



HIGH MACH

Serving the World's Premier Flight Simulation Test Complex



Vol. 61, No. 19

Arnold AFB, Tenn.

PSRST STD
US POSTAGE PAID
TULLAHOOMA TN
PERMIT NO. 29

October 6, 2014

Accelerated mission test provides savings for U.S. Air Force

By Deidre Ortiz
ATA Public Affairs

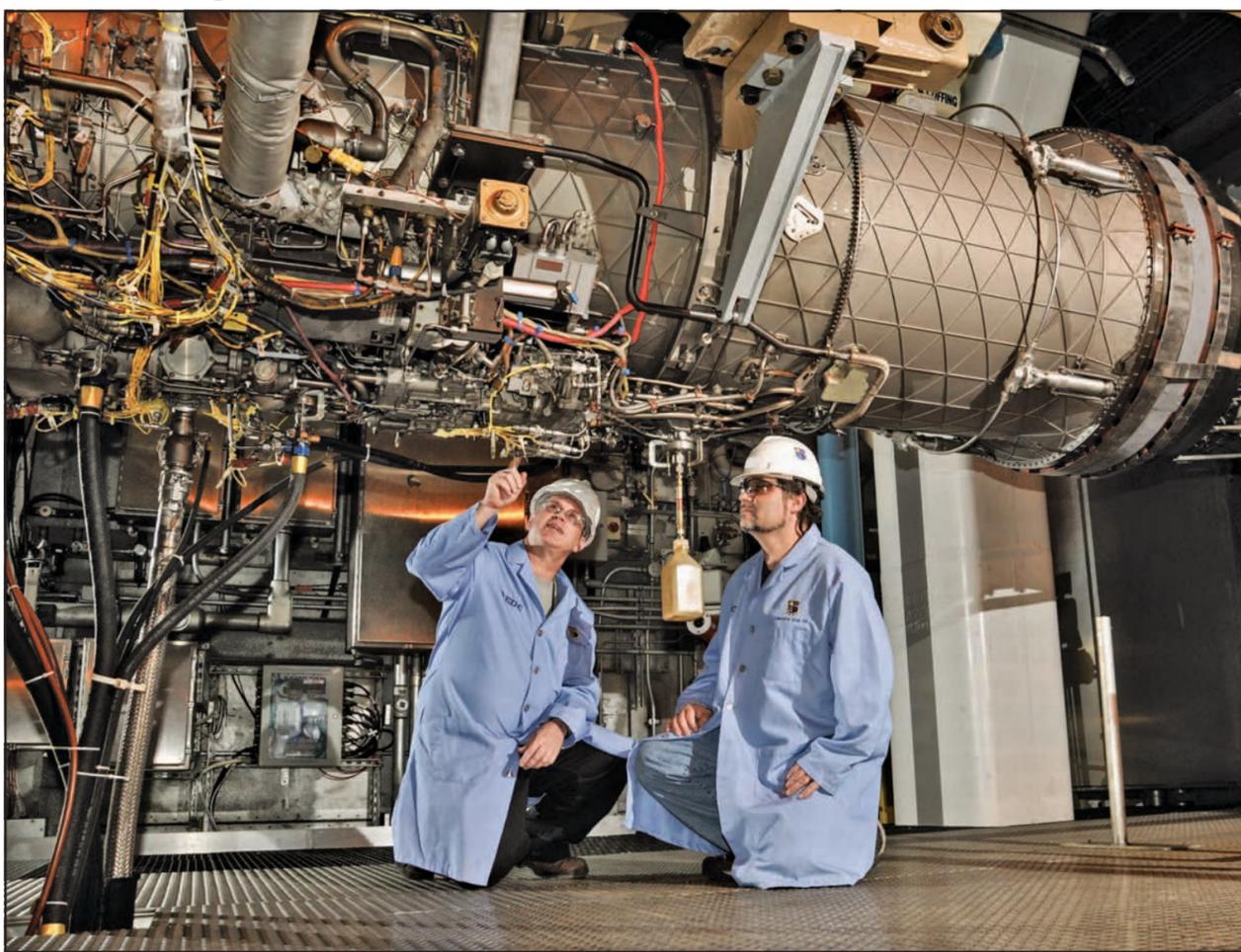
Project engineers at AEDC have led a significant effort in accelerating mission testing (AMT) that will ultimately result in a large payoff for the Air Force.

A 15-month AMT of Pratt & Whitney's F100-PW-220 engine, which powers the Air Force fleet of F-16 Fighting Falcons and the F-15 Strike Eagles, was recently conducted in AEDC's Sea Level 3 (SL-3) test cell.

The test, part of a \$17.5 million program, which ran from January 2013 until spring of this year, is one of the longest running jet engine tests in AEDC history. This successful test has extended the life of the F100-PW-220 by two years, from 8 years to 10.

"We were able to take the engine from 4,000 to 5,000 calculated cycles," said 1st Lt. Stuart Coston, Air Force team leader for the project. "Essentially, it eliminates an entire depot level overhaul in the engine life cycle."

Tom Schmidt, ATA project



Two AEDC mechanics, Neil Aukeman, left, and Doug Camp, right, check one of the electrical connectors on the F100-PW-220 engine. (Photo by Rick Goodfriend)

See TEST, page 3

Glenn Liston heads hypersonic branch at AEDC

By Deidre Ortiz
ATA Public Affairs

The U.S. Air Force Research Laboratory (AFRL) formed the High Speed Experimentation Branch at AEDC, with Glenn Liston selected to head the new venture.

As chief of the branch, Liston will oversee the operations of the government and contractor team that will conduct experimental research in AEDC's facilities.

"For most of my career, I've conducted analysis and developed program plans within the Air Force's laboratory system," he said. "That has been fascinating work, and



Glenn Liston

it's given me a solid grounding in hypersonic technologies."

Liston will be supervising about a dozen laboratory employees to include civilians, military personnel and interns. Four to six on-site contractor

engineers and technicians will also be working as part of the branch.

"The new branch has the mission to conduct foundational and systems research in propulsion, aeronautics and structural applications providing technology maturation related to the hypersonic flight regime," he said.

Liston mentioned how his past experience has prepared him for this position. He served as an Air Force captain assigned to Onizuka Air Force Base. There he was a member of the Advance Echelon (ADVON) as the Air Force's satellite control network transitioned from Air Force Mate-

riel Command to the Second Space Wing.

"It was at Onizuka that I learned about quality assurance management, award fees and similar issues associated with operations," he said. "Up to that time, all of my experience was with research and development contracts."

In 1999, Liston served for a year as an acting branch chief. He stated that it was an interesting position to be in, as that branch was split between Edwards Air Force Base and Wright-Patterson Air Force Base.

"That experience convinced

See LISTON, page 10

Revolutionary Change: Preparing for a year of transition

AEDC Commander, Col. Raymond Toth is providing periodic updates on AEDC's Source Selection efforts to the entire workforce via email and video messages called "What's the Buzz?". The High Mach will print those messages and transcripts in a series titled "Revolutionary Change." Additionally, Toth's messages and other information can be found online at www.arnold.af.mil/transition.

Team AEDC,

Today marks the beginning of what some are calling the 'year of transition.'

One year from now we will be operating under a completely new construct. The test mission will be performed by Combined Test Force teams - government-led teams comprised of members from each Division and contracted employees from multiple companies who will combine their varied expertise to achieve results for our customers and our nation.

This transition started today at our Precision Measurement and Equipment Lab (PMEL) where APRO International will be performing all of our PMEL requirements on base. APRO is a woman-owned small business and was awarded the AEDC PMEL Task

See CHANGE, page 3

ACC announces annual dinner Oct. 23

By Raquel March
ATA Public Affairs

The Arnold Community Council (ACC), a community support group for AEDC, will host its annual dinner Oct. 23 at the Manchester-Coffee County Conference Center.

The guest speaker is Tennessee Governor Bill Haslam.

Haslam was elected as the Tennessee governor in 2010. Haslam launched the "Tennessee Promise" program in 2014 to give graduating high school seniors a chance to earn a certificate or degree beyond high school free of charge.

The Knoxville native is a



Governor Bill Haslam

graduate of Emory University and began his career in business at the Pilot Corporation where he later became the president. Haslam left the Pilot Corp. and became the CEO of

the E-Commerce and Cataloging division at Saks Fifth Avenue in 1999 to 2001.

