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Large Model Wings Level Yaw capability to be available soon at AEDC

By Deidre Ortiz
ATA Public Affairs

AEDC engineers are presently working on a multimillion dollar fast-track design and build effort for the 16-foot transonic wind tunnel called Large Model Wings Level Yaw (WLY).

It's likely that the new

WLY capability will be available to AEDC's test customers by the end of 2014.

Marvin Sellers, flight systems senior engineer, explained the reason behind this accelerated effort.

"The current WLY capability, built in the mid-1980s, does not have sufficient capacity to handle the loads

[generated by] some of the new aircraft being tested," he said. "We have used the existing WLY for all of the Global Hawk tests performed at AEDC with great success. The WLY system uses a second roll mechanism offset by a prebend from the primary roll mechanism, which is installed on the pitch sec-

tor. By rolling the two roll mechanisms approximately the same amount in opposite directions and adjusting the pitch sector, the model yaws while keeping the wings level to the floor."

Sellers noted that test articles with larger load requirements

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U.S. Air Force Chief Scientist set to speak at AEDC Fellows Banquet



Dr. Mica Endsley

By Raquel March
ATA Public Affairs

The 2014 AEDC Fellows Banquet will be at the Arnold Lakeside Center on June 25 at 5:30 p.m. where U.S. Air Force Chief Scientist Dr. Mica Endsley will be the speaker.

The event is an opportunity to recognize AEDC individuals, past and present, who have made exceptional substantial contributions to the nation's aerospace ground testing capability at the Complex.

Endsley serves as the first female chief scientific adviser to the Chief of Staff and Secretary of the Air Force. She provides assessments on a wide range of scientific and technical issues affecting the Air Force mission.

In her role she identifies and analyzes technical issues bringing them to the attention of Air Force leaders. She also interacts with other Air Staff principals, operational commanders, combatant commands, acquisition and science and technology communities to address cross-organization technical issues and solutions.

Endsley's research focuses on the design, development and evaluation of systems to support human situation awareness and decision making in aviation, air traffic control, space, cyber, military command and control, medical and power systems operations.

AEDC Commander Col. Raymond Toth recognizes Dr. Heard Lowry III and Michael Mills as 2014 AEDC Fellows. Ross Roepke and John Sutton are recognized as 2014 AEDC Lifetime Achievement Fellows.

Cmdr. Allen retires with 29 years of service in the U.S. Navy



Cmdr. Brian Allen (center) and his wife Sherri are being "piped ashore for the last time" at his retirement ceremony recently held at the AEDC Arnold Lakeside Center. This tradition is performed during a Navy retirement ceremony. (Photo by Rick Goodfriend)

By Raquel March
ATA Public Affairs

Family, friends and coworkers recently gathered at a retirement ceremony for Cmdr. Brian Allen, with the U.S. Navy and the AEDC Test Support Division (TSD) director of operations, to wish him well in his future endeavors.

The ceremony was attended by his wife Sherri, son Brennan, daughter Kaisey, father Michael, mother Kathy, brother Mike and sister Lori Rausch.

The Ohio native shares his thoughts about the

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Cmdr. Brian Allen (right), with the U.S. Navy and the AEDC Test Support Division director of operations, receives a letter for best wishes from former President George W. Bush during his retirement ceremony presented by Capt. Sam "Pappy" Paparo, Allen's close personal friend and who served as the retiring officer. (Photo by Rick Goodfriend)

'Cruise-In' style



AEDC personnel display their muscle cars, cruisers and hotrods at the Complex's Cruise-In. See page 4 for more photos. (Photo by Jacqueline Cowan)

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HIGH MACH

Arnold Engineering Development Complex
An Air Force Materiel Command Test Complex

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- 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

Critical Days of Summer Campaign begins

The Memorial Day holiday weekend was the official start of the 2014 Critical Days of summer campaign, themed *Double Checks, Not Second Thoughts*.

Air Force Leadership, Secretary of the Air Force Deborah James, Air Force Chief of Staff Mark Welsh III and Chief Master Sergeant

of the Air Force James Cody issued a memorandum to all Air Force personnel.

This year's campaign is a reminder of your responsibility to be a good wingman, on and off duty – take care of yourself and your teammates, and always be prepared to fly, fight and

win. We safely accomplish the mission when we commit to our core values of *Integrity First, Service Before Self, and Excellence In All We Do*. Taking responsibility for your safety is part of that commitment. You must take pride in doing the job right. When you

do things the right way, you do things the safe way.

As you participate in summer activities with your family and friends, use what you have learned about risk management. Plan for the unexpected and avoid unnecessary risks. Embrace safety as the foundation of our core

values. Enjoy the warm weather; get out and have fun, but always keep safety in mind.

Take care of yourself and your wingmen this summer to ensure our mission success. Have fun while off duty, and remember: *Double Checks, Not Second Thoughts!*

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needed to use the primary support system which includes the pitch sector and primary roll mechanism.

"Yaw angles are achieved by pitching and rolling the model to obtain the correct orientation relative to the wind," he said. "This requires more roll movement than when using the WLY mechanism and takes a small amount of additional time to set model attitudes. But our advanced control capabilities have allowed data to be acquired in a continuous sweep fashion for many years using this pitch/roll technique."

A discovery was made during a study on the first Global Hawk test that high-aspect ratio wings (large wing span) experience flow variations as a model is rolled in the wind tunnel.

"Data acquired with WLY were compared with pitch/roll combination and indicated the wings were experiencing non-uniform flow in the corners of the tunnel as the model was rolled," Sellers said. "Although corrections could be applied to the pitch/roll data to minimize the effect, the complete effect could not be removed."

All of the Global Hawk test data was acquired with the WLY technique. New aircraft with large wing spans and high aerodynamic loads needed to use the WLY technique but haven't been able to because of limits with the current mechanism.

