



HIGH MACH

Serving the World's Premier Flight Simulation Test Complex



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Concept and design beneficial to modernization

By Deidre Ortiz
ATA Public Affairs

Skilled personnel at AEDC led the concept and design of the recent modernization of the Complex's 4-foot transonic wind tunnel (4T).

As a result of extensive plan-

ning and assistance provided throughout the project, the existing equipment and parts making up 4T were successfully replaced.

The major portions that were upgraded included the flexible nozzle controls/actuators, Automatic Model Attitude Position-

ing roll mechanism, seal flaps, Captive Trajectory Support (CTS) system and new data acquisition systems. Overall the project took seven years to complete.

Groups from concept, design, manufacturing, installation, testing and checkouts, and analysis

and reporting each played a part in the upgrades.

Greg Fox, ATA section manager of the Propulsion Wind Tunnel Operations Group, explained that unless you were one of the team members involved in the project firsthand, you likely wouldn't realize the magnitude

of work that went into it.

"These systems are all very complicated," he said. "They're basically one-of-a-kind systems, and it takes people with different skills [to achieve something like this]."

See DESIGN, page 4

Manchester Police recognize Arnold Police for bomb threat assistance

By Raquel March
ATA Public Affairs

Arnold Police Officer Aaron Cheney, a K-9 handler, Officer Jason Layne and K-9 Officer Bo were recognized by the Manchester Police Department (MPD) for their assistance with two bomb threats in Manchester at the Coffee County Central High School on April 25 and the Coffee County Red Raider Academy on May 12.

Due to the officers' bomb detection training and the coordination of AEDC Emergency Services Manager Rick Trull and AEDC Test Support Division Director Col. James Krajewski, they were able to expedite the search for bombs in both incidents which was valued by the MPD.

"The quick response and professionalism in handling these matters are very much appreciated by the Manchester Police Department, the Coffee County School System and our community," said Mark Yother, MPD Chief of Police. "Trull's willingness to help and the great work of Officers Layne, Cheney and Bo are a great asset and comfort to the Manchester Police Department and our community."

Yother remarked that a bomb threat situation for children in a school setting can be "scary" and that it's important to have an asset like the Arnold Police in the local area.

"In the past we have used the state's dogs and wait four hours," said Yother. "Just to have that resource here, friends here, and partners here makes it so much better for us at the Manchester Police Department."

Yother presented certificates of appreciation to the officers and AEDC Commander Col. Raymond Toth spoke about AEDC's support of the partnerships within the communities.

"We value our partnerships with the local communities and local police departments and anything we can do to help out when we have that opportunity I know that our police department and fire department will do what we can." Toth said.



Arnold Police K-9 officer Bo, a Belgian Malinois, is presented with a certificate of appreciation from Manchester Police Department (MPD) Chief of Police Mark Yother (far right) on June 10 at AEDC for bomb threat assistance at two Manchester schools. Bo's handler and Arnold Police Officer Aaron Cheney (second from left, kneeling) and Arnold Police Officer Jason Layne (not pictured) also received certificates of appreciation. AEDC Commander Col. Raymond Toth (kneeling) and MPD Maj. Bill Sipe are also pictured. (Photo by Jacqueline Cowan)

AEDC, celebrating 64 years on June 25



President Harry Truman delivers the dedication speech at the Arnold Engineering Development Complex on June 25, 1951. The President dedicated the new Air Engineering Development Center as the then Arnold Engineering Development Center in memory of General of the Air Force H.H. "Hap" Arnold. General Arnold pushed for the establishment of the test complex so that America would never lag behind in aerospace testing again. President Truman said in his address that "here men would explore flight beyond the speed of sound." Mrs. Arnold, her sons, then Air Force Chief of Staff Gen. Hoyt S. Vandenberg and thousands of guests braved the unseasonable heat and dust to attend the ceremony. (AEDC file photo)

Revolutionary Change: Commander announces OBXtek, Inc. awarded contract

AEDC Commander, Col. Raymond Toth provided an update on AEDC's Source Selection efforts to the entire workforce via email on June 19 announcing the contractor which was selected to perform the Complex's Base Communications and Information Technology Services (BCITS) contract. Additionally, Toth's messages and other information can be found online at www.arnold.af.mil/transition.

Team AEDC,

We were notified on Monday that the Small Business Administration denied the pre-award protest on our Base Communications and Information Technology Services (BCITS) effort allowing us to begin Congressional notifications that same day.

So, today, the BCITS effort was awarded to OBXtek, Incorporated, (OBXtek), a service-disabled, veteran-owned small business located in Tysons Corner, Va. This award will be a firm fixed price task order valued at \$52.6 million through the GSA Alliant Small Business Government-wide Acquisition Contract. OBXtek will perform base communication and information technology services at Arnold Air Force Base and our two geographically separated units in Maryland and California. OBXtek is subcontracting with Abacus Technology Corporation, Chevy Chase, Md.; DKW Communications, Incorporated, Washington D.C.; and Sedona Technologies, Moline, Ill. The period of performance is five years – one base year and four one-year option periods in addition to a 90-day phase-in period.

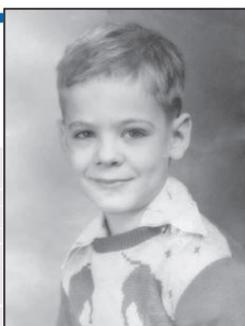
It is still possible for OBXtek to begin their phase in on July 1 with a start of period of performance on Oct. 1. However, a post-award protest could delay the start of the phase-in and subsequent start of performance necessitating an extension of the ATA contract to ensure mission continuity.

As we move forward, your leadership team will keep you informed of new developments as they impact timelines and milestones.