In 2003, Haslam was elected to serve as mayor of Knoxville and elected to serve a second term in 2007.

The annual dinner is the ACC's only fundraiser and the money raised is used to support and promote AEDC.

Each year the community council sponsors and collects donations for the Veterans Picnic; makes a donation to the AEDC Children's Christmas Party, provides gifts for the Complex's annual military award winners; donates

to Honor Flight and sponsors receptions for visiting dignitaries.

The group also travels to Washington, D.C., each year to promote AEDC. About 20-25 ACC members schedule appointments with the Tennessee Congressional delegation and key test and evaluation and ground testing officials at the Pentagon to discuss issues facing AEDC.

Members of the council each pay for their trip expenses out-of-pocket.

If you are interested in attending the ACC's annual

See ACC, page 2

In This Issue....

AEDC's Ron Lutz is 'trending'...
Page 4



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

High Mach is published by *The Tullahoma News*, a private firm in no way connected with the U.S. Air Force, Arnold Engineering Development Complex (AEDC) or Aerospace Testing Alliance (ATA), under exclusive written contract with ATA, complex support contractor, at Air Force Materiel Command's AEDC, Arnold AFB, Tenn., 37389.

Everything advertised in this publication will be made available for purchase, use or patronage without regard to race, color, religion, sex, national origin, age, marital status, physical handicap, political affiliation or any other non-merit factor of the purchaser, user or patron.

The *High Mach* office is located at 100 Kindel Drive, Suite B212, Arnold AFB, Tenn. 37389-2212. Editorial content is edited and prepared by AEDC support contractor ATA. Deadline for copy is Wednesday at close of business the week before publication.

This commercial enterprise newspaper is an allowable ATA contractor publication for personnel at AEDC.

The content of *High Mach* does not necessarily reflect the views of the Air Force, AEDC or ATA. The appearance of advertising in this publication does not constitute endorsement by the Department of Defense, the Department of the Air Force, AEDC, ATA or *The Tullahoma News* of the products or services advertised.

For advertising information, call (931) 455-4545.

For general information about *High Mach*, call (931) 454-5655 or visit www.arnold.af.mil.

The complex's vision: Be the nation's best value ground test and analysis source for aerospace and defense systems.



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

Air Force Ball crowd celebrates AF birthday



(Top photo) Col. James Krajewski (left), the director of the AEDC Test Support Division, and 2nd Lt. Chris Handy, with the AEDC Propulsion Wind Tunnel Test Branch, cut the first piece of cake to celebrate the U.S. Air Force 67th birthday during the Air Force Ball at Arnold Air Force Base on Sept. 19. (Photo by Rick Goodfriend)



(Right photo) Attendees share a toast at the Air Force Ball at Arnold Air Force Base on Sept. 19. (Photo by Rick Goodfriend)

Feds Feed Families campaign ends with success

By Peggy Proffitt
AEDC Contributing Writer

Arnold Air Force Base has participated in an Air Force wide program called "Feds Feed Families" for the past three years. This program provides an opportunity for all of us here at Arnold to give back to the surrounding communities.

We coordinate with three local Good Samaritan agencies. These agencies are non-profit and serve the Tullahoma, Manchester and Decherd communities.

Last year was my first opportunity to help with donation collections for the Feds Feed Families campaign and it was such a rewarding experience, that this year I volunteered to be a point-of-contact for the Junior Force Council!

There are so many families in our area in desperate need of assistance to provide even basic necessities to their children and families,

and this program plays a vital role in providing food, school supplies, baby care items and personal hygiene items to those families.

In spite of the many challenges we have faced in the last year, we have been able to maintain the spirit of giving back to our community through the Feds Feed Families Campaign.

The program normally runs from June through August each year. Although we got off to a late start this year, beginning our collections in late July, we have been able to collect almost 275 pounds of non-perishable food, personal hygiene and baby items to donate to three local Good Samaritan sites.

On Sept. 25, we met with Kathy Pelton, executive director of the Tullahoma Good Samaritan, Grace Thompson of the Decherd Good Samaritan, Dr. Ralph Jones, who was picking up for his wife Fay Jones the



AEDC Feds Feed Families volunteers (left to right) Dr. Ralph Jones, Armando Aguirre, Kathy Pelton – with Tullahoma Good Samaritan, and Peggy Proffitt load donated items for Good Samaritan into cars on Sept. 25 at AEDC. IAW DODI 5040.02 Ecl. 10, a portion of this image has been masked as part of our security posture. The image containing the masked portion is approved for public release. (Photo by Rick Goodfriend)

pantry coordinator for the Manchester Good Samaritan, and Patrick Jourdan, the Arnold AFB Commissary Manager to distribute the items so generously donated by caring people at Arnold.

Those of us who worked in the campaign would like to express our great appreciation to all those who gave donations to support this cause as well as to all the volunteers who helped make this year's campaign

a success. We also appreciate the cooperation of Jourdan in allowing us to gather, weigh and store the donations in his warehouse facility at the Commissary until we could distribute them at the end of the campaign.

ACC from page 1

event, table sponsorships are \$700 for gold and \$350 for silver; individual seats are \$75 per person.

Companies and organizations who sponsor at the gold level will receive 10 seats at the event at a reserved table with the sponsor name; 10 ACC individual memberships

for one year and recognition in the program, the dinner slide show and on the ACC website.

Silver sponsors will receive five reserved seats at the dinner, five ACC memberships for one year and recognition in the program, dinner slide show and on the

ACC web site.

Individual attendees will get one seat in the general seating area along with a membership to ACC for one year.

All members are invited to ACC meetings held each month and other special events throughout the year.

To sponsor a table or individual seats at the ACC's annual event, email 2014dinner@arnoldcommunitycouncil.com or call Ben Craig, (931) 639-0694; Jim Joliffe, (937) 545-9135; Jennifer Young, (931) 455-5497; Harry Brittain, (931) 247-5417; Suzie

McEachern, (931) 728-7635; Bruce Shaw, (931) 308-8932; Mike Wiedemer, (931) 308-1923; or Jim Herron, (931) 455-2664, extension 218.

The social begins at 5:30 p.m. with dinner at 6 p.m. and the official program at 7 p.m.

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 meet, 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

AEDC Fire Department reminds you 'working smoke alarms save lives: test yours Every Month!'

By Jim Evans
AEDC Contributing Writer

In an effort to better educate communities throughout the U.S., fire-fighters and safety advocates nationwide are joining forces with the nonprofit National Fire Protection Association (NFPA) in promoting "Working Smoke Alarms Save Lives: Test Yours Every Month!" as the theme for this year's Fire Prevention Week campaign, Oct. 5-11.

"In a fire, seconds count," said Jim Evans, AEDC Fire Prevention Officer. "Roughly half of home fire deaths result from fires reported at night between 11 p.m. and 7 a.m. when most people are asleep. Home smoke alarms can alert people to a fire before it spreads, giving everyone enough

time to get out. We want residents to understand that working smoke alarms are needed in every home, on every level (including the basement), outside each sleeping area and inside each bedroom."

According to the latest NFPA research, working smoke alarms cut the chance of dying in a fire in half. Meanwhile, almost two-thirds of home fire deaths resulted from fires in homes with no smoke alarms or no working smoke alarms. The association's data shows that many homes have smoke alarms that aren't working or maintained properly, usually because of missing, disconnected or dead batteries.

An ionization smoke alarm is generally more responsive to flaming fires and a photoelectric smoke alarm is generally



more responsive to smoldering fires. For the best protection, or where extra time is needed, to awaken or assist others, both types of alarms, or combination ionization and photoelectric alarms are recommended.

Interconnected smoke alarms offer the best protection; when one sounds, they all do. This is particularly important in larger or multi-story homes, where the sound from dis-

tant smoke alarms may be reduced to the point that it may not be loud enough to provide proper warning, especially for sleeping individuals.

The AEDC Fire Prevention Office offers the following tips for making sure smoke alarms are maintained and working properly:

- Test smoke alarms at least once a month using the test button, and make sure

everyone in your home knows their sound.

- If an alarm "chirps," warning the battery is low, replace the battery right away.

- Replace all smoke alarms, including alarms that use 10-year batteries and hard-wired alarms, when they're 10 years old (or sooner) if they do not respond

properly when tested.

- Never remove or disable a smoke alarm.

If you have questions regarding smoke detectors call the AEDC Fire Prevention Office at 454-5445.