"The new large model WLY capability will provide improvements in data quality and productivity for AEDC's customers," Sellers said.

In addition, the yaw range for WLY will be increased from 15 to 16 degrees, and the capacity of the new WLY will be doubled with the possibility to increase roll-moment capacity by almost three times.

www.christopherreeve.org

Summer Safety Checklist

Driving

- Buckle up... properly! Bottom strap across hips and shoulder strap across chest.
- Do not be distracted by other passengers, motorists, cell phones, radio, etc. Stay focused!
- Obey car and booster seat guidelines.

Swimming and diving

- Do not dive in less than nine feet of water.
- No board, no diving!

Personal watercrafts

- Be watchful, defensive, obey speeds, and keep your distance.

Body boarding

- Hold board so it extends past head.

General Water Safety

- No re-dos; do not combine alcohol and water-related activities!
- Be aware of sandbars.
- Feet-first entry.

Bicycle Riding

- Wear a helmet... properly! A helmet should be worn snug, fitted, and level.
- Replace helmet after three to five years and/or if cracked.

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TODAY'S CARE. TOMORROW'S CURE.

(Courtesy of Wingman Toolkit)

Goals: How many of us have them?

By Tech. Sgt. DeEric Gray

387th Air Expeditionary Group

SOUTHWEST ASIA (AFNS)—Have you set goals for your future? According to dictionary.com, "a goal is the result or achievement toward which effort is directed." Goals can be short or long-term, personal, professional, spiritual or physical, and are usually specific to a person or group. According to Dr. Gail Matthews, a psychology professor at Dominican University in California, you are 42 percent more likely to reach a goal by writing it down. In short, a goal that is not written down is just a thought.

On my first and second

deployments I had no strategy for setting goals. For my third deployment, I bought a journal and wrote down my goals and plans to make them a reality. As a result, I completed three online college courses and earned two Community College of the Air Force degrees. I also completed several hours of professional development, became debt free and most importantly, effectively managed my time. I achieved more on my third deployment than my first two combined.

When setting goals, you must make sure they are specific, measurable, attainable, realistic and timely, or S.M.A.R.T. A specific goal has a greater chance of be-

ing accomplished and allows for strategic planning. A measurable goal establishes concrete criteria for measuring progress toward the attainment of each goal set. You should set milestones to track progress and make corrections as needed. To ensure goals are attainable, you must figure out the best route to take to achieve your goals. The Professional Development Guide describes this as the planning phase. You are the best person to determine if a goal is realistic based on your abilities. For instance, a goal of losing 50 pounds in 30 days is not realistic. To ensure your goal is timely, have a reasonable completion date and adhere to the checkpoints set. If these steps are skipped, you will easily get off track.

As the individual setting the goal, you should also make sure that it is known to people who can assist in achievement. For example, if your goal is to make senior airman below the zone, it is

probably a good idea to let your supervisor know your intentions. Making your goal known shows your motivation to live the core value of excellence. Can you really be "excellent in all you do," if you do not set goals to become excellent? Also, setting and achieving goals gives you confidence to set greater milestones and achieve them.

Setting goals is an important aspect of life that has been proven time and time again. My current goal is to earn my bachelor's degree in accounting by 2016. One of the milestones I set was the completion of four classes during this deployment. I am well on the way to accomplishing that milestone. Knowing my strengths and weaknesses has made accomplishing this easier. It is never too late in life or on a deployment to set goals. So again I pose the question, "How many of you have goals?" We all have to start somewhere; I will see you at the finish line.

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 AEDC web portal at https://papro.arnold.af.mil/PORTAL/images/Smoking_area_map.pdf. 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 three ways: via the AEDC intranet home page, Action Line boxes at the base cafeterias 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

Red Cross blood drive begins June 10-13 at AEDC

By Raquel March
ATA Public Affairs

AEDC employees will have an opportunity to donate blood with the American Red Cross during a blood drive June 10-13 at 11 a.m. – 4 p.m.

The Red Cross provides a convenient method for donating blood using a bloodmobile, a mobile blood collection lab.

The bloodmobile will move to a different location each day while stationed at AEDC.

The dates and corresponding locations are: June 10 – the Propulsion Wind Tunnel office, building 740; June 11 – the Administration and Engineering, building 100; June 12 – The von Karman Gas Dynamics Facility, building 676; June 13 – the Main Auditorium, building 452. Employees may donate at the multiple locations during work hours with approval from their supervisor.

To be eligible to donate, you must be at least 17 years old (16 years old with parental consent), weigh at least 110 pounds and be in good health. The process usually takes about 30 minutes and includes a complimentary snack and T-shirt. Donors are asked to drink plenty of fluids - avoiding caffeine - and eat a meal that is rich in iron prior to donating. Bring identification in the form of a donor card or driver's license.

The Red Cross Tennessee Valley Blood Services Region serves nearly 60 hospitals in Tennessee, Western Kentucky, Southern Illinois and parts of Missouri. They must have approximately 600 people donate blood or platelets each weekday to meet the needs of hospital patients.

To donate blood at other locations see www.redcrossblood.org/make-donation.

For more AEDC blood donation guidelines and information, call 454-5387.

Testing and Evaluation Course valuable to AEDC, its customers

By Deidre Ortiz
ATA Public Affairs

The Aeropropulsion Test and Evaluation (T&E) Short Course that AEDC has been hosting since 2011 is beneficial to the Complex and its customers.

For one, Aeropropulsion Test Branch Deputy Director Mike Dent said the course has “paid great dividends” in helping AEDC to build strong partnerships with its customers.

The course is offered on a semiannual basis to the Air

Force Life Cycle Management Center engineers and program managers, engine model engineers and managers, Air Force Research Laboratory test engineers, Navy and Army testers and others.

Engineers and program managers with the System Programs Office (SPO) and Tinker Air Force Base participated in the most recent T&E course held May 6-8.