Col. Toth

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HIGH MACH

Arnold Engineering Development Complex
An Air Force Materiel Command Test Complex

Col. Raymond Toth
Commander

Jason Austin
Chief,
Public Affairs



Steve Pearson
General Manager,
Aerospace Testing Alliance

High Mach Staff:
Kathy Gattis, ATA Public Affairs Manager & Executive Editor
Raquel March, Editor

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**Core Values**

- Integrity first
- Service before self
- Excellence in all we do

**Vision**

"ATA will be a trusted partner in delivering best value warfighter support and asset stewardship to AEDC"

Core Values

- Be accountable for our own actions
- Ensure the safety of individuals and equipment
- Demonstrate the highest integrity and ethical standards
- Communicate clearly and openly
- Deliver professional and technical excellence
- Nurture, enable and treat people fairly
- Align with customer goals and objectives
 - Use disciplined and innovative processes
 - Continually improve in all that we do

Col. Raymond "Buzz" Toth retires after a 26-year Air Force career

By Col. Raymond Toth
AEDC Commander

Team AEDC,

Well, unfortunately my tenure as your commander is at an end. These last three years were the highlight of my 26-year career in the Air Force, and it was truly my honor and privilege to guide this Complex through some of the most challenging times in over a decade. You, the men and women of AEDC, are critical in delivering war-winning capabilities to our warfighters and I am thankful to have played a small part in that.

Together we have re-

ally accomplished a great deal over the last three years. We defined a compelling vision for what Arnold will look like in 2024 and are moving along in great strides to make that vision a reality. Our workload is up over 70 percent since 2012 and there is more work on the horizon; so much that we may move to 24/7 operations in many of our mission areas. We are successfully transitioning to the Combined Test Force (CTF) construct and while many of you believe we worked this way in the past, we never truly realized the power of CTF; we are getting there. Breaking the con-



Col. Raymond Toth,
AEDC Commander

tract up into six separate contracts will allow us to realize efficiencies where we couldn't in the past and while this transition is difficult for all involved, it is the right thing to do in our fiscally constrained environment. We created new

relationships with the Air Force Research Laboratory (AFRL), the University of Tennessee Space Institute (UTSI) and other academic institutions. For the first time in our history, AFRL is one of our mission partners and together with USTI we will change the face of hypersonic research and development for the nation!

I have no doubt that Col. Rodney Todaro [incoming AEDC commander] will lead AEDC to even greater heights during his tenure. You have created a culture of innovation and change that he will build on to ensure AEDC remains the greatest collec-

tion of engineering development capabilities in the world. Col. Todaro brings great experience in test and evaluation, acquisition and leadership and I know you will provide him the same expertise and support that you always gave to me.

Finally, I want to remind you that what you do, day in and day out, is crucial to our nation. Each and every one of you is a key player in providing the best to our warfighters. AEDC is absolutely the best team I've ever been a part of. Theresa and I will miss being a part of AEDC and this community and we wish you all the best in the future.

Maj. Gen. Bunch says farewell to men and women of Air Force Test Center

By Maj. Gen. Arnold W. Bunch Jr.

Team,

Thank You!

When I was told in January 2012 I would have the privilege to serve as the first Air Force Test Center Commander, I was elated. I thought I knew what a dedicated team of professional Airmen the new AFTC would be comprised of and how the test mission would be executed. I use the word "thought" because over the last three years your efforts across the board have demonstrated you are doing much more than I imagined as we started this journey and you have raised the level of your performance more than I thought possible.

Over the last three years, Caroline and I have been continually amazed as you personify integrity, service and excellence while we live and work alongside you. You bring those Air Force Core Val-

ues to life as you professionally execute your wartime mission every day.

Your accomplishments are many. You have moved from a site-centric view of developmental test and evaluation to an Enterprise approach to address customers' developmental test and evaluation needs by sharing resources, linking sites, building cross-site Combined Test Forces, standing up and then dissolving virtual CTFs to meet emerging needs and many other feats. You have developed and tested systems and provided critical information to decision makers. As a result, you have ensured that systems have been thoroughly tested with their performance verified, documented and reported so the decision makers have the best, most complete information upon which to base their decisions.

You have executed tests for systems put on the fast track to meet urgent operational needs for emerging issues, tested the latest systems our Air Force, sister services and allies



Maj. Gen. Arnold W. Bunch Jr.

are counting on to execute the Nation's defense far into the future, and tested legacy systems to ensure they remain relevant as we intend to keep them in the field for many years to come. You have even re-created capabilities to test systems we were told we would never test again.

You have identified the shortfalls in test capabilities across our Enterprise and built a roadmap and strategy to modernize and revitalize existing test capabilities so we are prepared to test our future systems. You have identified new test requirements and emerging test needs and developed strategies

to test in ways we never envisioned.

You have adopted the One Wing, One Mission mantra as we merged wings and built a unified force moving forward. You have removed artificial barriers that impaired efficiency, and today we are more responsive because of it. You have provided world-class support to the men and women on our installations so they can focus on their mission with clear minds.

You have built stronger relationships with our very supportive communities. You have demonstrated our belief that community and sites must partner for the mutual benefit of each. You have fostered those relationships and made those bonds even stronger.

You are the foundation upon which AFTC is built. Our Air Force – without peer – executes its air, space and cyberspace mission today and will execute its mission tomorrow in large part due to your dedicated efforts to develop and test systems

that are currently fielded or soon will be fielded. Your intellectual capital, innovation, professionalism, craftsmanship, and skills all make AFTC successful. You enable the Air Force mission!

While we have made great strides over the last three years, we must continue our Enterprise journey so we become even more agile, responsive, and innovative. We must each play our part to ensure our Air Force continues to advance and stay ahead of our adversaries.

You have made the last three years extremely rewarding and a lot of fun. Caroline and I have come to treasure our time here because of you. It has been a privilege and an honor to work for you as the Air Force Test Center Commander. I wish all of you the best as you further develop the Test Enterprise.

Thank you for what you do each and every day to make AFTC – and therefore the Air Force – successful and the best in the world!

Work Safely during the summer

By AEDC Safety, Health and Environmental

Summer officially arrived June 21, and summer temperatures are here.

Working in summer heat can be dangerous if you do not properly protect yourself from the heat and sun.

These workplace summer safety tips can help you bet the heat:

1. Always dress ap-

propriately. Wear short sleeved shirts and shorts whenever possible.

