



HIGH MACH

Serving the World's Premier Flight Simulation Test Center



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AEDC rolling out lean concept for testing the A-10 engine

By Philip Lorenz III
Aerospace Testing Alliance

A decision to bring a sea level test cell to AEDC in 1994 is paying dividends as initial testing of a legacy, but modified General Electric TF34 turbofan engine was recently initiated.

"We were successful in being chosen for the A-10 [Thunderbolt] engine, TF34, AMT (accelerated mission test)," said Mike Dent, Deputy Director of AEDC's Turbine Engine Ground Test Complex. "This is very significant because AEDC is expanding its test capability with the introduction of a basic, low-cost test alternative. It's ideal for workhorse engines such as the TF34 that do not have sophisticated control systems like the F119 or even F110 and F100."

Test Facility Director Lt. Col. Brent Peavy has coined this capability "lean testing."



The A-10 fighter's power plant, the TF34-GE-100, will undergo a six-month AMT to evaluate and validate new components prior to production approval for the fleet upgrade. (Photo by Rick Goodfriend)

Two GE TF34 engines in 1972. AEDC testers were involved with aerodynamic and store separation evaluation work on the A-10 and engine oper-

ability testing on the TF34 and a competing engine, the Avco Lycoming, during the 1970s. Refinements to the engine over the years through the Air Force Component Improvement Program (CIP) have enabled the TF34 engine to log more

than 2,000 hours before needing an overhaul. CIP provides the sustaining engineering that keeps the Air Forces' 22,000 fielded engines flying as effectively and efficiently as possible.

Dent said he was contacted around a year ago by representatives from the Oklahoma City Air Logistics Center (OC-ALC), the engine owner for the TF34.

"They were planning accelerated mission testing for the TF34 to evaluate upgraded hot section components of the engine," he said. "The program is called the TF34 BRU which stands for boltless rotor upgrade."

The ALC was preparing to do the AMT at Jacksonville Navy Air Depot and asked AEDC for assessment of possible risks with testing at a production facility and for suggestions to mitigate those risks.

See TEST, page 4

Final Minuteman rocket motors undergoing testing at AEDC

By Shawn Jacobs
Aerospace Testing Alliance

One of the final Minuteman III intercontinental ballistic missile (ICBM) motors to roll off the assembly line was tested in the AEDC J-6 Large Rocket Motor Test Facility.

Production quality assurance (PQA) testing concluded Jan. 18 on the Stage 2 solid-propellant motor.

Ground testing under simulated altitude conditions in J-6 includes carefully controlled test environments with extensive instrumentation and photographic coverage to validate the operability and performance of a test article.

Denny Elston, project engineer for ATA, said, "It's the last of the production runs, so it's a significant test. The test was highly successful. The motor met all specification requirements, and that's not unusual. They usually do."

ATK Launch Systems, the manufac-

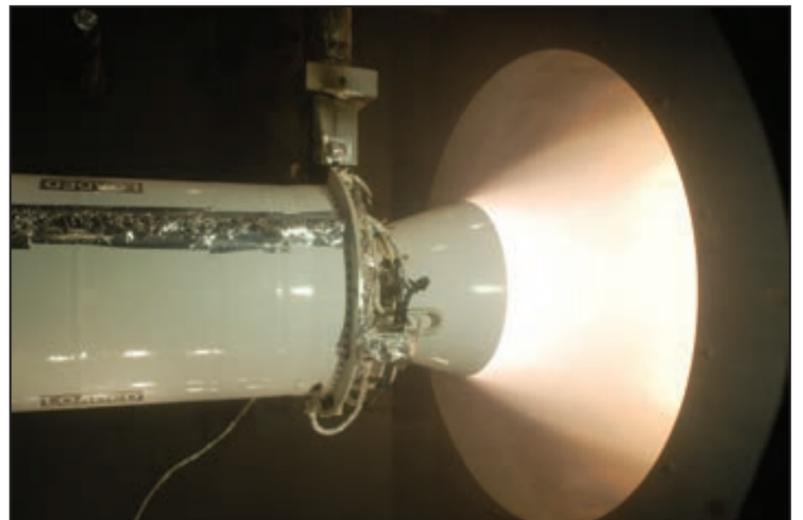
turer, produced a total of around 625 of the rocket motors up until two years ago when production dropped to a very low rate under what is called a "Warm Line" program.