The three-day T&E course was developed in an effort to provide AEDC's external customers with an overview of the fundamental

role and technical elements of turbine engine ground test and evaluation. It's aimed at educating the customer about the Complex's significant role in developing, sustaining and improving their weapon systems.

During the course, participants receive a mix of classroom training as well as worksite visits on base including the high bay, test cells and control rooms.

Past participants of the course have commented through anonymous surveys that they're grateful

for the opportunity. Even those without a background in ground testing say they were able to comprehend the information provided and gain a better understanding of why ground testing is important.

“The best part was seeing the experts and capabilities that AEDC possesses,” one recent participant said in his or her course evaluation.

The next T&E Short Course is scheduled tentatively for November 2014. For more course information call 454-3826.

AEDC's Stokes retires from U.S. Air Force



Tech. Sgt. Jennifer Stokes received her Certificate of Retirement from AEDC Commander Col. Raymond Toth at a recent retirement ceremony. Stokes retired early with 16 years of service in the U.S. Air Force. She was the AEDC noncommissioned officer in charge of out-patient services and an independent duty medical technician. (Photo by Jacqueline Cowan)

Eglin AFB F-35s surpass 5,000 combined sorties

By 1st Lt. Hope Cronin
33rd Fighter Wing Public Affairs

EGLIN AIR FORCE BASE, Fla. (AFNS) – The 33rd Fighter Wing etched another mark on the F-35 Lightning II joint strike fighter program by logging its 5,000th combined sortie, May 28.

The F-35 Integrated Training Center, or ITC, flies a third of all the sorties in the Department of Defense program. More than 15,000 sorties have been flown across all variants of the fifth generation multirole stealth fighter.

“Our team knows they are leading the way in putting the F-35 through its paces and developing the cadre that will establish the F-35's role in air dominance,” said Col. Todd Canterbury, the 33rd FW commander. “The men and women here advance the ball down the line every day, and we see that in the number of sorties generated and students trained.”

The maturity of the F-35 program at Eglin AFB was echoed this week, he said.

Also this week, the 58th Fighter Squadron welcomed its 26th and final F-35A delivery, scheduled in the current environmental impact study.

The F-35 ITC is responsible for F-35 A/B/C Lightning II pilot and maintainer training for the Marine Corps, the Navy, the Air Force and, in the future, at least eight international partners.



A Navy F-35C, a Marine Corps F-35B, and an Air Force F-35A Lightning II participate in a training sortie together May 21 near Eglin Air Force Base, Fla. The F-35 Integrated Training Center at Eglin AFB surpassed 5,000 combined training sorties May 28 contributing more than a third of all sorties in the Department of Defense's F-35 program. All three variants of the fifth generation multirole stealth fighter are hosted by the 33rd Fighter Wing here. The F-35 is designed with the stealth, electronic warfare, and multi-spectral fused sensor capabilities, which will increase lethality and survivability in a contested environment. (U.S. Air Force photo/Staff Sgt. Joely M. Santiago)

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AEDC area and provides a glimpse of his journey to AEDC and beyond.

High Mach: What were your thoughts about the area when you arrived here?

Cmdr. Brian Allen: I am not from the area or even Tennessee. I am originally from Ohio. My duty station prior to coming to AEDC was as the

Executive Officer of the Vanderbilt NROTC Unit so I was already settled in the Nashville area before reporting to AEDC. I did not know a lot about AEDC when I showed up, but [I] did have some idea of where it was and what type of work went on there. I am very impressed by the surrounding area of AEDC and especially the people I got to know as I

worked here for the last 4 years.

HM: When did you report to work at AEDC and what did your mission involve?

Allen: I reported to AEDC on June 1, 2010 and was made the deputy of the Test Division under Col. Jim Jolliffe and did that for two years. After that, I moved over to the Test Support Division and basically filled

the role of Director of Operations. This role mainly involved advocating for the Test Support Division's scheduling needs.

HM: How will you remember the relationships you have developed here – business, personal, community?

Allen: Very fondly! I have met so many outstanding people here both on the government and contractor

side of the house. The leadership on the government side and the ATA leadership has been great and I have really made some dear friends in TSD whom I plan to keep in touch with as I go about the next stage of my life. People like Alan Fleenor, Jan Hollowell, Clark Brandon and Amanda Cur-bow are names that come to mind right away. But there are many more quality peo-

ple I could mention; I just don't have enough room.

HM: What are your retirement plans?

Allen: I wish I could say fishing and watching sports but I will be looking for another challenge out there somewhere and who knows, if the “Lord is willing and the creek don't rise” I may be back at AEDC in a civilian role.

'Cruise-In' style



(Photos by Jacqueline Cowan)

By Deidre Ortiz
ATA Public Affairs

AEDC personnel and their families viewed muscle cars, cruisers and hotrods at the Complex's 2014 Cruise-In last month. The third annual lunch-time display allowed personnel to showcase their cars as well as participate in demonstrations and tours.

Though organizers were concerned the threat of thunder storms would impact the event, fortunately it ended up being a beautiful day for the event. Two participants tied for 2014 People's Choice winners, they are AEDC employee Mike Hodges with his 1963 Ford F100 and ATA retiree Wayne Hawkins with his 1957

Chevy. On behalf of those who planned this year's Cruise-In, Ralph Jones said he appreciated everyone's participation and gave a special thanks to Ricky Bobby's Hot Rod Shop and Hawks Hardware Speed Shop, both located in Manchester, for bringing their 'Rat Rod' for display.



Eglin welcomes final F-35A

By 1st Lt. Hope Cronin
33rd Fighter Wing Public Affairs

EGLIN AIR FORCE BASE, Fla. (AFNS)—The 58th Fighter Squadron became the Air Force's first complete F-35A Lightning II squadron after they welcomed their 26th and final F-35A May 28 at the 33rd Fighter Wing.