2. Keep all clothing light colors. The darker the fabric the more sun it will attract and absorb.

3. Wear loose clothes that breathe. Natural fibers such as cotton or those made to wick away moisture are best. They allow air to flow over your skin and help you stay cool.

4. Drink plenty

of fluids. Water is best, and most sports drinks are good choices. Avoid sugary sodas and energy drinks. Sugar and caffeine accelerate dehydration.

5. Wear sun block if you are going to be outdoors for a majority of the day. The sun can be very damaging to your skin if it is left unprotected.

6. "Bug" spray will help you avoid mosquitos, ticks, and chiggers

along with the potential for disease that sometimes comes with them.

7. Take breaks in the shade or – when possible – in an air-conditioned area. It is important to allow your body a chance to recover from the heat.

8. If you begin to feel dizzy, weak or nauseous take a break immediately. If your symptoms do not go away after getting out of the heat, you

should call for medical attention.

9. Hats and glasses with UV protection are great accessories for the summer season. Both help protect your eyes from harmful UV rays, and hats help prevent sunburn. They also help keep your body slightly cooler than it would be if you were to go without a hat. Safety glasses have UV protection even if they don't have tinted lenses.

Smoking Policy

1. The following revised AEDC smoking policy is effective immediately. Smoking is permitted solely in designated areas identified by a plastic "smoke genie." This receptacle is for the sole purpose of cigarette butt disposal. If there is no receptacle, smoking is not permitted in that area. It is the responsibility of all smokers to clean up the area surrounding the receptacles for any cigarette butts on the ground. Smoking in government-owned vehicles is strictly prohibited. Personnel are allowed to smoke in their personal vehicles at any time. Smoking areas will be held to the absolute minimum and will be located in low traffic, low visibility areas away from points of building ingress/egress and air intakes. A map of all authorized smoking areas is available on the Team AEDC SharePoint site. Smoking near a facility in an area not designated on the map is prohibited and any smoking receptacles located in areas not shown on the map will be removed. All "smoking permitted" and "no smoking" signs will be removed unless specifically required by OSHA.

The fact a person smokes has no bearing on the number of breaks they may take. Breaks should be taken in accordance with the company/agency personnel policies that apply to all employees.

Smoking, including the use of electronic cigarettes and smokeless tobacco, is prohibited in any area, at times when official business is being conducted with government clients, test customers, outside visitors and dignitaries, and where official business is being conducted including conference rooms, auditorium settings, business meetings, or in any other area where Air Force regulations specifically prohibit use. Containers of tobacco waste product, including sealed containers, must not be left unattended or disposed of in trash receptacles. Users of smokeless tobacco must flush tobacco waste down the toilet. Due to the nature, appearance, and safety concerns of electronic cigarettes (also known as "e-cigs"), the use of said products will abide by the same rules for tobacco products stated above and governed by AFI 40-102, *Tobacco Use in the Air Force*.

2. Supervisors at every level will ensure this policy is followed. Disciplinary action is appropriate for repeated violations.

3. Updates to this policy will be made in the future to further align with Air Force guidelines.

4. This policy remains effective until rescinded. (This policy is dated December 20, 2013)

Action Line

Team AEDC

I believe in free and open communications with our Team AEDC employees, and that's why we have the Action Line available. People can use the Action Line to clear up rumors, ask questions, suggest ideas on improvements, enter complaints or get other issues off their chests. They can access the Action Line in one of two ways: via the AEDC intranet home page, and by calling 454-6000.

Although the Action Line is always available, the best and fastest way to get things resolved is by using your chain of command or by contacting the organization directly involved. I encourage everyone to go that route first, then if the situation isn't made right, give us a chance.

Col. Raymond Toth
AEDC Commander



The AEDC Large Model Wings Level Yaw Program Team receives an AIAA Tennessee Section Special Award from nominator Corey Rice (far right) for management and manufacturing innovations resulting in rapid project execution. Team members (left to right): Michael Cowan, Norman Smith, Kim Luther, Elijah Minter, Pete Macaluso, Marvin Sellers, Lisa Waddell, Scott Wieland and Carrie McInturff. Team members not pictured: Keith Holt, Mark Andrews, Mike Mashburn and Schmiede Corp. representatives Kelvin Oldham and Brad Ferrell.



AEDC employee Dr. Joe Sheeley (left) receives an AIAA Tennessee Section Booster Award for his service as Section Chair from nominator and AEDC employee Dr. Robert Howard.



AEDC employee Dr. Doug Garrard (left) receives an AIAA Tennessee Section Special Award for the use of Design-of-Experiments in the Propulsion Wind Tunnel 4-foot Transonic tunnel calibration from nominator and AEDC employee Dr. Joe Sheeley.

AIAA Tennessee Section presents annual awards

The American Institute of Aeronautics and Astronautics (AIAA) Tennessee Section recently held an annual awards luncheon where professional engineers were recognized for their significant technical accomplishments, outstanding achievements and support to AIAA Section activities. (Photos by Rick Goodfriend)



University of Tennessee Space Institute (UTSI) Professor Trevor Moeller (center) receives an AIAA Tennessee Section Special Award for outstanding student advising and mentoring efforts from UTSI nominators (left to right) Lara Lash, Densu Atkas, James Rodgers and Nehemiah Williams.



AEDC employee Dr. Joe Wehrmeyer (right) receives an AIAA Tennessee Section Booster Award for management of recent Section meetings from nominator and AEDC employee Dr. Joe Sheeley.



AEDC employee Taylor Swanson (left) receives an AIAA Tennessee Section Young Professional Award for his development of the Milsatcom Atmospheric Scintillation Simulator project from nominator and AIAA member Dr. Bill Baker.

Additional location operational for generating Common Access Cards

By Raquel March
ATA Public Affairs

Due to the large number of personnel who will require Common Access Card (CAC) renewals during the contract transitions at AEDC, the Visitor Center has opened an additional Real-Time Automated Personnel Identification System (RAPIDS) processing location.