"The program was intended to sustain and maintain the manufacturing and engineering infrastructure necessary to preserve the Minuteman solid rocket motor production capability," Elston said. "We [AEDC] were included such that we would test one motor of each Minuteman stage each year. That meant two motors last year and two motors this year."

The final Minuteman Stage 3 PQA Warm Line motor will be tested in J-6 later this month.

Elston said AEDC has been involved in the Minuteman program "since day one."

"We've tested hundreds of Minuteman missiles over the years," he said. "There have been many production runs of these motors and many generations. This is



White-hot exhaust spews from the nozzle of the Minuteman Stage 2 motor during testing Jan. 18 in the AEDC J-6 Large Rocket Motor Test Facility. (Photo by Rick Goodfriend)

the third generation that we're currently testing."

He said the expectation is that each motor will have a lifespan of up to 30 years.

The Minuteman ICBM is the land-based missile component of America's

three-part nuclear defense.

"We have weapons on submarines, bombers – as well as the Minuteman land-based missiles – so it's a member of the triad of our nuclear defense force," Elston said.

ATA employee working to establish international standards for turbine engine exhaust measurements

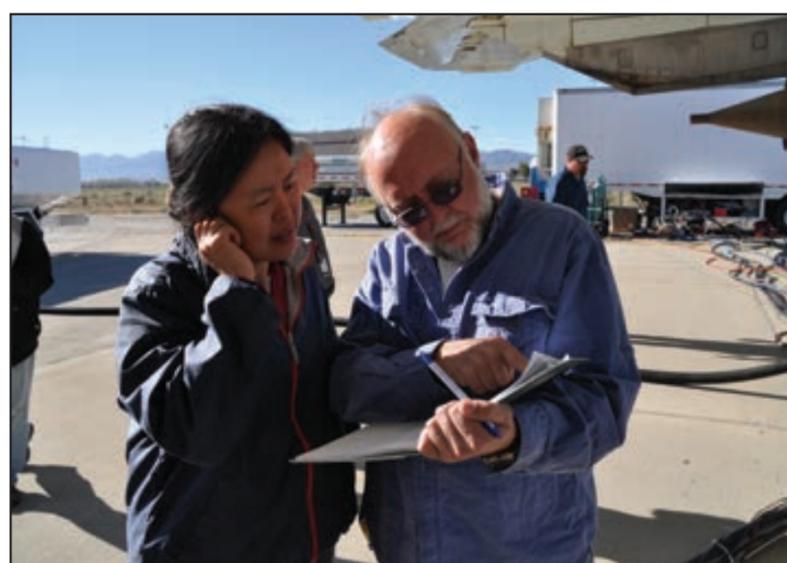
By Patrick Ary
Aerospace Testing Alliance

Dr. Robert Howard is an experienced traveler.

He's spent time away from his home in Manchester to visit Cologne, Germany; Interlaken, Switzerland; Wales and other places that he can't even remember off the top of his head.

One reason he may not be able to remember them is because he spends most of his time overseas in hotel conference rooms.

Howard, an engineering specialist in the Instrumentation and Diagnostics section of ATA's Technology and Analysis Branch, attends meetings affiliated with the Society of Automotive Engineers (SAE) twice a year. While those meetings sometimes take place in cities most people would love to visit for their culture and tourist attractions, Dr. Howard and other committee members spend most of their time working.



Dr. Robert Howard discusses a sampling system layout with Dr. Xu Li-Jones of the Navy Aircraft Environmental Support Office (AESO) located in San Diego, Calif. Howard and other AEDC employees traveled to the NASA Dryden facility in Palmdale, Calif., in early 2011 to take part in the Alternate Aviation Fuel Experiment (AAFEX 2). Howard has used his research to help the Society of Automotive Engineers in establishing an international standard for measuring particulate emissions from turbine engines. (Photo provided)

See HOWARD, page 4

Fellows nominations needed by March 23

AEDC is currently accepting nominations for the 2012 Fellows Program with submissions due no later than March 23.

Established in 1989, the Fellows program recognizes AEDC individuals who have made substantial and exceptionally distinguished technical contributions to the nation's aerospace ground testing capability at AEDC.

Since the inception of the program, AEDC has bestowed the center's highest honor to a grand total of 72 individuals (Fellows, Lifetime Achievement Fellows and Honorary Fellows).