Maj. Scott Charlton, 58th FS pilot, ferried the aircraft, AF-45, from Lockheed Martin's F-35 production center in Fort Worth, Texas.

"We've been in a growth mindset for the last few years," said Lt. Col. Matt Renbarger, the 58th FS commander. "We've been focused on adapting our training levels to the availability of aircraft as a growing squadron. It's been exciting to see this mission develop, but we're more excited to dial-in all of our attention to training our team."

The arrival of the last Air Force joint strike fighter variant scheduled

to be stationed at the wing marked a shift in priorities for the 58th FS and 58th Aircraft Maintenance Unit. Both units experienced a series of transitions and accomplishments since the arrival of the first F-35A here July 14, 2011.

Renbarger was trained in the initial cadre of F-35 instructor pilots. He witnessed the number of JSF pilots swell to 100 since the F-35 training mission was first established here in October 2009. Half of those pilots are Air Force.

"We are focusing now on refining our processes and training, improving our tactics, and really optimizing our overall program to meet the needs of the Air Force as our Airmen move out to other F-35 missions," said Renbarger.

The last F-35A delivered is more capable than the first F-35A delivered three years ago as a result of the F-35 program's concurrency development model. The



An F-35A Lightning II taxis across the flightline on Eglin Air Force Base, May 28. The Air Force welcomed its first full F-35A joint strike fighter training squadron with the arrival of the 26th and final jet assigned to the 33rd Fighter Wing. (U.S. Air Force photo/Senior Airman Christopher Callaway)

concurrency model executes testing, training and development simultaneously and incorporates feedback from each area into subsequent Low Rate Initial Production blocks produced at Lockheed Martin's mile-long factory in Fort Worth.

Renbarger highlighted that AF-45 arrived with

Block 2A software and upgrades, including the use of simulated weapons, datalinks, and night and Instrument Meteorological Conditions flight capabilities.

"The arrival of AF-45 is an incredible milestone for the Air Force as we move closer to F-35A Initial Operational Capa-

bility in 2016," said Col. Todd Canterbury, 33rd FW commander. "The men and women here are establishing the foundation for all F-35A training operations. Having our full end-strength grants our pilots and maintainers more flexibility in training, and that flexibility lets us advance the

F-35 program at a faster rate than ever before."

The 33rd FW is home to the F-35 Integrated Training Center responsible for F-35 A/B/C Lightning II pilot and maintainer training for the Marine Corps, the Navy, the Air Force and, in the future, at least eight international partners.

After high way crash, instructor pilot flies again



First Lt. Laura Jones poses for a photo after preparing for a flight April 21 at Laughlin Air Force Base, Texas. Jones was involved in an automobile accident Jan. 2 that kept her from flying for three months. Jones is a 85th Flying Training Squadron T-6A Texan II instructor pilot. (U.S. Air Force photo/Airman 1st Class Jimmie D. Pike)

By Airman 1st Class
Jimmie Pike
47th Flying Training Wing Public Affairs

LAUGHLIN AIR FORCE BASE, Texas (AFNS) – Her career seemed ruined, her dreams grounded.

"At the beginning, I thought I'd never fly again," said 1st Lt. Laura Jones, when she recalled her Jan. 2 accident.

On her way from San Antonio International Airport back to base, a car next to her had a tire blow out. The driver lost control and swerved into Jones's vehicle travelling at about 75 mph, she said.

"Shortly after, a passing National Guardsman arrived, held my neck to immobilize and keep me from damaging my cervical spine and talked to me until the paramedics arrived," said Jones, a T-6 Texan instructor pilot from the 85th Flying Training Squadron. "It all happened pretty quickly, from getting hit to the helicopter taking me to San Antonio Military Medical Center, only a couple of hours had passed. I maintained consciousness the entire time."

Jones suffered multiple breaks and injuries during the collision – injuries that grounded her flying career.

"The accident left me with a shattered left femur, lacerations on my kidney and spleen, my right wrist was broken in four places, my jaw was broken in

two places, and my lungs were bruised, among other scrapes," Jones said. "After I heard there were no neck, spine or eye injuries, I knew I would be flying soon enough."

The accident was followed by 11 days in the hospital and several grueling months of physical therapy and rehabilitation.

"We started her with basic range of motion exercises to work up to light weights and ensure she didn't overwork herself," said Kira Pie, a local physical therapy assistant. "We now have her going through impact workouts, like skipping, to get her body adjusted to the feel of pressure on the joints and bones."

Even though her body was aching and her workouts were strenuous, she worked through the difficulties with a single goal: to return to flying.

"My main concern was when I would be able fly again," Jones said. "When I talked to the flight doctors, they said I'd be shooting to fly again in June. I was bummed that it would take so long. After I started progressing so quickly I knew I could fly sooner."

Jones' hard work and dedication in physical therapy paid off when she had her first flight since the accident, April 21, and felt as if things had gone well.

"The flight went great, I knocked off a lot of rust and have my confidence

back," Jones said. "I felt better than I expected I would."

Jones' group commander took notice and commended Jones for her initiative.

"The fact that she is flying this soon, after an accident that should have been fatal, is testament to her hard work, determina-

tion and desire to fly," said Col. Timothy MacGregor, the 47th Operations Group commander. "She belongs here as a first assignment instructor pilot to teach the students what it means to be a pilot in the world's greatest Air Force."

Jones' next step is preparing to take the reins as an instructor once again.

"I'm hoping to be back flying with students in the next week," Jones said. "The only obstacle at this point is coming off a four month break and getting proficient in every maneuver so I can be the best instructor possible."

As Jones works toward instructing again, she remembers why she has

worked so hard in the first place.