Room B-108 in the Administration and Engineering building (bldg. 100) is the location for the addi-

tional RAPIDS which began operations on June 15.

To complete the CAC renewal process, personnel must schedule an appointment after they receive an email from the Trusted Agent Sponsorship System (TASS) stating that approval was granted for CAC renewal. The Visitor Center will schedule appointments for the additional location. AEDC personnel must request an appointment by emailing Arnold.VisitorCenter@us.af.mil.

This location will remain operational through Sept. 30 and it is only for AEDC personnel including military, DOD civilians and contractors. If personnel need assistance entering locked entry doors to bldg. 100, they may call 454-7454.

All other individuals such as retirees, dependents and persons not assigned to AEDC must report to the Visitor Center located beside the Complex main gate for card issuance.



AEDC employee Brent Bates (left) receives an AIAA Tennessee Section Hap Arnold Award for his analyses of AEDC facilities from nominators and AEDC employees Dr. Joe Sheeley and Dr. Robert Hiers (not pictured).



Capt. Sam Stephens (right), takes an oath of office during his promotion ceremony to captain on May 20. Col. Timothy West, AEDC Test Operations Division chief, administers the oath.



Master Sgt. James Key (right) is pictured accepting his Certificate of Induction from Senior Master Sgt. Patrick Lazarus during his promotion ceremony to master sergeant on May 28.



Capt. Akshay Tripathy (center) is pinned to the rank of captain by Lt. Col. Ancie Dotson (left), AEDC Test Operations Division deputy, and Kenneth Jacobsen, AEDC Director of Staff, during his promotion ceremony on May 21.



Capt. Chance Johnson (right) takes an oath of office during his promotion ceremony to captain on May 21. Col. Anthony Walker, AEDC Aeropropulsion Ground Test Division director, administers the oath.

AEDC military members promoted

Five members of the Air Force at AEDC were recently promoted in multiple ceremonies. (Photos by Rick Goodfriend)



Capt. Joshua Coughenour (right), joined by AEDC Commander Col. Raymond Toth, prepares to be pinned while the official promotion order is read at his promotion ceremony to captain on May 21.

DESIGN from page 1

Fox mentioned the project was such a success because of the cooperation of everyone on base and also because requirements were written by the groups that own and use the equipment.

“The test engineers, project engineers and system engineers were involved early on and stayed involved throughout the

whole project,” he said. “They worked with the design group, such as the controls engineers who had to design the controls and the programmers who programmed the software we’re using. Probably every crafts skill here at AEDC has been used: pipefitters, boilermakers, iron workers, electricians, instrument technicians,

machinists, multiple engineers, electrical engineers, mechanical engineers... I think we pretty much hit every skill we have out here.”

Tom Hartvigsen, ATA design engineer involved in the CTS upgrade, stated that early on in the planning, it wasn’t certain that AEDC’s own personnel would be overseeing the

project.

“We didn’t know who would design and build the system; we thought it might be contracted out, so we approached it from that point of view when writing the system requirements document,” he said.

After writing up requirements, the CTS design team began to study how they would execute the plans and first visited the Nissan plant in Smyrna to learn about industrial robotics.

“Basically how the CTS six-degrees of freedom operates is like a robot,” Hartvigsen explained.

Doyle Veazey, a manager of Flight Systems Analysis, stated “We had the idea that we needed to strengthen the mechanism,” he said. “When the modernization effort started up, the CTS came up as one of the key features of the overall 4T modernization effort.”

According to John

Wright, ATA project manager, store separation testing of the new CTS has been successful so far. “Hopefully it’ll be an asset to AEDC for the next 25-plus years.”

In addition to increasing the load-carrying capability, the CTS modernization improved the range of movement and the system’s reliability and maintainability.

The changes to CTS mean less maintenance and less man hours when performing tests in 4T. For example, it once took an entire shift, close to eight hours, to perform a calibration of the CTS, whereas now it takes just two hours.

Woody McFarlane, Jacobs design engineer, commends the work done by AEDC craftsmen, stating they took the designers’ plans for the project and ran with them.

“As we went beyond the execution of the design and went to fabrication,

assembly and installation, the Model Shop turned out to be crucial,” he said. “In terms of getting what our plans were from a design perspective into actual operation, getting all those pieces together and getting them fabricated, getting them assembled and getting them installed to some very tight tolerances, the Model Shop played a big part in making this thing come to pass.”

The 4T upgrade follows the recent modernization of Tunnels A, B, C at the von Kármán Gas Dynamics facility (VKF) and now the processes of 4T align with those of the VKF tunnels.

This greatly benefits the crews who work in both the PWT and VKF wind tunnels because 4T and Tunnel A are companion tunnels with overlapping Mach numbers. Now test articles can now more easily be moved from one tunnel to the other because the data systems are the same and adapters allow the sharing of model support hardware. Additionally, many of the systems, such as test article control or the nozzle, are the same architecture so system engineers, test engineers and craft are able to more easily move from test to test at each tunnel.

“We’ve solved several problems,” Fox said. “We got new equipment to replace old equipment, we got some improved processes and now we’ve got easier turnaround between the tunnels as part of that.”

AEDC personnel reminded to drive safely

By AEDC Safety, Health and Environmental

There have been several reports of unsafe driving practices on AEDC roadways involving violations of various DOD, State of Tennessee, AEDC and ATA traffic safety policies such as:

- not using hands-free cell phones
- not wearing seatbelts
- excessive speeding and failure to use turn signals

in parking lots

- on industrial area main thoroughfares (35 mph unless otherwise stated)
- on highways and access roads
- failure to use a spotter when backing

Cell phone

ATA prohibits use of communication devices (1) while operating any government/company-owned vehicle (GOV) on or off base, or (2) while operating

a personally owned vehicle (POV) on company business, or when engaged in company-related business on personal time or at any time when operating a POV within the AEDC fenced area. This includes emailing and texting and applies to both hands-free and non-hands-free devices. There's an exception for emergency or police vehicles.