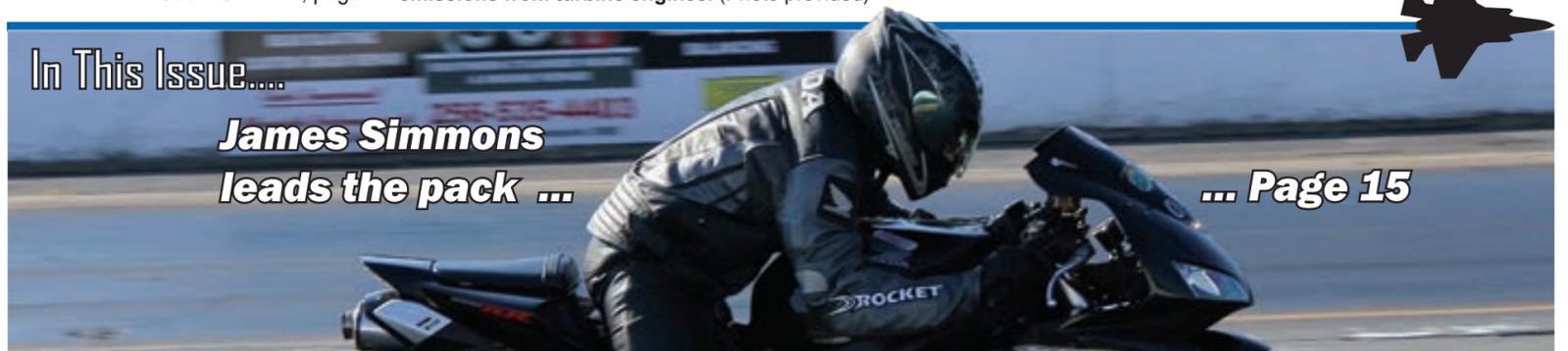
AEDC Fellows nominations may be submitted by any present or former AEDC government or operating contractor/sub-contractor employee. All current or retired military, civilian and operating contractor and subcontractor personnel assigned or previously assigned to AEDC can be considered candidates for selection as an AEDC Fellow. Candidates qualified for consider-

See FELLOWS, page 4

In This Issue....

James Simmons leads the pack ...

... Page 15



HIGH MACH

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An Air Force Materiel Command Test Center

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The center's vision: AEDC as the test center of choice, the workplace of choice for our people and a model of environmental excellence.

**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 assert 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

American Heart Month: Tips for staying heart healthy

By **Dr. Rob Tessier**
CORE physician

Heart disease is the leading cause of death in the United States. Although you don't have the ability to change some risk factors such as family history, age or sex, there are some key heart disease prevention strategies that can be taken. The sooner you develop a healthy lifestyle today the more successful you will be at avoiding heart problems in the future.

Quit smoking

Smoking is one of the single biggest risk factors for developing heart disease. Chemicals in tobacco can lead to narrowing of your arteries (atherosclerosis) which can ultimately lead to a heart attack. This narrowing of the arteries makes your heart work harder to pump blood through them thus increasing your heart rate and blood pressure.

In addition, carbon monoxide in cigarette smoke is absorbed by the lungs and replaces some of the oxygen in your blood. This further increases your blood pressure by forcing your heart to work harder to supply enough oxygen to your body's tissues.

The good news is that when you quit smoking your risk of heart disease drops dramatically within just one year. And no matter how long or how much you smoked, you will start reaping rewards as soon as you quit.

Get regular health screenings

Visit the doctor at least once per year to have your blood pressure, cholesterol and blood sugar checked. These are often referred to as "silent killers" because long term elevation of them



Dr. Rob Tessier examines John Gilmer, an ATA electrician at the Propulsion Wind Tunnel, at the ATA/CORE Dispensary. (File photo)

can cause damage while exhibiting no symptoms. Your doctor may recommend more frequent checks if your numbers are not ideal or if you have other risk factors for heart disease.

Regular blood pressure screenings should begin in childhood, cholesterol screenings should begin at age 20 and diabetes screens at 30-45 usually depending on family history.

Get regular exercise

Physical activity helps you control your weight and can reduce your chances of developing other conditions that may put a strain on your heart such as high blood pressure, high cholesterol and diabetes. It also reduces stress, which is thought to be a factor in heart disease.

It is recommended that you get at least 30-60 minutes of moderately intense physical activity on most days of the week. A good rule of thumb for defining

"moderately intense" is an activity that gets your heart and breathing rate up but still allows you to have a conversation with someone without being too out of breath. Brisk walking would be a good example. You can even break up the workout into 10-minute intervals for example if you are time constrained. Also, you don't have to exercise strenuously to achieve benefits, but you can see bigger benefits by increasing the intensity, duration and frequency of your workouts. Keep in mind that activities such as taking the stairs instead of the elevator and parking at the end of the parking lot and walking instead of parking close to a destination can add up as well towards your goal.