"I was one of the kids who always knew they wanted to be a pilot," said Jones. "I grew up around Air Force jets, I knew that's where I belonged. Now I'm looking forward to being one of the Tigers again. This is the best squadron I could ask for."

Morris Ferry Dock receives hydrant: Fire Departments join in activation

By Deidre Ortiz
ATA Public Affairs

Members of the AEDC Fire Department and the Capitol Hill Fire Department joined their efforts in activating a new dry hydrant at the Morris Ferry Dock.

James Evans, assistant fire chief of the Arnold AFB Fire Department, stated acquiring this hydrant at Morris Ferry Dock has been a work in progress and both departments are proud that it's now installed.

"About a year ago Capitol Hill's fire chief and Arnold AFB Fire Inspector Steve Macon saw a need for a dry hydrant to supply water to the Morris Ferry Dock area in the event of a fire," Evans said. "After working with several base officials, the hydrant was installed [a few months] ago."

Though the dry hydrant at Morris Ferry Dock has been set up and ready to go, the weather had not allowed the fire departments to test the hydrant until recently.

On May 16 members of the Capitol Hill and Arnold fire departments met to, according to Evans, "put [the hydrant] through its maiden voyage."

And while they don't work together daily, this occasion is far from the first time that the Arnold Fire Department has teamed up with Capitol Hill's firefighters.

Arnold Deputy Fire Chief Daryl Vancise explained Capitol Hill Fire

Department is one of the base's valued and trusted Mutual Aid (MA) partners.

"Our MA agreement with Capitol Hill allows us to support their emergency responses when necessary and provides an avenue of additional resources for us as well," he said.

Vancise added that the dry hydrant they worked to get will be greatly beneficial to the area and to fire personnel in the event of a fire there.

"This hydrant will allow fire apparatus to refill their water tanks during emergencies," he said. "Hydrants are scarce in that area so having access to water from the lake will increase the chance for successful fire operations."

The dry hydrant itself is a unique type of hydrant which pulls water from an existing water source. Dry hydrant systems are generally non-pressurized and are designed for use in a drafting application. The installation of these systems on alternate water supplies can provide year-round water sources for fire suppression. Installed in strategic areas, five or more dry hydrants often become a main water supply system for rural fire departments where pressurized systems are not available or where lines are too small to support needed fire flows. However, they can also be used to supplement pressurized systems in municipal areas where low water pressure exists or where back-up systems are desirable for emergency preparedness.



Members of the Capitol Hill and Arnold Air Force Base fire departments work together to perform a first draft of the dry hydrant installed at Morris Ferry Dock. Pictured in the first photo are Capitol Hill fire personnel hooking the fire truck up to the dry hydrant. As seen in the second photo, the fire hose successfully sprays water from the lake. Pictured in the last photo are AEDC fire personnel Odell Crutchfield (left) and Billy King (right) assisting in detaching equipment from the truck. (Photos by Jacqueline Cowan)



Wounded warrior finds new place in the AF family



Retired Staff Sgt. Daniel Crane draws an arrow back using a mouthpiece during the Air Force Trials April 10 at Nellis Air Force Base, Nev. After a gunshot wound left his right forearm and hand immobile, Crane immersed himself in adaptive sports, where he has learned new ways to overcome his limitations. (U.S. Air Force photo/Senior Airman Jette Carr)

By Senior Airman Jette Carr
Air Force News Service

FORT GEORGE G. MEADE, Md. (AFNS) – Faith and trust in what we cannot see.

Those words are etched into his skin, right above a scar that, by itself, embodies the journey he has undertaken. The spider web of pink lines starts midway up the inside of his right arm and continues nearly to his wrist, following the path doctors took as they rushed to save his life and limb.

Retired Staff Sgt. Daniel Crane, a former security forces Airman stationed at Andersen Air Force Base, Guam, said he saw the phrase after his injury and it just stuck with him. In July 2013, one year after he had been shot in a random act of violence, he made those words a permanent expression on his body.

“I got this quote because of my whole incident and what I’m going through now,” Crane said. “The path I was given might not be the path I wanted or saw myself doing, but I try not to question it. I’ve got to believe that it’s for the greater good and just have faith that in time I’ll understand what the purpose is.”

Currently participating in the Air Force Wounded Warrior program as an athlete and mentor, Crane hopes that telling his story will help

others who are struggling through similar trials.

“I just want them to keep pushing forward; don’t let whatever happened to them stop them from being who they are,” he said. “It hasn’t stopped me.”

The night of July 28, 2012, Crane was accosted by someone he’d never met, a stranger who happened to be the neighbor of a friend he was visiting off base in Guam. Though he was later told the man had a history of run-ins with military members, at the time of his attack, Crane said he was unaware of the grudge that had been steadily building in the house next door.

Ready to head home after his visit, Crane said goodbye to his buddy around midnight and walked to his car. After his two dogs got settled in the back seat, the security forces Airman started the engine and rolled down his windows. He glanced to the right and watched as a car passed by. That’s when Crane saw the blast and heard the crack of a gun being fired.

“At the time when he shot me, I didn’t realize he’d done it,” Crane said.

“So, when I realized that it was actually real, I tried to get out of my car and to my buddy’s house,” he said. “But I got to the gate and from the amount of blood I’d lost, I just couldn’t move anymore. So I tried to

yell for help, and that’s probably the most helpless and the most scared I’ve ever been.”

The anti-military local used either a shotgun or high caliber rifle in his drive-by shooting. The blast impacted Crane’s right arm, struck the brachial artery, severed the nerves, shredded the muscle and struck bone.

As he stood by the gate unable to move and shouting for help, Crane said he thought that was it, that no one was going to come and he was going to die. Luckily, his friend heard the commotion and ran out to help.

Awake and aware throughout the entire ordeal, from the shot to the hospital, Crane remembers telling his buddy to tie a tourniquet around his arm. He said he couldn’t see much because of the darkness, but recalls the smell of gun powder and blood, and feeling the sensation that the world was slowing down.