Seatbelts

DOD, Tennessee, AEDC and ATA all require drivers and passengers to "buckle up." State law also

requires any child through age 8 and less than 4 foot 9 inches to be properly restrained in appropriate car seats or boosters.

Speeding

Maximum speed within the AEDC industrial area is 35 mph except in parking lots where it is 15 mph or where otherwise posted. On Wattendorf Memorial Highway, the speed limit is 55 mph unless otherwise posted. Keep pace with traffic, but don't speed just because other drivers are speeding. If you pass, use turn signals

when changing lanes.

Backing

Before getting into the vehicle, do a 360 degree visual check and walk-around to be sure the path is clear. For GOVs not equipped with a backing camera, use a traffic cone as a reminder to do this check. Use of a spotter is required when more than one person is in the GOV. Drivers can also ask an employee who is in the area to serve as a spotter. Once inside the vehicle, do another 360 degree check by turning, using

shoulder and mirror checks to identify blind spots.

Parking lots

Inside the AEDC fenced area, parking lot speeds are 15 mph unless posted otherwise. State law requires drivers to yield to all vehicles already on the main road when entering a main road from a parking lot. It also requires drivers to signal when turning into or out of a parking lot or leaving a parked position. Remember to watch out for pedestrians and yield to those in walkways.

Weapons safety ensures ICBM effectiveness

By Airman 1st Class Malcolm Mayfield

90th Missile Wing Public Affairs

F.E. WARREN AIR FORCE BASE, Wyo. (AFNS) – The 90th Missile Wing's mission is to defend America with the world's premier combat ready intercontinental ballistic missile force, and ensuring the safe execution of the mission is the prime focus of the 90th MW Safety Office.

"Safety is a huge, huge part of what we do," said Staff Sgt. Kevin Cain, a 90th

Missile Maintenance Squadron weapons safety representative. "(Everything comes) back to us having to abide by safety, whether it's weapons safety or ground safety, whatever the case may be, to make sure we do the job safe, secure, and effectively."

When it comes to the weapons safety section's realm of control, it is divided into three areas: nuclear surety, missile safety and explosive safety.

The section conducts inspections to verify all of these areas are being safely executed by Airmen here.

"There is almost nothing on this base that we do as a wing that you can't somehow pull back or relate to nuclear surety," said Donald Koenig, the 90th MW Safety Office explosive safety superintendent.

Richard Mullee, the 90th MW Safety Office missile safety superintendent, explains that the ICBMs the wing is responsible for are immensely important. Weapons safety focuses on verifying that the assets the base operates are maintained and secured safely.

"We do a lot of operating

instruction review, checklist review, (and) hands on inspection," Koenig said. "I'd say about 90 percent of our job is inspecting - making sure the young troops are out there doing what they need to be doing."

Mullee said the office conducts annual safety inspections of various units on base. Their goal is to prevent damage to equipment and to prevent injury to Airmen.

"The Airmen are the mission," Koenig said. "We are three old, crusty, senior NCOs that have had our career, so we use our expe-

rience to make sure things are done right, but the young Airmen are the ones that turn the wrenches."

Cain said the guidelines that regulate base operations are necessary, and that the Airmen accomplishing the mission every day – the ones in the action turning the wrenches – need to keep to those guidelines.

"Whenever I'm training brand new individuals, the biggest thing is safety," Cain said. "(Lack of safety) could

cause you to harm and lose one of your most important resources, which is the individual."

He added that the weapons safety office keeps Airmen focused on accomplishing the mission in a safe manner because Airmen are the Air Force's number one resource and are vital for a secure environment, especially when dealing with the Air Force's number one priority – the nuclear deterrence mission.

Woods Amateur Radio Club invites public to Field Day June 27-28

By Michael Glennon

AEDC Engineering and Technical Management

The Woods Amateur Radio Club (ARC) at AEDC will participate in the upcoming Amateur Radio Field Day June 27-28 at Old Stone Fort, Manchester. The event is open to the public, who will have the opportunity to see an onsite demonstration and learn about the amateur radio hobby.

Woods ARC is comprised of past and present AEDC employees who meet at announced times at the Complex.

Since 1933, amateur radio operators across North America have established temporary radio stations in public locations during Field Day to showcase the science and skill of amateur radio. For over 100 years, amateur radio – sometimes called ham radio – has allowed people from all walks of life to experiment with electronics and communications techniques, as well as provide a free public service to their communities during a disaster, all without needing a cell phone or the internet.

Field Day demonstrates ham radio's ability to work reliably under any conditions from almost any location and create an independent communications network. More than 45,000 people from thousands of locations participated in Field Day in 2014.

"It's easy for anyone to pick up a computer or smartphone, connect to the Internet and communicate, with no knowledge of how the devices function or connect to each other," said Sean Kutzko of the American Radio Relay League, the national association for Amateur Radio. "But if there's an interruption of service or you're out of range of a cell tower, you have no way to communi-

cate. Ham radio functions completely independent of the internet or cell phone infrastructure, can interface with tablets or smartphones, and can be set up almost anywhere in minutes. That's the beauty of amateur radio during a communications outage.

"Hams can literally throw a wire in a tree for an antenna, connect it to a battery-powered transmitter and communicate halfway around the world. Hams do this by using a layer of Earth's atmosphere as a sort of mirror for radio waves.

"In today's electronic do-it-yourself environment, ham radio remains one of the best ways for people

to learn about electronics, physics, meteorology and numerous other scientific disciplines, and is a huge asset to any community during disasters if the standard communication infrastructure goes down."

Anyone may become a licensed amateur radio operator. There are more than 725,000 licensed hams in the United States, as young as five years old and as old as 100. And with clubs such as the Middle Tennessee Amateur Radio Society, Bedford County ARC or Short Mountain Repeater Club, it's easy for anybody to get involved right here in Middle Tennessee.

For more information

about Woods ARC or Field Day, call 931-571-0502 or email kb4jhu@arrl.net or visit <http://www.qsl.net/mstars/> and www.arrl.org/what-is-ham-radio.