To learn more about "Working Smoke Alarms Save Lives: Test Yours Every Month!" visit NFPA's Web site at www.firepreventionweek.org.

Desktop icon offers quick access to helping agencies

By Raquel March
ATA Public Affairs

It is now even easier to gain access to the on-line directory to all helping agencies available to base personnel through the Helping Agencies icon on all AEDC personnel's desktops.



The helping agencies are available through the Arnold AFB homepage in the Employee Resource Guide under AEDC Links. However, with just a click of a mouse, anyone looking for assistance will be taken directly to the directory listing the contact information

for all helping agencies.

These helping agencies include the Military One Source, Airman and Family Readiness Center, Sexual Assault Response Coordinator, Health and Wellness Center, Employee Assistance Program, Victim Witness Assistance Program and many more agencies.

By using this icon the AEDC community will have quicker access to assistance when someone is in need. It's been called a "one-stop shop" for finding information on all the helping agencies available.

CHANGE from page 1

Order by our partners at Air Combat Command in August.

Additionally in August, the Air Force Civil Engineering Center awarded our Performance Based Remediation requirements to Bhate Environmental Associates. Throughout FY15, Bhate will be developing site plans and performing Military Munitions Response Program activities. Starting in FY16 they will be performing our other environmental remediation work.

These and our future transition efforts do not happen in a vacuum. As we move from one consolidated contract to six contracts, decisions are made, we are all impacted, and yet our mission must continue - our customers expect nothing less.

Throughout this year we must learn the lessons from these transitions so we don't make the same mistakes next October. More importantly though, as we accomplish our individual parts of the mission, we must watch out for each other and focus on our strong safety culture. Know your co-workers as well as your task, so when something doesn't seem right, you will say something - to the co-worker, a supervisor or someone else.

I look forward to seeing how well you will all perform over the coming year. Thanks for all you do to make AEDC a success today and in the future!

Col Toth

Fitness trail closed on weekends

By Deidre Ortiz
ATA Public Affairs

To ensure the safety of all personnel, the AEDC Fitness Center Trail will be closed on weekends during deer hunting season.

The first weekend for the trail to be closed was Sept. 27. It will remain closed on weekends until Jan. 11, 2015.

In addition to weekends, the trail will also be closed on the following dates: Nov. 27-18; Dec. 25-26; and Jan. 1-2.

Chris Elkins, AEDC Natural Resources manager, stated that signs have

been posted at the AEDC Fitness Center parking lot, as well as the entrances to the trail, in an effort to make people aware it shouldn't be used for running or walking during this time.

"We make this announcement every year and just want everyone to be safe," he said. "Deer hunting is archery only in the areas surrounding the industrial area, which includes the Fitness Center Trail, and someone running or walking wouldn't typically be able to see the hunters from the trail."

Any questions can be directed to the Natural Resources Office at 454-5466.

TEST from page 1

manager for AEDC's Aeropropulsion Products Branch, added that increasing the time between performing a major overhaul of an engine is financially beneficial for both the government and taxpayers.

"Benefits include a more dependable engine for the pilots and cheaper costs to maintain for the depots and taxpayers," he said. "This will potentially save [the Air Force] many millions of dollars in depot maintenance costs when applied to the fleet of F100-PW-220s in service."

It's estimated the test will actually lead to a more than \$100 million savings in reduced depot overhaul costs through 2045.

An AMT simulates the operational stresses the engine would experience in flight between depot overhaul visits.

Jeremy Morris, lead project engineer, explained the objectives of this AMT were to demonstrate the durability of the bill of material (BOM) and task hardware by exposing it to 5,000 CCYs via test standards.

"This is done by running the engine through carefully designed throttle profiles, representing different missions of the F-15 and F-16 aircraft in service," he said. "In simpler terms, we simulate about 15 years of wear and tear the engine would see in service before needing to be overhauled and see how the hardware performs and endures. When complete, the engine is sent back to Logistics Command and is torn down for detailed inspection of all its parts."

The test crew worked together seamlessly in completing the AMT, finding several ways to achieve

desired results while remaining on schedule. Test engineers Bernie Williamson and Ray Joellenbeck were instrumental in coordination of inspections and maintenance between SL-2 and SL-3 given the project's reduced manpower requirements. In addition to reduced staffing, testing changed from a two-shift operation to around-the-clock test coverage, decreasing the test schedule by more than a month. Lastly, the test team was in constant coordination with multiple AEDC test support resources to minimize project delays.

Paul Kelly, senior analysis engineer, explained that "the test results provided engine performance, durability and reliability assessments, and documented engine hardware component distress." Innovative

thinking during the planning stages of the project resulted in the creation of modified mission profile definitions. These modifications decreased engine fuel consumptions and resulted in savings of \$524,000 for the systems program office.

Team leaders applauded the project team on a job well done.

"Aerospace Testing Alliance personnel worked around the clock to ensure the test was completed on time," Coston said.

The test team incorporated lean staffing and efficiencies to run 1,968 test hours for 58 weeks. On two occasions during this program, the F100 was one of five engines testing simultaneously at AEDC. Due to the efficient use of manpower and resources, the test exceeded customer expectation and was com-

pleted at \$733,000 under cost.

Morris explained testing in the AEDC sea level test cell also had its advantages.

"By using SL-2 or SL-3, we can operate at sea level ambient, variable inlet RAM or heated inlet sea level without RAM," he said. "Having the ability to test with multiple facility configurations offers the test customer an additional measure of flexibility during a crowded test window."

Completion of this test marks the successful demonstration required to certify and extend the service life of the engine for the F-15 and F-16 by 25 percent. For their outstanding effort, the F100 test team was recently presented the General Lee Gossick Team Excellence Recognition.

Power the Force. Fuel the Fight.



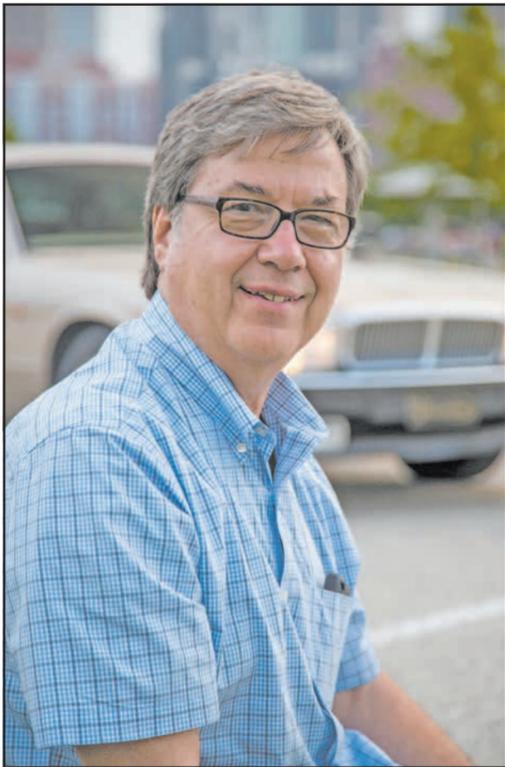
I AM AIR FORCE ENERGY

October is Energy Action Month

"Go Green Wednesdays"
Wear a green shirt every Wednesday throughout October to help boost Energy Awareness

"Energy Expo"
Oct. 22, 10:30-11 a.m.
Main Auditorium
TVA tips and tricks on saving "Energy @ Home"

Lutz's love for Jaguars 'trending'



Ron Lutz. (Motor Trend Photo by Julia Lapalme)

By Raquel March
ATA Public Affairs

Ron Lutz, an engineer in the AEDC Test Technology Branch and Manchester resident, has a love for Jaguars but not of the animal kind. His interest in Jaguar automobiles was recognized by Motor Trend magazine in the special summer issue titled "Motor Trend Classic."

Lutz became a Jaguar enthusiast in 1997 while he was employed by a company in England that manufactured wind tunnel parts.

"I had joined a small English firm that makes wind tunnel test equipment

and decided that I needed an English car for my sales calls in the U.S.," Lutz said. "The only real choice was Jaguar."

Lutz eventually purchased a used 1992 Jaguar Vanden Plas saloon (sedan) from a friend.

"I have a friend whose wife had one [a Jaguar], so I asked if I could test drive it to get familiar with the car," Lutz said. "He let me drive it and they explained that they planned to trade it in within the year and asked if I would like to buy it instead. Six months later I purchased the car, it had 50,000 miles on it, in October of 1997."