The injured staff sergeant underwent initial surgery at the naval hospital in Guam and, once stabilized, was medically evacuated to Hawaii.

Though he went through a total of eight surgeries, including nerve grafting to restore some function in his damaged limb, his current prognosis is complete nerve damage, paralyzing his hand and forearm.

“Nerves regenerate very slowly, so it’s still just a waiting game at

this point,” Crane said. Crane retired from the military in February, due to his injury. He now sports a beard and his hair is no longer within regulations, but said he still feels a connection with the Air Force.

“My dad was enlisted in the Air Force for 30 years,” Crane said. “That’s definitely what I knew, and he raised me right. I just knew that was my calling, and once I joined, I realized I wanted to do so much more. I loved the brotherhood. I love the camaraderie, and what I was a part of. It was the biggest thing to me. It still is.”

When telling the story of his shooting, Crane is able to speak in a calm and matter-of-fact manner, but when he delves into having to hang up his combat boots, his voice begins to waver.

For Crane, a career in the Air Force was his dream, and it’s one he hopes to continue in the future, he said.

Until then, he plans to go to school for animal psychology, with the goal of rehabilitating and training dogs – perhaps even training dogs for wounded warriors. He will also be furthering his participation in the Air Force Wounded Warrior program and he was recently selected as one of the athletes to compete in the Warrior and Invictus Games this fall.

Recently, Crane joined the newly formed Air Force Wounded Warrior Recovering Airmen

Mentorship Program, which encourages the idea of Airmen helping Airmen.

“As a veteran to the program, you are there basically as a link between athletes and coaches,” he said. “You relate through your own experiences and help others to realize their potential, along with the benefits of being active.”

Through the adaptive sports camps hosted by the program, Crane’s eyes have been opened to methods of adapting to overcome his limitations, something he said he hopes others are able to experience.

Being surrounded by other wounded warriors has helped him in this process.

“They have inspired me not to give up,” he said. “There was definitely a time where I didn’t want to do anything, but after meeting these guys who are pushing through and they have worse injuries than me -- it has motivated me to get out of my comfort zone and back to my love of competition and being athletic.”

With momentum on his side, Crane continues to break his boundaries as he trains to represent his Air Force teams in the two upcoming competitions. He said he looks forward to competing against and supporting his fellow wounded warriors as they all push each other toward the next level of recovery.

Milestones



Phil Medley

Sept. 11, 2001, we got word that planes crashed into the New York Trade Center towers. I immediately reported to what was known as the "battle staff" in the A&E building. All my prior battle staff experiences were training exercises and preparation. This was a real world event. I was able to play a small part and witness the AF leadership engage. We stayed late into the night and when released, it was eerily calm and quiet outside. Most activities were shut down, and flights were grounded. I was anxious to get home to my family since we were still uncertain about what else may happen."

45 YEARS

Phillip Medley, ATA

35 YEARS

Rick Gamble, ATA
Douglas Hodges, ATA
Thomas McCoy, ATA
Joseph Migliaccio, ATA
Terry Riddle, ATA
Robert Schwer, ATA
Gary Storey, ATA
Teresa Wilhite, ATA
Curtis Winstead, ATA
Aaron Yates, ATA

30 YEARS

Ricky Burger, ATA
Deborah Davenport, ATA
Mark Duke, ATA

David Ehemann, ATA
Martha Leeser, ATA
Robert McAmis, ATA
James Waggoner Sr., ATA



Rick Gamble
ATA Integrated Test and Evaluation, Space and Missile Product Branch, 35 years

What is your most memorable AEDC moment during your years of service?

"The most heart-pounding is experiencing an APTU run for a scramjet test article at Mach 6. You can feel the facility as much as see and hear it. Butane, LOX [liquid oxygen], hydrogen, superheated JP-7 fuel and lots of high pressure air all come together to generate an extreme test environment."

25 YEARS

Charles Bryant, ATA
Ricky Bush, ATA
James Janssen, ATA
Gary Johnson, ATA
Bruce Lewis, ATA
Roy Thompson, ATA
Leisa West, ATA
Robert Weiten, ATA

20 YEARS

Hunter Beavers, ATA
Lorraine McElroy, ATA

15 YEARS

Bradley Panter, ATA

10 YEARS

Tracey Akpan, AF
Patricia Lynch, ATA
Donald Miller Jr., ATA
Patty Nunley, Premiere
Patti Prater, Premiere
Scott Prince, ATA
Joseph Wehrmeyer, ATA

5 YEARS

Quitman Alexander, ATA
Trenton Bussell, ATA
Charles Cook, ATA
Lauana Konyndyk, ATA

INBOUND MILITARY

Capt. Michael Saltzman, AF

OUTBOUND MILITARY

Capt. Sarah Kress, AF
Capt. Brett Ramnarine, AF

RETIREMENTS

Thaddeusz Kaczorek, ATA

NEW HIRES

Justin Anchanattu, ATA
Jonathan Carroll, AF
Keith Crosier, ATA
Jonathon Duke, ATA
Adam Fanning, AF
Kendall Hampton, ATA
Gary Horn Jr., ATA
William Keith Jr., ATA
Joshua Lankford, ATA
Keri McBee, ATA
Brian Meverden, AF
Richard Roberts, AF
Lee Smith, AF
Angela Teesdale, AF
Jon Paul Wallace, AF
Isaac Welch Jr., ATA

PROMOTIONS

1st Lt. Joseph Achenbach
Andrew Alexander, ATA
Belinda Alexander, ATA
Quitman Alexander, ATA
Lester Bates, ATA
William Burt, ATA