Don't get hooked by phishers

By Tech. Sgt. Dan DeCook

Secretary of the Air Force Public Affairs Command Information

WASHINGTON (AFNS) – Fast cash promises on popular social media sites like Facebook, Instagram and Twitter are causing major problems for service members.

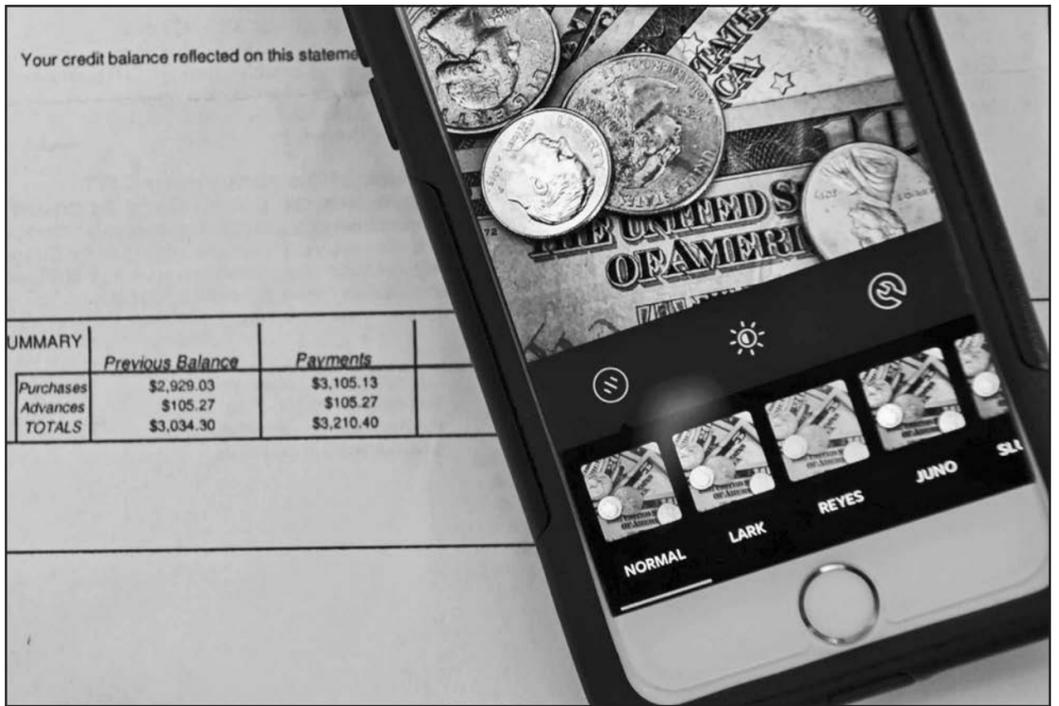
Phishing scams have continued to evolve in an attempt to keep up with progressing technology. Today, some phishing scams have been using social media outlets to fool users into revealing sensitive and personal information at an alarming rate.

Phishers typically send a short message targeting young adults and, recently, more service members, asking if they would like to make quick cash. Preying on those in need of

money, phishers entice victims with the idea of an easy payday. Many service members are sending debit card personal identification numbers or online credentials, only to be left holding a large bill.

One popular scheme involves a phisher depositing a fake check into a willing member's account and then using the personal information obtained to withdraw funds from that account. For example, an Instagram post with the hashtag #USAA offers a \$5,000 deposit to establish dialogue with a potential victim. The victim then provides account information, allowing the phisher to upload a phony check

and deposits the fake checks themselves with the intention of claiming no knowledge later on. Either way it's done, the ac-



(Courtesy photo)

count holder is responsible for the funds.

Recently, a 20-year-old Sailor had a checking account balance of \$25 with USAA. After he engaged with a phisher and provided account information, several fraudulent checks were deposited into his account, totaling \$17,453. The fraudster withdrew his fee and left the Sailor liable for \$6,500. Phishers often deposit large amounts because only a portion of a deposited check is available right away.

While many service members are falling for these fake check phishing attempts, banks aren't. They also aren't paying the bills left in the wake. "USAA is not going to post something like that on social media," said Brent

Mosher, the USAA executive director of financial crimes, investigations and recovery. "Fraudsters ask for things we would never ask for – personal identifiers, debit card information, account numbers – we already have all that."

A financial woe isn't the only thing that comes with being a willing, or unwilling, victim. Security clearances, which take financial standing in account, can also be affected. Depending on their level of involvement in the schemes, service members may face legal action and possible discharge.

Phishers aren't content with just social media sites. They are also crafting emails with company logos from official looking addresses. Phishers send

emails from what appear to be trusted establishments.

According to the Cyber Security Division within the office of Headquarters Air Force Communications, these emails often contain links to fake websites which ask the potential victim to enter their personal and account information. The site then records the information entered giving phishers all they need to wreak havoc on such things as bank accounts and credit cards.

Banks and other financial institutions do not ask for personal information or account information via email. If you suspect an email or social media post is phishing, contact the company directly using information on a recent billing statement.

This day in espionage history

By AEDC Industrial Security

June 23, 1997 – Earl Edwin Pitts sentenced to 27 years in prison

Earl Edwin Pitts:

- ❖ Senior FBI agent, arrested Dec. 18, 1986, charged with providing classified information to the Russian Intelligence Services from 1987 until 1992
- ❖ Turned over Top Secret documents including a list of FBI assets who were providing intelligence on Russia
- ❖ FBI was tipped off by a Russian agent that became a double agent for the FBI

❖ Also tipped off by his wife

❖ Feb. 27, 1997, pleaded guilty to two counts of espionage

❖ Motivation: disgruntled with the FBI, he "wanted to pay them back"

June 28, 1985 – Jay Clyde Wolff sentenced to five years in prison for attempting to sell classified documents

June 29, 2001 – Mariano Faget sentenced to five years in prison for disclosing classified info, and other charges

July 1, 2009 – John Reece Roth sentenced to four years in prison for passing sensitive defense information

Maintenance key to combat airpower mission



Staff Sgt. Donterrio Erby and Senior Airman Jaid Downing, both assigned to the 455th Expeditionary Maintenance Squadron, perform a 400-hour engine inspection on an F-16 Fighting Falcon at Bagram Airfield, Afghanistan, June 9. The 455th EAMXS ensure Fighting Falcons on Bagram are prepared for flight and return them to a mission-ready state once they land. (U.S. Air Force photo/Tech. Sgt. Joseph Swafford)

By Tech. Sgt. Joseph Swafford

455th Air Expeditionary Wing Public Affairs

BAGRAM AIRFIELD, Afghanistan (AFNS) – Maintainers deployed to the 455th Air Expeditionary Wing from their home station at Aviano Air Base, Italy, are always at work maintaining a squadron of combat-ready F-16 Fighting Falcons.

