranked #63 on 2016 Bloomberg Government (BGOV) 200 Federal Industry Leaders List (the top federal contractors based on prime contracts awarded in fiscal 2015). Additional information on NeXolve can be found at <http://nexolvematerials.com/index.php> and additional information about ManTech can be found at www.mantech.com.

Community Partner Spotlight



PeopleTec Co-Founder, Chairman of the Board, and CEO Ms. Terry Jennings along with Co-founder and President Mr. Doug Scalf (l) accept their Community Partner Wingman renewal plaque from Mr. George Krym (r), Chapter VP for Community Partners.



Ms. Brenda Armstrong, Chapter 335 VP for Programs, presents Mr. Dan LaBoudiere, Director of *The Jackson Center*, with Community Partner renewal certification.

Community Partner Spotlight



Ms. Linda Hargrove (r), Facility Director, accepts *Parsons'* 2016 Community partner renewal certification from Ms. Brenda Armstrong, Chapter 335 VP for Programs.



Mr. Jay Carlson, Chapter 335 VP for Aerospace Education, presents Ms. Tonya Maurice, Director of Corporate Relations, with *Intuitive's* Community Partner renewal certification.

COMMUNITY PARTNER SPOTLIGHT

COMMUNITY PARTNER SPOTLIGHT

Community Partner Spotlight



Mr. Andy Grau (l) Program Integrator and Senior Analyst and *Sigmattech* President and CEO MG (Ret) Joseph Bergantz (c) accept an AFA Community partner plaque and first medallion from Mr. George Krym (r), Chapter VP for Community Partners.

COMMUNITY PARTNER SPOTLIGHT

COMMUNITY PARTNER SPOTLIGHT

Did you know:

As a member of AFA you will receive up to 20% off the “Best Available Rate” at over 7,500 participating **Wyndham Hotels** locations worldwide. Book online or call and give the agent your special discount ID number 1000007607 at time of booking to receive discount. Whether you are looking for an upscale hotel, an all-inclusive resort or something more cost-effective, we have the right hotel for you... and at the right price. So start saving now. Click below or call the special member benefits hotline 1-877-670-7088 and reserve your room today.

Tennessee Valley AFA Chapter 335 is proud of its Community Partners:



ACE Level



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Wingman Level



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**Intuitive Research and
Technology**

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Mary's Grocery:

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Aleta Technologies

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Dentistry Downtown with

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www.rebeccahowelldmd.com

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256-755-1524

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www.jacksoncenter.net/

Lamar Advertising

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www.landersmclartynissanhuntsville.com

Linc Research Inc.

www.lincresearchinc.com

Linda Morgan - Rise Real Estate

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morgan3.homesandland.com/

NeXolve-ManTech

www.nexolvematerials.com

Northington Consulting

www.northconllc.com

Parsons

www.parsons.com

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www.qualis-corp.com

Quantech Services

www.quantechserv.com

**Redstone Federal Credit
Union**

www.redfcu.org

Sigmattech

www.sigmattech.com

The Lodge at Johns Road

www.thelodgeatjohnsroad.com

U.S. Space & Rocket Center

www.rocketcenter.com

COMMUNITY PARTNER SPOTLIGHT

COMMUNITY PARTNER SPOTLIGHT

Annual Giving Levels: Ace: \$500, Wingman: \$250, Basic: \$90

Want to become a Community Partner at the Ace, Wingman, or Basic level?

Contact George Krym at george.krym@yahoo.com.

**7th Annual
Pancake Breakfast Fundraiser
Hosted by
Army Space Professional Association/
Legacy 4 Korean War Veterans Foundation**

14 January 2017

Serving time: 0700-1000

**Location: Applebee's located on Hughes
302 Hughes Rd, Madison, AL 35758**



**Proceeds will support programs for the
Veterans, Deployed Soldiers, and Inspiring
America's Future Leaders**

**POCs: Phillis Reid, 256-225-3062 phillisgreid@gmail.com
KC Bertling, 256-541-0450 KCBertling@yahoo.com**



Upcoming Events

Dec—No Executive Council Meeting
21 Dec—Galaxy of Lights Support
14 Jan—Pancake Breakfast Fundraiser
19 Jan—Executive Council Meeting
16 Feb—Executive Council Meeting
23 Feb—Quarterly Luncheon at RFCU
16 Mar—Executive Council Meeting



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Community Partners: George Krym

CyberPatriot: Bob Hovde

Membership: John Pennell

Programs: Brenda Armstrong

Public Relations/Newsletter: Lee Alford

Veteran's Affairs: Zig Jastrebski

Your AFA chapter is a 501-3C organization, and is always receptive of donations to further chapter Aerospace Education objectives. If you would like to donate to this worthy cause, please mail a check (made out to AFA Chapter 335) to Jack Royster, 1880 Shellbrook Drive, Huntsville AL 35806.