After purchasing a new



The 1992 Jaguar XJ6 Vanden Plas, owned by AEDC engineer Ron Lutz, features burlwood tea trays for rear passengers which is an example of old world luxury. (Motor Trend Photo by Julia Lapalme)

1996 Jaguar, Lutz decided to sell the 1992 Jaguar Vanden Plas through the Nashville Jaguar Club. At the same time, Motor Trend was looking for a Jaguar to compare to a 1992 Nissan Infiniti Q45t for an article on 1990 luxury cars.

The Nissan U.S. headquarters has a 1992 Infiniti Q45t museum car that was used for the article.

"They [Nissan] wanted Motor Trend to do an article on their car and compare it to one of its early 1990s competitors," Lutz said. "Motor Trend wanted to find a car in the Nashville area to make it an easy trip to make the photos and do the test drives.

They got in touch with me and we set a date for the test drive and photo-shoot in Nashville in late June."

Lutz rebuilt his Jaguar with original Daimler trim and insignia after a severe collision in 2005 because the top trim of Jaguar cars were distributed with the Daimler name in the European market. The cars showcased the Jaguar branding only when it was marketed in the U.S.

Lutz said, "Daimler Cars were purchased by Jaguar Cars in 1960 for the double decker busses and military vehicles Daimler made, as an effort to expand the Business of Jaguar. They did not intend

AEDC engineer Ron Lutz's 1992 Jaguar XJ6 Vanden Plas, seen in this photo, was featured in the summer 2014 "Motor Trend Classic" magazine which was published in August. The photo-shoot for the article took place in Nashville and compared features of the 1990s luxury cars – the Nissan Infiniti Q45t and the Jaguar. (Motor Trend Photo by Julia Lapalme)

to continue the hand-built Daimler Car production. However, due to dealer pressure, they agreed to offer the most luxurious Jaguar models as Daimlers in all markets except the U.S.

"My car was manufactured as a British Daimler with Connelly leather, Wilton wool carpets and a seven-coat hand-rubbed paint job, but rebadged as a Jaguar Vanden Plas prior to shipping to the U.S."

The Motor Trend writer Rory Jurnecka wrote that, "If the Q45 was cutting-edge, the Jaguar that inspired its basic proportions and driving dynamics seems distinctly Old World."

The article compared the differences in the old world luxury of the Jaguar to the modern luxury of the Q45t and provided specifications of each car. Even the owners, Lutz and Barry Winfield, who owns an Infiniti Q45t, provided

insights for the article regarding why they liked their cars and why they are collectable.

"Although the handling isn't quite as good as my son's Series III XJ6, the combination of the negative front and rear camber, level of power assist, and the large diameter steering wheel make it a fun car to drive."

Lutz said. "The XJ40 series brought Jaguar into the modern age with major styling and mechanical changes. It also took a step toward reducing the brand's reputation for poor reliability."

Lutz's son, Josh, drove the Nissan Infiniti Q45t museum car in the photo shoot.

To read the entire article where Lutz's Jaguar is featured in the Motor Trend Classic publication, see this link – www.motortrend.com/classic_cars/mctflipbook/.

F-16 collision-avoidance system could save lives

By Maj. Leroy Doby
F-16 Operational Flight Program

WRIGHT-PATTERSON AIR FORCE BASE, Oh. – This fall the Air Force will begin fielding the M6.2+ F-16 Operational Flight Program with a capability that will greatly enhance pilot safety. The Automatic Ground Collision Avoidance System uses a database of digital terrain data and information on the aircraft's position and velocity to determine if there is an impending controlled flight into terrain (CFIT).

If the system determines that CFIT is imminent, the flight controls automatically roll

the aircraft upright and pull up to avoid ground collision. The AGCAS is a significant addition to the aircraft's arsenal of safety systems. An estimated 26 percent of aircraft losses and 75 percent of all F-16 fatalities are caused by CFIT. It is predicted that AGCAS will eliminate 90 percent of all F-16 CFIT mishaps.

"This capability is a game-changer. It is a culmination of the hard work and dedication of a diverse industry and government team. I am proud of their exemplary and persistent efforts as we approach the fielding of this potentially lifesaving capability to our warfighters," said Lt. Col. Marc Dauteuil,



The Air Force Research Laboratory Automatic Ground Collision Avoidance System will automatically take over an aircraft's flight controls if a crash is imminent. The technology is a significant advance in safety systems. (Air Force photo by Staff Sgt. Christopher Ruano)

Headquarters Air Combat Command, F-16 Program element monitor.

AGCAS began development under the Automatic Collision Avoidance Technology Pro-

gram started in 2007 as a new initiative between the Air Force Research Laboratory, the Office of the Secretary of Defense and NASA. The ultimate goal of the AGCAS is to provide enhanced safety without interfering with pilot operations or reducing aircraft performance. This technology has paved the way for integration on other platforms, including the F-22 and F-35.

The Air Force Life Cycle Management Center, F-16 System Program Office contracted with Lockheed-Martin Aeronautics, Fort Worth, Texas, to integrate the AGCAS into the F-16 through the M6.2+ OFP and through modifications to the Digital Flight Control Computer and Advanced Data Transfer Equipment. F-16 AGCAS developmental testing, conducted by the

416th Flight Test Squadron, Edwards Air Force Base, Calif., began in fall 2011.

Testing concluded in the summer of 2014 with M6.2+ Operational testing by the 53rd Wing, Eglin Air Force Base, Fla. Extensive testing was conducted using operationally representative scenarios to demonstrate operational utility and low probability of mission interference.

AFMC promotes Strengthening Relationships campaign

By Greg Chadwick
Air Force Materiel Command Wellness Support Center

WRIGHT-PATTERSON AIR FORCE BASE, Ohio – During the month of October, Air Force Materiel Command will promote the Strengthening Interpersonal Relationships campaign. Healthy and caring relationships with family, friends, and significant others can give our lives immeasurable joy and meaning.

According to the U.S. Department of Health & Human Services, qualities of a healthy relationship

include:

- Strong two-way communication
- Commitment
- Trust and support
- Honesty and respect
- Ability to laugh at self and the world
- Appreciation and thoughtfulness
- Willingness to compromise
- Fighting fair when resolving conflict

Some relationships may become strained and

lead to communication meltdowns. When a family member or significant other has an emotional outburst, the hurtful words can scar and lead to resentment and bitterness.

The ability to communicate and resolve conflict is at the core of any successful relationship. Think about your relationships and how you want them to be. If you are feeling distressed about a relationship, support is available through the following local installation helping agencies:

- Family Advocacy Program



- Military Family Life Consultant
- Chapel
- Military OneSource

- Employee Assistance Program

For more information regarding resources for strengthening relation-

ships, visit www.AFM-Cwellness.com or contact your local Civilian Health Promotion Services team.

Hill AFB in midst of robust F-35 preparation

By Nathan Simmons
388th Fighter Wing Public Affairs

HILL AIR FORCE BASE, Utah (AFNS) – Aggressive renovation and modification is in full swing at Hill Air Force Base, Utah, in preparation for the military’s newest multi-role fighter aircraft.

Hill AFB’s preparations for the F-35A Lightning II, totaling more than

\$100 million, with 23 projects to be completed between September 2014 and July 2015, and 36 total projects will be finished once construction concludes in 2019.

Hill’s 388th Fighter Wing and the Air Force Reserve 419th Fighter Wing will become the Air Force’s first operational units flying the F-35A, with the first jet projected to arrive in September 2015. The 388th FW be-

came the first fully operational F-16 Fighting Falcon fighter wing in 1979, and was the first unit to fly the F-16 into conflict with the low-altitude navigation and targeting infrared for night system through the skies of Iraq and Kuwait during Operations Desert Shield and Desert Storm.

Earlier this month, the F-35 Joint Strike Fighter program leader, Lt. Gen. Christopher Bogdan,

warned there is danger of missing deadlines if F-35 jets aren’t flying regularly by the end of September.

“I need all of (the test airplanes) back to full envelope by the end of this month,” Bogdan said at a recent conference in Washington D.C. “Otherwise we will start seeing some delays in future milestones.”

Col. Lance Landrum, the 388th FW commander, said the challenges the

F-35 program is facing aren’t affecting how the 388th FW is preparing for the new fighter’s arrival.

“We’re currently in the most invasive phase of the construction, and our mission hasn’t slowed down at all in the process -- we’re still flying as many sorties as we can, maintaining our fleet of F-16s, and staying combat ready all while making huge adjustments in preparation for the F-35,”

Landrum said.