Maintainers are the first and last people pilots see when flying combat sorties; they're always there to ensure the pilot has a properly functioning aircraft. Without these dedicated Airmen the combat airpower mission at Bagram Airfield would come to a halt.

"The main goal of maintenance is to give quality aircraft to aircrew at all times," said Master Sgt. Martin Noel, the 455th Expeditionary Aircraft Maintenance Squadron production superintendent. "The style is the same as

The main goal of maintenance is to give quality aircraft to aircrew at all times.

Master Sgt. Martin Noel

home station, just with a little more pep in our steps here due to the increased amount of flying we do and the fact the mission we do here is real compared to training back at our home station."

The role maintenance Airmen play keeping the aircraft mission ready is critical to the 455th AEW, being able to deliver decisive airpower in support of NATO's Resolute Support mission and Operation Freedom's Sentinel.

"The mission would stop here without maintainers," said Airman 1st Class Donal Cantero, a member of the 455th EAMXS. "We wouldn't have operations and the jets wouldn't be ready or available to complete the combat mission here."

Being in a deployed environment brings extra challenges to the maintenance Airmen at Bagram.

"The tempo is significantly higher due to the amount of time we have to turn aircraft and that we're a 24-hour flying operation here," Noel said. "At home station we fly for a 12 hour period, then have a 12 hour period to fix the aircraft. Here there is no period to fix. We have to fix as we can and when moments arise."

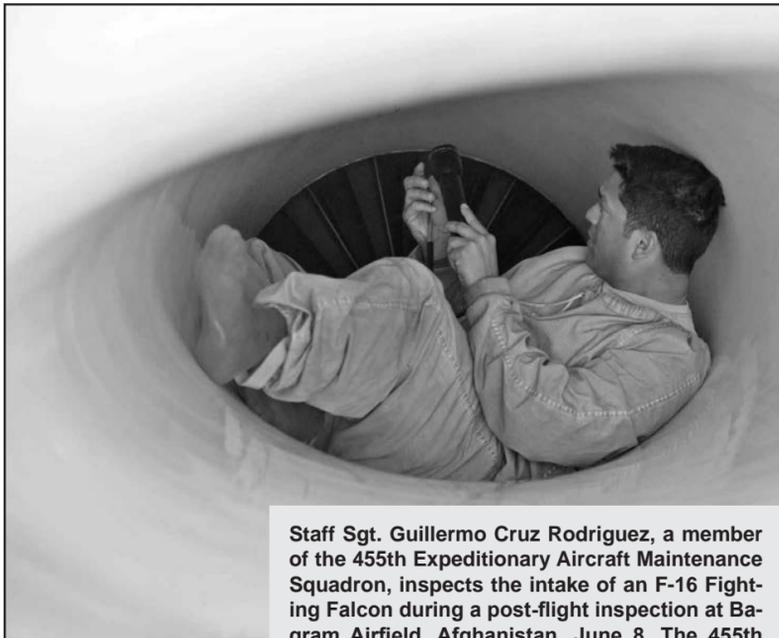
Even though being in a deployed environment brings extra challenges, the Airmen of the 455th EAMXS meet each challenge and keep the aircraft in the sky.

"The stress is a little higher in a deployed environment and there is a little more pressure because of the mission we're doing here," Noel said. "We train at home station and we also had two months of predeployment training in Las Vegas that prepped the maintainers quite well, and they're handling the stress perfectly."

The long hours pay off for the maintainers when they see their hard work take off and return to Bagram.

"I still love it, the hours come with the workload," Cantero said. "You just push through and see the mission success rate go up. It gives a sense of pride seeing the jets take off in full afterburner, and then seeing them come back without bombs."

Noel added, "I've been doing it for 16 years now and still enjoy watching the birds take off, and I still take great pride in knowing the maintenance that my team is doing is quality maintenance."



Staff Sgt. Guillermo Cruz Rodriguez, a member of the 455th Expeditionary Aircraft Maintenance Squadron, inspects the intake of an F-16 Fighting Falcon during a post-flight inspection at Bagram Airfield, Afghanistan, June 8. The 455th EAMXS ensure Fighting Falcons on Bagram are prepared for flight and return them to a mission-ready state once they land. (U.S. Air Force photo/Tech. Sgt. Joseph Swafford)

Employee Assistance Program available

Personal problems can affect the lives of employees both at home and at work. To help prevent, identify and resolve potential stressors or issues, Air Force Materiel Command partners with Federal Occupational Health to provide our Employee Assistance Program services. EAP services are offered free (limitations apply) to civilians and their family members.