Peter Cento, ATA
David Claudio, ATA
1st Lt. Stuart Coston
Sarah Cothran, ATA
Derick Daniel, ATA
Valerie Davenport, ATA
James Dotson, ATA
Michael Eppinger, ATA
Marcus Golden, ATA
Muriel Harter, ATA
1st Lt. Benjamin Hoff
James King, ATA
Jason Klepper, ATA
Phyllis Lafferty, ATA
James Link II, ATA
Capt. Paul Malone
James Masters, ATA
Alan Milhoan, ATA
Shelby Moorman, ATA
1st Lt. Michael Parmentier
Tony Pederson, ATA
Cindy Prebola, ATA
Sherry Ramanathan, ATA
Orlan Richards, ATA
Christopher Robinson, ATA
Charles Rose, ATA
Marvin Sellers, ATA
Robert Smith, ATA
Debra Stacey, ATA
1st Lt. Julie Sung
Shannon Tibbals, ATA
Kimberly Vanzant, ATA
Jerry Washington, ATA
Leisa West, ATA
Scott Wieland, ATA
Jared Wrather, ATA
Jacky Young, ATA

What is your most memorable AEDC moment during your years of service?

"While at the Gossick Leadership Center on

Phil Medley reflects on his past 45 years at AEDC

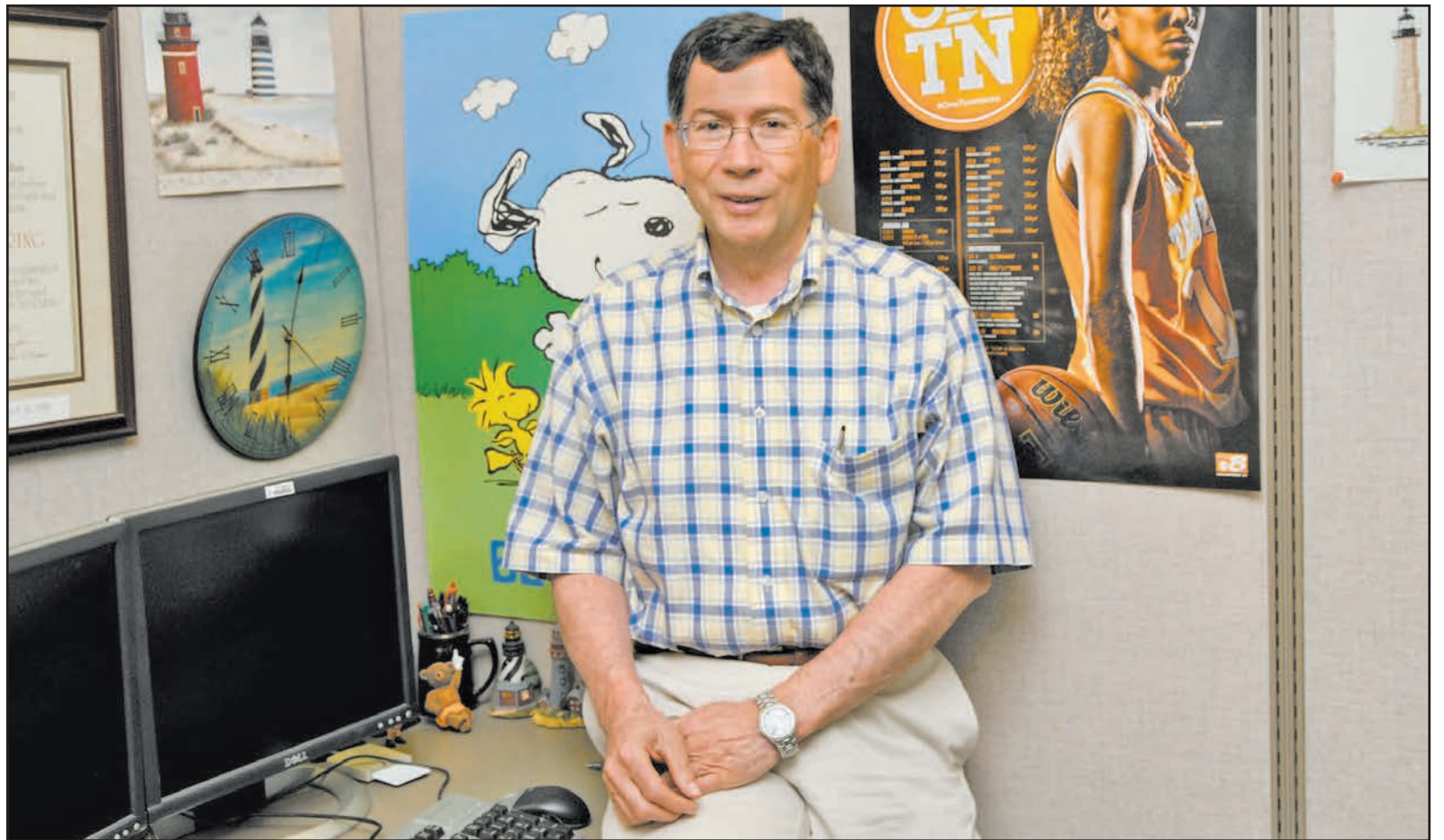
By Deidre Ortiz
ATA Public Affairs

Phillip Medley started his career at AEDC right after graduating from Tennessee Tech University in 1969.

Forty-five years later, Medley, who now works as the Test Measurement and Diagnostic Equipment (TMDE) technical lead, remembers his interview like it was yesterday, commenting on the kindness he was shown that day.

"I spent most of the morning in the Engine Testing Facility (ETF) talking with the instrumentation folks," he said. "When it came lunchtime Mr. Will George offered to take me to the A&E Cafeteria for lunch. I panicked for a few seconds. I was so excited about [my] interview that I didn't make sure I had lunch money when I left home that morning. I secretly counted the change in my pocket as we went through the line and figured out I had enough change for a hot dog and a glass of water. I was very relieved when Mr. George bought my lunch for me."