The 388th FW is scheduled to receive 72 F-35A jets in total. The wing will get an initial cadre of pilots from the F-35 test and training units at Eglin AFB, Florida, Luke AFB, Arizona, and Nellis AFB, Nevada, while also gaining F-35 qualified pilots from other fighter wings, and retraining some F-16 pilots currently in-house.

See F-35, page 6

Remembering the three-point rule

By AEDC Safety, Health and Environmental Office

You don't have to be climbing scaffolding, ladders or even stairs to suffer a fall from height.

Falling while getting into or out of a large high-riding vehicle, heavy equipment, a tractor cab or while dismounting trailers is another way to trip up. Even an ankle sprain can make it difficult for you to carry a

load, walk comfortably, or even drive. Minor injuries can cost big in terms of lost income and downtime.

No matter what type of access system your vehicle has available, using the three-point system can significantly reduce your chance of a slip or fall. Just as in climbing a ladder, the three-point system means three of your four limbs are in contact with the vehicle while entering or exiting

at all times two hands and one foot, or two feet and one hand. Not only does it prevent falls, it reduces strain on your knees. The three-point system gives maximum stability and support, thereby reducing the likelihood of slipping and falling.

DOs

- Wear shoes with good support and slip resistance.

- Exit and enter facing the cab.

- Descend slowly to avoid straining a muscle.

- Slow down and use extra caution in bad weather.

- Get a firm grip on rails or handles with your hands.

- Look for obstacles

on the ground below before exiting.

DON'Ts

- Don't climb down with something in your free hand. Put it on the vehicle floor and reach up for it when you get down on the ground.

- Don't rush to climb out after a long run. Descend slowly, to avoid straining a

muscle.

- Don't ever jump out. You may land off balance or on an uneven surface.

- Don't use tires or wheel hubs as a step surface.

- Don't use the doorframe or door edge as a handhold.

- Don't become complacent.

DRAGON program to improve aging E-3

By Justin Oakes

66th Air Base Group Public Affairs Office

HANSCOM AIR FORCE BASE, Mass. (AFNS) – The Air Force and NATO are undergoing a cooperative development effort, known as the DRAGON program, to upgrade the cockpits of their E-3 Sentry (AWACS) aircraft.

DRAGON, which stands for Diminishing Manufacturing Sources Replacement of Avionics for Global Operations and Navigation, is finding that aging AWACS fleets are a main concern for the Air Force and NATO.

"As original equipment manufacturers discontinue support to 40-year-old avionics, replacement parts are becoming harder and harder to come by," said Jennifer Pomphrett, the DRAGON project manager.

Easily identified by its 30-foot rotating radar dome, the E-3s use computers and radar to provide detailed aerial pictures of airspace.

The DRAGON program office, located at Hanscom Air Force Base, Massachusetts, is the driving force behind the replacement of non-sustainable, mainly analog, equipment. Existing technology will be updated with commercially available, digital avionics sys-

tems.

The flight deck modernization will include replacing most analog indicators with modern digital multicolor graphic displays. In addition, nearly all of the 1970's avionics are being replaced with updated airspace-compliant subsystems. The modernization will also allow for elimination of the navigator, dropping the crew size from four to three, as well as adding a Mode-5 Identification Friend or Foe capability.

All aircraft infrastructure such as engines, airframe and mission systems will remain the same, but the upgraded E-3 flight deck will host a plethora of new technology currently used by the commercial airline industry.

Digital satellite-based communications; modern flight management system suite architecture; and a digital cockpit that includes five glass display screens will offer aircrews easy-to-use and customizable engine, navigation and situational awareness data.

Other new capabilities will include a weather radar that can predict wind shear; an enhanced ground proximity warning system; warnings, cautions and advisories via an engine instrument and crew alert system; and a fully digital flight deck audio distribution system.

In addition to hard-to-find replacement parts, another reason for the AWACS upgrade is due to changing national and international regulations for civil airspace.

The International Civil Aviation Organization has imposed new flight mandates that need to be met by 2018. With the flight deck modernization, both U.S. and NATO fleets will meet the mandates and will have broader access to airspace.

"Unrestricted flight through preferred airspace takes the E-3 to the fight when it needs to be there," said Sid Kimhan, the DRAGON program manager. "The shorter flying times provided by access to preferred routes reduces costly wear and tear on the fleet and fuel consumption."

The Air Force and NATO are progressing together through risk reduction and engineering, manufacturing and development phases, but the organizations will have separate contracts for the production, deployment and operational stages.

"This cooperative effort is important because it leverages the 95 percent design commonality between the U.S. and NATO AWACS and promotes interoperability, interchangeability, cost sharing and a common sustainment and logistics pipeline," said Rob Stewart, the DRAGON logistics manager.

Boeing, which holds the current engineering, manufacturing and devel-



A NATO E-3A Sentry (AWACS) approaches a Utah Air National Guard KC-135R Stratotanker for air refueling during a training exercise over Germany. (Utah Air National Guard photo/Staff Sgt. Annie Edwards)

opment contract, installed one digital flight deck and avionics system onto the first NATO aircraft, N-1, and will also install another system into an Air Force test aircraft, D-1, in the coming months.

Ground testing for the NATO AWACS was slated

for September 2014 with an anticipated first test flight scheduled for November. The Air Force expects their 24 updated E-3s to be delivered by the fourth quarter of fiscal year 2025.

"We're very pleased with the progress that's

being made," said Lt. Col. Brian Clifford, the E-3 operational capabilities branch chief. "This modernization will bring a whole new level of communication, navigation and surveillance to the U.S. and NATO E-3 operational community."

F-35 from page 5



An F-35A Lightning II gets ready to land Sept. 13, 2013, at Hill Air Force Base, Utah. This was the first F-35 to land at Hill AFB. The multirole, fifth-generation fighter arrived from the 422nd Test and Evaluation Squadron, at Nellis AFB, Nev. to undergo post-production modifications at the Ogden Air Logistics Complex. (U.S. Air Force photo/Alex R. Lloyd)

Hill AFB will likely receive 83 F-35 qualified maintainers by December 2015 and transition more than 100 legacy technicians to F-35 maintainers within the first year of operations. Hill AFB collectively will gain roughly 475 members, both active duty and civilian during the transition to the F-35.

The timeline to renovate facilities has been compressed significantly, as the start time to base the jet was pushed back by the delayed record of decision. However, base officials have full faith that Hill AFB will be ready for the F-35, when the base receives the first jet in September 2015.

"We're confident the construction will be on time for the first aircraft arrival, even with our late start after the record of decision was made," said Ron Stonebreaker, the chief of design and construction management in Hill AFB's civil engineering sector.

Stonebreaker said the projects aren't steady state – there is constant

evolution in preparing for the F-35. His team developed a floor plan for one major hangar that will house the aircraft maintenance units, but then learned there were special requirements for communications rooms – connectivity between the maintenance and operations teams built around the new jet's automatic logistics information system, which ties the two functions together. His team had to modify the contract and adjust the floor plan to accommodate the requirement.

F-35 sustainment is already in place at Hill AFB's Ogden Air Logistics Complex; the ALC is currently converting dock space used to modify the F-16 to depot maintenance space for F-35. Stonebreaker said post production modifications will likely be a critically important component, as the aircraft is still in development. The Ogden ALC completed the Air Force's first organic depot modifications on an F-35 earlier in 2014.

Global Strike provides deterrence for the modern era

By Airman 1st Class

Joseph Raatz

Air Force Global Strike
Command Public Affairs

BARKSDALE AIR FORCE BASE, La. (AFNS) – The Air Force recently demonstrated its nuclear deterrence and power projection capabilities through a coordinated display of strategic combat power.

Air Force Global Strike Command Airmen – responsible for two legs of the nation’s nuclear triad – conducted the demonstrations, which included participation in a large combined forces exercise in the Pacific, a nuclear-capable cruise missile weapon system evaluation over the Utah Test and Training Range, and an ICBM operational test launch from Vandenberg Air Force Base, California.

“The United States’ strategic forces provide the nation a safe, secure and effective deterrent that’s ready 24/7,” said Lt. Gen. Stephen Wilson, the AFGSC commander. “While the world is growing more challenging and more complex, Global Strike Airmen operate with flexibility and strategic agility whether the mission calls for a conventional or nuclear capability.”