The EAP is a comprehensive program that helps employees



resolve personal problems that may adversely impact their work performance, conduct, health and well-being. EAP addresses

problems in the quickest, least restrictive and most convenient manner while minimizing cost and protecting client confiden-

tiality. Services offered include:

Individual and/or Family focused

- Assessment, counseling and referral
- Financial
- Legal
- Supervisor/Manager coaching and consultation
- Website resources

Unit Focused

- Health and Wellness presentations
- Orientation presentations

Employee Assistance Program

24 hours a day / 7 days a week, **1-800-222-0364** (TTY: 1-888-262-7848)

FOH4You.com



ALC – Arnold Lakeside Center, 454-3350
 Café – Café 100, A&E, 454-5885
 ODR – Outdoor Recreation, 454-6084
 RRRP – Recycling, 454-6068
 Marketing/Sponsorship – 454-3128
 Barber Shop – 454-6987

GC – Arnold Golf Course, 454-GOLF
 MG – Mulligan's Grill, GC, 454-FOOD
 FC – Fitness Center, 454-6440
 WI – Wingo Inn, lodging, 454-3051
 Resource Management – 454-7425
 Admin – 454-7779

July 2015

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Hot 250

Log 250 miles during the month on any bicycle and earn prize Register at the Fitness Center by July 15



Ask about bicycles available for checkout

1 FC: 100 Push Up Challenge
 Top 2 highest rep at end of month win Fit-Bit
 GOAL: Reach 100!
 Ask our staff for training advice



2
 Movie: The Spongebob Movie: Sponge Out of Water

3
 CAFE: Closed
 ALC: NO First Friday Jam due to holiday weekend

4 Happy 4th of July

11
 GC: Arnold Tri-City begins See details on the left (July 12)

ODR: High Point Rock Climbing
 8am-4pm Age 13+ \$40

Bring your lunch Water provided Sign up by July 3

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ARNOLD TRI-CITY MEDAL PLAY CHAMPIONSHIP
ARNOLD GOLF COURSE
JULY 11 & 12
 8am Shotgun Individual Stroke Play
 \$45 for Advanced Green Fee Players
 \$60 for all others
 Price does not include cart
 Field will be flighted depending on number of participants
 Prizes will be awarded in each flight
 PLUS Closest to the Pin competition both days
 Deadline for sign-up is close of business July 9

FOR MORE INFORMATION CALL 454-GOLF

Price Includes
 One Free Practice Round during the week of July 6-10
 Riding Cart extra
PLUS Lunch on Sunday

14

15 FC: Triple Threat Bench, Squat, Deadlift
 T-shirts for first 20 to participate
 Winner – highest total combined weight
 Come by anytime during regular hours
 5am-7:30pm



16
 ALC: Brushes & Bottles \$25
 GLC 6pm
 Sign up by July 10



Movie: Home

17

18 ODR: Stand Up Paddleboard Class
 10am \$10 age 13+ Sign up by July 11

ALC: Outdoor Movie & Cookout
 Dinner 6:30pm
 Showtime 7:30pm
 "Insurgent" PG13
 On the patio/lawn
 Bring chairs/blankets



Choice of hamburger/hot dog with chips, cookie, and drink
 \$6.50 mbr \$7.50 non



ALC Dining Room
 Thu 5-8pm
 Fri 5-9pm
 Sat 5-9pm

21

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ODR: Zip-lining Trip
 8am-4pm
 age 12+ \$60
 bring lunch
 Sign up by July 18



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Movie: Paul Blart: Mall Cop 2

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An AEDC Fellow's *life*

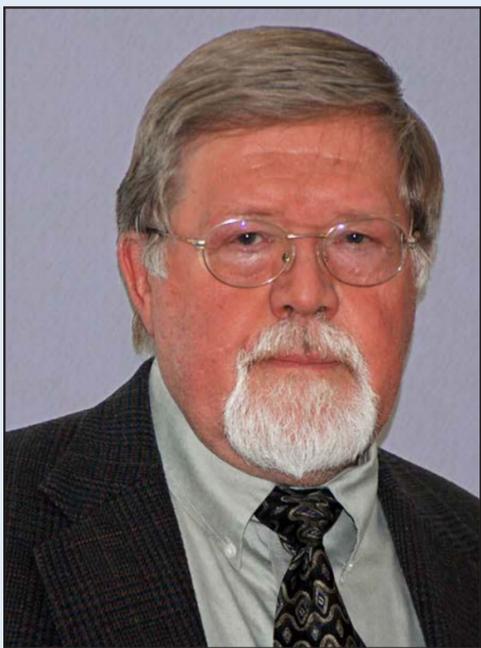
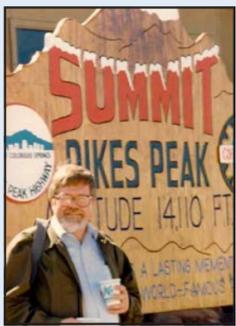
Dr. John Felderman and Dr. Grant Patterson will be inducted as AEDC Fellows at the annual AEDC Fellows Banquet at the Arnold Lakeside Center on June 25 at 5:30 p.m. Peggy Gray, the first female selected as a Fellow, and Phil Tarver will be inducted as AEDC Lifetime Achievement Fellows. (Photos provided)



Dr. Grant Patterson, AEDC Fellow



Jet Exhaust Acoustic Team
UTSI 1974



Dr. John Felderman, AEDC Fellow

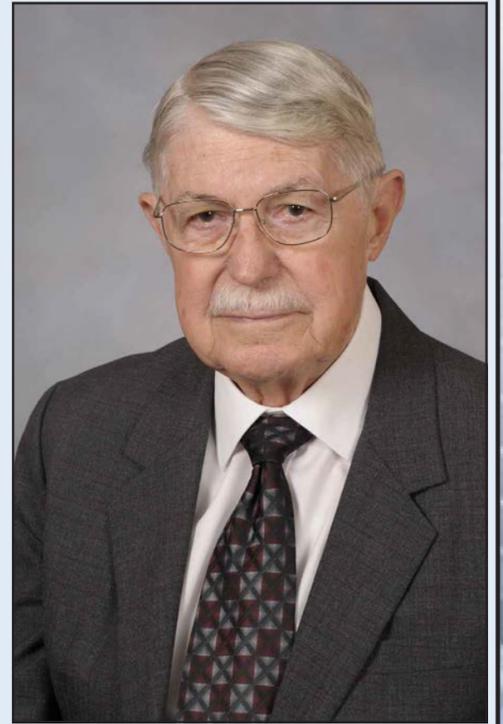


An AEDC Fellow's

life



Peggy Gray, AEDC Lifetime Achievement Fellow



Phil Tarver, AEDC Lifetime Achievement Fellow