Medley officially started at the base June 10, 1969, in the ESF Instrument Calibration Laboratory under Shirley Williams, supervisor of the



Phillip Medley has had several different career opportunities during his 45 years at AEDC. He is currently working as the Test Measurement and Diagnostic Equipment technical lead. (Photo by Jacqueline Cowan)

Temperature Calibration Laboratory at the time.

He explained that he looked to Williams as a mentor.

"Shirley [Williams] was one of the best supervisors I've had in my career at AEDC – he gave me the 10,000 chances Thomas Edison referred to in one of his quotes, 'I have not failed, I've just found 10,000 ways that won't work,'" Medley said. "I spent 12 great years in

the lab learning all about calibration, metrology and such from the instrument technicians, especially Calvin Rieben who taught me just about everything there is to know about temperature metrology from measurements near absolute zero, to working with the metallic freezing point standards."

Medley stated his most memorable, and perhaps the most stressful, moment in the lab occurred April 1,

1974.

"One of the technicians, Gene Smith, was calibrating the alternate current voltage standard in our multimeter calibration station and accidentally came in contact with about 2,200 volts," he said. "I hit the circuit breaker to turn off the power and those nearby took care of Gene. He made it through the ordeal, and an investigation revealed a design flaw in the voltmeter he

was using. Gene was following the correct safety procedures, but the 'holes in the Swiss cheese' just happened to line up to give him the electrical shock."

Medley received a letter of recognition from AEDC's general manager for doing his part in what could have been a life threatening accident.

Medley moved to ETF in 1982 and had the opportunity to gain some testing experience by spending the summer in the Solid Rocket Motor Test Facility J5.

"J5 was one of the ETF production test cells at the time," Medley explained. "Not only did I gain test experience, I gained new friends, including General Lee Gossick."

Maj. Gen. Gossick, now deceased, served as AEDC commander from 1964-67. After retiring from the Air Force, he returned to AEDC in 1980 to serve first as director of quality and safety, then as deputy general manager of the AEDC aeropropulsion testing contractor for nine years.

"Gossick shared his management philosophy with me – manage by walking around," Medley said. "That's one thing we all need to do, whether managing our home life or a big project at work. Stay involved with the 'team.'"

A noteworthy event came about in 1990, when Medley met the woman who would later become his wife.

"One of my job duties involved tracking down new instrument purchases to ensure the new items were correctly entered in the Instrument Management Information System," he said. "We received a monthly report of new items, but it didn't have all the information needed to track down the items. A colleague told me all the purchase requests went through material control and if I called [extension] 3930 the lady who answered the phone could tell me who bought each item. I tried it and it worked."

Medley began a friendship with the woman on the other end of the phone, and the calls became more frequent until he eventually went to visit her in person.

"Finally in 1995 I invited the young lady to go to the National Engineers Week Banquet with me and the rest is history," he

said. "The 'voice at 3930' has been my wife for a happy 18 years."

Medley's wife, Karen, is also still working at AEDC in the contracts office.

Another inspirational individual Medley speaks fondly of is Bill Earheart.

"Bill was always an engineer at heart and thinking of better ways to do things," Medley said.

Medley noted that over the years he's witnessed firsthand how much technology has advanced. For example, in the early 1990s, a systems engineer in the Central Computer Facility (CCF) introduced him to a computer program that extracted data from a database on the mainframe and allowed you to transfer that data to the PC, which was exciting news.

"At that time, it took a letter from your branch manager and director to get a report created by the CCF programming staff, and it took a long time to get the report. This program made the reports practically instantly."

Though he's looking towards retiring soon, Medley believes the TMDE program is in good hands and will continue to be successful.

"We (AEDC) now have a TMDE program we can be proud of," he said. "Our test data quality is the best it's ever been and we are meeting the Air Force customer's expectations for compliance with TMDE related technical orders. As we begin another page of TMDE history this fall as we welcome the new PMEL contractor to AEDC, I'm sure the TMDE community will do what needs to be done to make the new contractor feel at home at AEDC and get the job done."

Medley said he's enjoyed his career and appreciates those who've been supportive along the way.

"I'm very happy to have had the opportunity to work with the great people that made up the ARO/Sverdrup Instrument Branch, as well as many others from the other departments who gave me a good foundation. And there's the ATA generation – we have a great, highly performing workforce who knows how to use technology to keep AEDC at the forefront of the ground test community. Thanks to all of you for allowing me to share a wonderful 45 years at AEDC."

AEDC military personnel receive promotions



Capt. Paul Malone (right) takes his Oath of Office during his promotion ceremony where he was promoted to captain in the U.S. Air Force. The oath was presented by Lt. Col. Jay Orson. (Photo provided)



First Lt. Joseph Achenbach (center) is pinned by 1st Lt. Benjamin Hoff (left) and 1st Lt. Chance Johnson at a recent promotion ceremony where he was promoted to first lieutenant in the U.S. Air Force. (Photo by Jacqueline Cowan)



First Lt. Benjamin Hoff (right) takes his Oath of Office during a promotion ceremony where he was promoted to first lieutenant in the U.S. Air Force. The oath was presented by Hoff's father, Gregory. (Photo by Jacqueline Cowan)



First Lt. Julie Sung (center) is pinned by U.S. Air Force Lt. Col. Jay Orson (left) and U.S. Navy Lt. Cmdr. Jessica Herman during a recent promotion ceremony where she was promoted to first lieutenant in the U.S. Air Force. (Photo by Jacqueline Cowan)



CONGRATULATIONS ON YOUR MILITARY PROMOTION!

The AEDC Public Affairs office would like to use pictures of your military promotion to run in High Mach. If you are interested, please contact the High Mach staff at 454-5655 or via e-mail at: arnold.highmach@arnold.af.mil to let them know the date and time of the promotion/ceremony!