Showcasing AFGSC’s conventional capabilities, 8th Air Force Airmen currently deployed to Andersen AFB, Guam, and participated in the exercise Valiant Shield, a U.S. Pacific Command combined forces training exercise that took place Sept. 15-23.

Valiant Shield is a biennial field training exercise that focuses on the integration of joint training among U.S. forces. The participating forces demonstrated the inherent flexibility of joint forces and exercised a wide range of capabilities, from maritime security operations to anti-submarine and air defense exercises and complex warfighting.

“Having the B-52 (Stratofortress) operate in the Pacific provides security and stability in the region and allows our operators to become familiar with the area of operations,” said Capt. Case Johnson, a B-52 aircraft commander assigned to the 96th Bomb Wing here. “This was my first time participating in Valiant Shield and I learned a lot of great things, including the capabilities our sister services...The long loiter time and number of weapons we bring to the fight make (the B-52) a great joint asset.”

In addition to AFGSC bomber support, the nine-day Pacific theater-focused exercise brought together 19 surface ships, more than 200 aircraft and 18,000 U.S. troops from every branch of service to participate in joint forces operations throughout the region.

“It was very interesting to learn from the other branches of the service and learn about their unique capabilities,” said Capt. Anthony Mascaro, a B-52 pilot with the 96th Bomb Squadron and a participant in Valiant Shield. “One of the things we’ve learned is how to interoperate with the different services that are out here, for instance discovering what kind of requirements the Navy might have versus the Air Force for a certain mission

set. We would approach a problem and then work together on how to solve it in a joint fashion.”

The Air Force has been conducting continuous bomber presence operations in the Asia-Pacific Region for more than a decade and plans to continue the practice into the foreseeable future.

“This forward deployed presence demonstrates continuing U.S. commitment to stability and security in the Asia-Pacific region,” said Maj. Gen. Scott Vander Hamm, the 8th Air Force and Task Force 204 commander. “Eighth Air Force maintains an ongoing deployment of bombers to Andersen, which provides opportunities for our Airmen to advance and strengthen regional alliances and our long-standing military-to-military partnerships throughout the Asia-Pacific. Most importantly, these bomber rotations provide Pacific Air Forces and U.S. Pacific Command commanders a global strike and extended deterrence capability against any potential adversary.”

While Valiant Shield was in full swing in the Pacific, 8th Air Force bomber crews stateside conducted an end-to-end operational nuclear weapons system evaluation demonstrating the strategic bomber force’s ability to configure, load, fly and deliver a nuclear capable air launched cruise missile. As part of the Nuclear Weapons System Evaluation Program, or NucWSEP, two B-52H Stratofortresses were tasked to fly a simulated combat mission from Barksdale AFB to the Utah Test and Training Range where one launched an unarmed AGM-86B Air Launched Cruise Missile, Sept. 22.

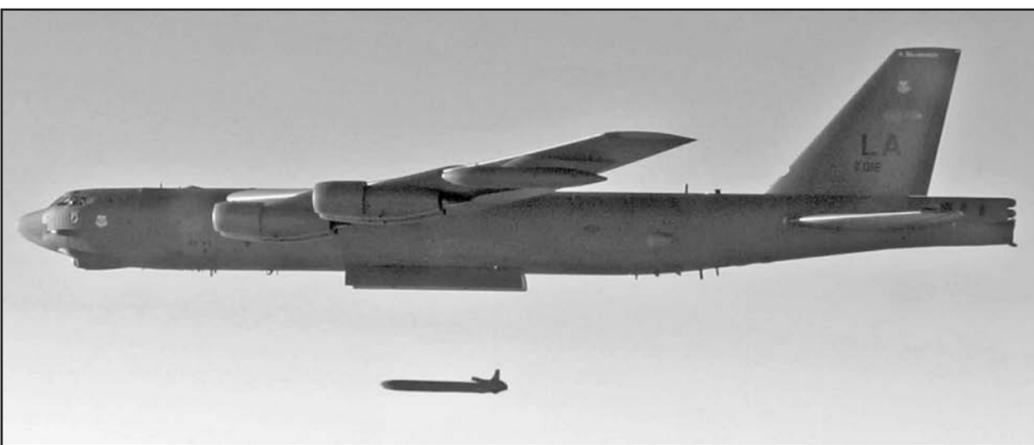
As a standoff weapon the AGM-86B was designed to be launched from outside of the combat area, allowing aircrews to strike distant targets with a high degree of accuracy without exposing themselves to potentially deadly enemy fire.

“These periodic demonstrations provide a highly visual example of our nation’s long range strike abilities,” Vander Hamm said. “With each success, we prove to our adversaries that we can and will effectively defend the United States and its allies and can reliably strike at any threat, any time.”

With aerial refueling, a B-52 can put AGM-86B capability anywhere in the world within hours. Each B-52 can carry up to 20 of the missiles, with six on each of two exterior pylons and eight on an interior rotary launcher.

“An enemy force would have to counterattack each of the missiles, making defense against them costly and complicated. The enemy’s defenses are further hampered by the missiles’ small size and low-altitude flight capability, which makes them difficult to detect on radar,” Vander Hamm said.

For the NucWSEP, Airmen from the 2nd Bomb Wing’s munitions and aircraft maintenance squadrons pulled the ALCM data during the missile’s flight and feed it back to the operators. This provided a detailed picture of how well the weapon system functioned.



An unarmed AGM-86B Air-Launched Cruise Missile is released from a B-52H Stratofortress Sept. 22, over the Utah Test and Training Range during a Nuclear Weapons System Evaluation Program sortie. Conducted by Airmen from the 2nd Bomb Wing, Barksdale Air Force Base, La., the launch was part of an end-to-end operational evaluation of 8th Air Force and Task Force 204’s ability to pull an ALCM from storage, load it aboard an aircraft, execute a simulated combat mission tasking and successfully deliver the weapon from the aircraft to its final target. (U.S. Air Force photo/Staff Sgt. Roidan Carlson)

“We’re testing it the whole time to make sure that it’s operating in the manner in which it was designed,” said Staff Sgt. Joshua Craig, a cruise missile maintenance team chief with the 2nd Munitions Squadron here.

Once the diagnostics and programming were completed, the ALCM was loaded onto a B-52 by an experienced weapons load team. The B-52 then flew to the test range and launched the weapon, which flew for an undisclosed amount of time before striking its target.

For aircrews, the opportunity to launch a missile drove home the importance of their mission.

“When you think of deterrence, it’s not something that you normally see in the news every day, but what we’re doing on this flight... is vitally important to the defense of the U.S.,” said Capt. Lance Adsit, a B-52 aircraft commander with the 20th Bomb Squadron who flew with the lead aircraft during the test.

“The impact this has is it makes sure when our leaders go to make any type of decisions or negotiations on the world stage that they’re in a position of power, that their voice is heard – and not only heard but it’s respected and taken into account when other countries make decisions,” said Airman 1st Class Karl Reid, an ALCM flight missile technician with the 2nd Munitions Squadron here. “I think that’s important and it’s an honor to be a part of it.”

Demonstrating the ground-based leg of the nation’s nuclear triad, AFGSC and 20th Air Force Airmen conducted an operational test launch of an unarmed LGM-30G Minuteman III intercontinental ballistic missile from Vandenberg AFB, Sept. 23. It was the most recent in a series of more than 200 test launches conducted with the Minuteman III program.

“Test launches are critical to validating the continued accuracy and reliability of the Minuteman III weapon system and providing valuable data to ensure a safe, secure and effective nuclear deterrent,” said Maj. Gen. Jack Weinstein, the commander of 20th Air Force and Task Force 214. “Our Airmen maintain and operate this weapon system year round in some challenging environments, and this test is a result of their expertise and tireless devotion to this mission.”

The launch team, under the direction of the 576th Flight Test Squadron at Vandenberg AFB, included Airmen from the 91st Missile Wing at Minot AFB,



Senior Airman Breyana Anderson, left, and Staff Sgt. Raymond Edgerson, position an unarmed AGM-86B Air-Launched Cruise Missile for loading into the bomb bay of a B-52H Stratofortress Sept. 17, at Barksdale Air Force Base, La. The weapon was flown and released Sept. 22, as part of the Nuclear Weapons System Evaluation Program – an end-to-end operational evaluation of 8th Air Force and Task Force 204’s ability to deliver an ALCM from storage to its final target. (U.S. Air Force photo/Senior Airman Benjamin Gonsier)

North Dakota.

“Like all Airmen in 20th Air Force and Task Force 214, the Airmen of the 91st Missile Wing are dedicated

and highly proficient in maintaining, securing and operating the ICBM leg of the nation’s strategic deterrence capability,” said Col. Michael Lutton, the 91st MW commander. “This launch allowed us to demonstrate that excellence.”

See STRIKE, page 9

AEDC personnel remember POW and MIA military members

By Raquel March
ATA Public Affairs

AEDC personnel remembered military members who are Prisoners of War and Missing in Action in a POW/MIA Remembrance Walk/Run and Burger Burn event held at AEDC on Sept. 17.

The event, sponsored

by the American Society of Military Comptrollers, was held as part of the national POW/MIA Recognition Day acknowledged on the third Friday of September.

“The event is to remember those who gave so much to keep our great nation safe,” said Rhonda Ward, with the AEDC Financial Management and Comptrol-

ler Division and Remembrance committee member.

During the Burger Burn portion of the remembrance event, burgers and other food items were sold to raise funds. Those funds will be donated to the National League of POW/MIA Families and the BentStar Project.

The Defense POW/Missing Personnel Office (DPMO) has a mission to account for the more than 83,000 personnel lost between World War II through More recent conflicts. DPMO also works to limit the loss or capture of Americans who are serving abroad, and to bring home those who are captured or killed while serving our country.

“Keeping the Promise” is the DPMO motto. It refers to the promise made by the U.S. Government to



Bill Gonce, with the AEDC Financial Management and Comptroller Division, conducts the Missing Man Table and Honors Ceremony at the POW/MIA Remembrance Run/Walk and Burger Burn at AEDC on Sept. 17. The remembrance event was held as part of the POW/MIA Recognition Day. IAW DODI 5040.02 Ecl. 10, a portion of this image has been masked as part of our security posture. The image containing the masked portion is approved for public release. (Photo by Rhonda Ward)

account for Americans who went missing while serving our country.

Of the 1,971 missing

personnel in the Vietnam War, 696 were repatriated and identified and 1,275 remain missing.

For more information on POW/MIA personnel visit the DPMO website at www.dtic.mil/dpmo/.

Milestones

40 YEARS

Richard Dixon Jr., ATA
Thomas Jones, ATA

35 YEARS



Scott Keen
35 years, Engineer
ATA Integrated Test and Evaluation Department

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

“Dodging burning titanium shrapnel when a pylon ejector ground test unit exploded and getting to fly the F-22 simulator because the F-22 chief test pilot was late to a meeting due to being in a traffic accident.”

Kathy Abel, ATA
Diana Holland, ATA
Scott Keen, ATA

30 YEARS

Richard Sells, ATA
Kinny Roberts, ATA

25 YEARS

Jennifer Harvey, ATA
Willie Swift, ATA
William Weaver, ATA

20 YEARS

Kenny Davidson, ATA
Debbie Fraser, ATA
Darbie Sizemore, ATA
Paul Taylor, ATA

15 YEARS

Joseph Sheeley, ATA

10 YEARS

Karen Clippard, ATA
James Dotson, ATA
Julius Lockett III, ATA
Russell Montandon, ATA
Russ Roosa, ATA
Darrell Townsend, ATA
Elizabeth Waddell, ATA

Dennis Waggoner, ATA

5 YEARS

George Luttrell Jr., ATA

INBOUND MILITARY

1st Lt. Harrison Payne

OUTBOUND MILITARY

Tech. Sgt. Michael Hurley

RETIREMENTS

Capt. Nicholas Bauer
Michael Dorak, ATA
Edward Dorman, ATA
Billy Eady, Premiere
Terry Hood, AF
Sherri Lamas, AF
James Reed, ATA
Louis Vanacore, ATA
James Ordway, ATA
Joe Wilson, Premiere

NEW HIRES

John Brantley, ATA
Kenneth Brown, ATA
Gloria Fairchild, AF
Harlan Goan, AF
Aaron Hamlen, ATA
Nathan Harrison, ATA
Daniel Hawkins, AF
John Keith, ATA
Robert Knapke, ATA
Jason Lingerfelt, ATA
Korie Mattasits, ATA
Matthew Meacham, ATA
Mark Mehalic, AF
Evan Milligan, ATA
Troy Morris, AF
Donald Parker, ATA
Peter Redisi, ATA
Jameson Rogers, ATA
Calvin Rose, ATA
Christopher Rudolf, ATA
Michael Semon, ATA
John Shuttleworth, ATA
Bradley Summers, ATA
Derrick Talley, ATA
Jerry Thompson Jr., ATA
Samuel Wilcox, ATA
Erik Wineland, AF
Tristan Witt, ATA
Gary Woodall, ATA

PROMOTIONS

David Everett, ATA
Michelle Frame, ATA
Michael Magistro, ATA
2nd Lt. David Stebbins to first lieutenant
Terry Tate, ATA

GRADUATE / DEGREES

Andrea Stephens, BS of Science in Business Administration Project Management



Launch the Dragon

Space Exploration Technologies’ (SpaceX) completed a successful launch of their Falcon 9 Dragon spacecraft headed to the International Space Station from Space Launch Complex 40, from Cape Canaveral Air Force Station, Fla., Sept. 21 at 1:52 a.m. EDT. A combined team of military, government civilians and contractors from across the 45th Space Wing provided support to the mission, including weather forecasts, launch and range operations, security, safety and public affairs. (Courtesy photo/John Studwell/AmericaSpace)

STRIKE from page 7

As in each Minuteman III test launch, preparation for this launch began months before the launch date. The Air Force selected a missile from the field at random and removed it from the silo. The nuclear ordnance was then removed by a team of skilled missile technicians. Once disarmed, the missile was loaded into a special transporter vehicle and driven to the launch site at Vandenberg AFB.

When the missile reached its destination it was loaded with telemetry packages and carefully lowered into the test-launch silo. After running an exhaustive series of diagnostics and proceeding through checklists, the missile crews launched the ICBM toward the Kwajalein Atoll some 4,200

miles away, where it struck its target.

“This launch is the result of months of hard work and preparation by both our team here at Vandenberg, Airmen from Minot (Air Force Base) and engineers from the Air Force Nuclear Weapons Center,” said Col. Kelvin Townsend, the 576th Flight Test Squadron commander. “This launch validated our teamwork and demonstrated a strong and visible display of America’s deterrent and global strike capabilities.”

Every test launch verifies the accuracy and reliability of the ICBM weapon system, providing valuable data to ensure a safe, secure and effective nuclear deterrent, Townsend said.

The Minuteman III

ICBM has a range of more than 6,000 miles and can put a nuclear weapon on target almost anywhere on the globe. The U.S. maintains 450 of the missiles in hardened silos, manned 24 hours a day by highly trained and dedicated Airmen.

While the test launches are designed to test the missile system, they have the added benefits of both demonstrating the nation’s powerful deterrence capabilities and boosting the morale of the missile crews and maintenance personnel who stand vigil over America’s nuclear arsenal.

“Getting the opportunity to conduct a test launch is probably one of the most coveted assignments we have as missileers,” said 1st Lt. Trey Morris, an

ICBM combat crew commander with the 740th Missile Squadron at Minot AFB. “We are held to incredibly high standards in all of our training --and rightly so, as we’re dealing with the most devastating weapon system yet devised by man on a day-to-day basis -- but if there is one thing in our training that has to be done 100 percent correct at all times, that we are expected to be absolutely perfect on, it’s launch procedures. To get the opportunity to actually implement that training in the real world is extremely rewarding, to say the least. Plus, how many people can say that they’ve launched a real-life ICBM?”

Nuclear deterrence operations and long-range strike capabilities continue to be essential to the U.S.

national defense strategy in the 21st century by providing security and stability for the U.S. and its allies in a highly complex and fluid global environment.

“The United States’ ability to maintain a strong, credible nuclear deterrent is foundational to U.S. national security and the security of our allies and partners,” said Adm. Cecil D. Haney, the U.S. Strategic Command commander. “These test launches, and the valuable lessons we learn from each, ensure USSTRATCOM’s strategic forces remain relevant and ready, 24/7, providing flexible and credible options for the President and the Department of Defense.”

With multiple nations either currently in possession of nuclear weapons or

believed to be attempting to develop them, maintaining a safe, secure and effective deterrent capability is crucial.

“[The nuclear mission] is our most important mission, period, simply because of the sheer destructive power that’s involved and because of the criticality of it to our national security,” said Frank Kendall, the Under Secretary of Defense for acquisition, technology and logistics, speaking on behalf of Secretary of Defense Chuck Hagel during the 2014 Air Force Association’s Air and Space Conference, Sept. 17.

“This is the very foundation of U.S. national security,” Kendall said. “No capability we maintain is more important than our nuclear deterrent.”

PIKE nears end of service

By Scott Prater
Schriever Sentinel

SCHRIEVER AIR FORCE BASE, Colo. — The 22nd Space Operations Squadron officially decommissioned the Colorado Tracking Station here during a ceremony Sept. 29, signaling the end of operations for one of the Air Force Satellite Control Network's most valued assets of the past two decades.

Commonly referred to as PIKE, the station has long been associated with Schriever Air Force Base. It provided an iconic image for the base in a multitude of publications and media, which showed the tracking station's antenna back dropped by a majestic Pikes Peak.

But PIKE was so much more than a display.

It began communicating with military satellites in 1988, just as construction crews were putting the final touches on Buildings 300 and 400 at a place known then as Falcon Air Station.

"During this span, PIKE has provided us with the most reliable satellite operations in the AFSCN," said Brian Bayless, 22 SOPS Mission Support Flight chief. "It has also provided the largest ground communications bandwidth in the network."

In its 24 years of service, PIKE ran 174,900 satellite supports and had visibility of 97 of the 154 satellites supported by the AFSCN.

"That's 63 percent of all of our satellites," Bayless said. "It also had the highest contact success rate of any antenna in the AFSCN at 99.5 percent."

When constructed, it

represented the latest in Automated Remote Tracking Station technology.

Previous remote tracking stations were commanded on site, which meant that space operations squadrons had to relay commands to antenna operators, who then relayed them to satellites. Conversely, PIKE and the other new ARTS tracking stations acted as conduits, allowing space operators to control the antennas directly.

As years passed, it continued to be a showcase for new technology. Throughout the past two decades, PIKE was the only site that deployed every type of antenna in the AFSCN, including ARTS, Remote Block Change, Transportable RBC and hybrid forms. It was also the only AFSCN site to hold and use GPS enhancement equipment.

Though PIKE proved itself as a top performer among tracking stations, growing efficiency in the AFSCN combined with Air Force budget cuts, ultimately, led to it being redundant. The process of decommissioning the facility actually began years ago. PIKE operated continuously for many years. But, its time online eventually dwindled to eight hours a day, five days a week. It was removed from operational status in the summer of 2012.

Since then it has served the Air Force as a proving ground for the next generation of remote technology, from phased-array antennas to the latest transportable RBCs.

"PIKE has provided the AFSCN with criti-



A demolition crew dismantles a Colorado Tracking Station antenna building Sept. 19 at Schriever Air Force Base, Colo. The 22nd Space Operations Squadron will officially decommission the tracking station, known as PIKE, during a ceremony Sept. 29. (U.S. Air Force photo/Dennis Rogers)

cal operational capability during the past two years," said Lt. Col. Aaron Gibson, 22 SOPS commander. "It met the Air Force Space Command commander's requirement to offset the loss of one of our operational antennas at Thule Air Base, Greenland and provided essential test support for our next-generation transportable antenna. The legacy of PIKE will continue on for years with our future capability."

Demolition teams began dismantling the tracking station this Sept. 22. The control building will remain in place and provide network connections for future AFSCN testing by the Sustainment Program Office.

Cross the finish line



Steve Chu crosses the finish line as the 2014 U.S. Air Force Marathon Men's full marathon champion at Wright-Patterson Air Force Base, Ohio, Sept. 20. "I wanted to win this for my wife," said Chu, whose wife is an active duty Air Force major. (U.S. Air Force photo by Mike Libecap)

ATA donation supports local arts



The Employee and Community Activities Committee (E&CAC) of ATA presented a donation of \$350 to the Millennium Repertory Company (MRC). MRC is the resident theater group at the Manchester Arts Center located in downtown Manchester. The funds will be used by the MRC to purchase a multipurpose projector and backdrop screen to be used onstage during performances. Pictured are ATA E&CAC members (left to right) Mary Beth Barlow and Carol Smith presenting the donation to MRC managing director Noel Clements. (Photo provided)

LISTON from page 1

me that I could indeed serve as the chief of a branch that is not co-located with the rest of the organization," he said.

And having worked with AEDC personnel on several occasions, Liston said he should be comfortable in his new surroundings.

"For the past several years, I've worked closely with a number of AEDC team members as a subject matter expert for the Test Resource Management Center's High Speed System Test program," he said. "As a result, I had some pretty close work-

ing relationships even before opening up the office at AEDC."

AFRL anticipates that the High Speed Experimentation Branch will be at initial operating capability by the beginning of next year. According to Liston, both AEDC and AEDC will see positive outcomes as a result of this endeavor, and he's excited to get started.

"For AFRL's benefit, the branch will use the AEDC facilities and expertise to conduct research in larger scales than what we can typically handle in the facili-

ties at Wright-Patterson AFB," he said. "One benefit to AEDC will be the ability to engage the test and evaluation (T&E) workforce in the research process, generating new knowledge for hypersonic systems while improving their capability to test revolutionary new flight systems."

"AFRL and AEDC will together facilitate the transition of high speed S&T (science and technology) through T&E to fielded systems, serving the development of the nation's aerospace capabilities."

Topping off



An E-3 Sentry (AWACS) prepares for a refuel from a KC-135R Stratotanker Aug. 20, over Illinois. The E-3 is assigned to the Air Force Reserve's 513th Air Control Group at Tinker Air Force Base, Okla., and the KC-135 is assigned to the Air Force Reserve's 434th Air Refueling Wing at Grissom Air Reserve Base, Ind. Indiana's two flying wings partnered together to fly 37 employers of guardsmen and reservists on a 'boss lift' aimed at educating them about their employees' military service and responsibilities. (U.S. Air Force photo/Tech. Sgt. Mark R. W. Orders-Woempner)

AF ensures command visibility on substantiated sex-related offenses

WASHINGTON, (AFNS) – Air Force officials announced a new policy requiring the inclusion and command review of information on sex-related offenses in personnel service records Sept. 30.

The change was directed in the fiscal year 2014 National Defense Authorization Act, requiring the services to document this information in service member personnel records.

“Sexual harassment and sexual assault are not consistent with our core values, cause great harm to our Airmen who experience it and seriously degrade our mission readiness,” said Maj. Gen. Gina Grosso, the director of the Air Force sexual assault and prevention response.

The new policy requires commanders to review all records to ensure substantiated complaints of sex-related offenses against Airmen, regardless of grade, assigned to, and transferred into their command, are annotated in the Airman's performance report or permanent training report. Annotation of those complaints resulting in conviction by court-martial, non-judicial punishment or punitive administrative action will be filed in an Airman's permanent personnel service record.

“Actively engaged leadership and transparency are key to eliminating sex-related offenses,” said Brig. Gen. Brian Kelly, the director of force management policy. “This policy assists with that goal and helps leaders foster a climate of mutual respect, dignity and inclusion of all Airmen at every level.

“This level of aware-

ness should ensure commanders have knowledge of and familiarization with their assigned Airmen's histories of sex-related offenses,” Kelly said. “This also reduces the likelihood repeat offenses will escape the notice of subsequent or higher level commanders.”

The effective date for the notation is Dec. 26, 2013. Commanders will ensure substantiated offenses not previously documented on the Airman's performance or training report that occurred on or after the effective date will be documented in the Airman's next evaluation.

The policy does not limit or prohibit the Airman from challenging or appealing such action using the existing appeal process in line with Air Force Instruction 36-2406, Officer and Enlisted Evaluation Systems, or through the Air Force Board of Correction for Military Records, Kelly said.

For this policy, the Air Force considers sex-related offenses as those defined in Articles 120, 125, 120a, 120b, and 120c of the Uniform Code of Military Justice, which range from rape to stalking.

Air Force officials recognize the significant administrative burden associated with initially implementing this policy on the directed timeline, Kelly said. To alleviate this in the future, data codes are being developed to allow commanders to quickly identify Airmen who are assigned to or transferred into their unit.

(Information courtesy of the Secretary of the Air Force Public Affairs Office)