Eat a heart healthy diet

This means eating foods that are low in fat, cholesterol and salt and rich in fruits, vegetables and whole-grains. Limiting

certain fats you eat is especially important. Of the types of fat, saturated and trans-fat increase the risk of heart disease by raising cholesterol levels. Major sources of saturated fat include red meat and coconut oils. Major sources of trans-fat include almost any type of fast food, bakery products, packaged snack foods and margarines. A useful tip is that if a food ingredient label has the words "partially hydrogenated" it typically refers to trans-fat and should be avoided.

A heart healthy diet also means drinking alcohol only in moderation: no more than two drinks a day for men and one for women. At this level alcohol can have a protective effect on your heart. More than that becomes a health hazard.

Maintain a healthy weight

As you put on weight in adulthood, it is increasingly from fat and less from

muscle. Excess fat weight can lead to high blood pressure, high cholesterol and diabetes.

One important calculation is body mass index (BMI). To determine, enter your height and weight into one of the many online BMI calculators and it will be given to you. A number 25 or higher is associated with increased risk of heart disease. Waist circumference is also a useful tool. Men are considered overweight if greater than 40 inches and women greater than 35 inches.

Keep in mind that even small weight losses are beneficial. Reducing your weight by just 10 percent can significantly reduce your risk of heart disease.

In summary, even if you haven't done a good job following these guidelines it's never too late to begin. The sooner a heart-healthy lifestyle is begun, the greater the rewards will be.

Developing Airmen continues to be a priority

By **Todd Fore, Ph.D.**
Air Force Personnel, Services and Manpower

JOINTBASE SAN ANTONIO-RANDOLPH, Texas (AFNS) – An Air Force leader's most important job is to care for and develop Airmen through a combination of education and experience, but every Airman must also actively seek opportunities to learn and grow. This agreement between leaders and leaders-to-be is the foundation of the most powerful air force in the world.

Rapidly changing technologies and increasingly complex global conditions have changed the way we approach national security, and tomorrow's leaders must be technologically proficient, highly educated, strategic thinkers able to smoothly adapt to their changing world. Education is critical to developing that type of leader.

My job is to make sure you are aware of your educational opportunities and to knock down systemic barriers that prevent you from pursuing them. Your

job is to chase your educational opportunities with the same determination that you devote to other aspects of your life.

Opportunities abound for all Airmen, from junior enlisted to command eligible officers, and from student interns to flag officer equivalent civilians. The Air Force is the only service with a fully-accredited, associate degree-granting college – the Community College of the Air Force. That illustrates how seriously the Air Force takes education and training.

In addition to comprehensive enlisted education and training programs, we deliberately, progressively develop our civilian and commissioned members through a series of programs ranging from new employee orientation to Air War College and the gamut between. You can pursue advanced academic degrees, leadership and development seminars, education with industry and

**Fore**

more. And the Air Force not only encourages Airmen to pursue such developmental endeavors, we'll pay for most, or all of it.

Education is only part of the development continuum.

Increasingly challenging assignments and mission opportunities also help Airmen develop their decision-making and other leadership skills, so we vector civilians, officers and some senior enlisted members toward opportunities that will make them better leaders.

Some opportunities – like deployment to a combat zone – may seem unendurably onerous, but they will help you develop

greater strategic awareness and leadership ability. Other less hazardous opportunities – such as academic or technical training instructor – are no less critical than combat duties, and the impact you have on Airmen will be evident for generations.

You should not wait to be vectored, though. You should shop for your next growth opportunity to make sure it stretches you and allows you to use your skills and talents in support of

our critical missions. If you wait for things to happen to you, you may be waiting a long time.

The sky is NOT the limit for those of you who choose to push past the barriers. But where your career goes is ultimately up to you. I will knock down barriers and point you toward opportunities, but you must do your part. You must passionately pursue education and experiences that will make you the kind of leader our Air Force needs.

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. Michael Brewer
AEDC Commander

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, you cannot smoke 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. In case of inclement or cold weather, employees are encouraged to use their personal vehicles if a sheltered designated smoking area is not available nearby. 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://lpapro.arnold.af.mil/PORLALimages/Smoking area map. pdf](https://lpapro.arnold.af.mil/PORLALimages/Smoking%20area%20map.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.

Regarding use of smokeless tobacco, 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. Smokeless is strictly prohibited in conference room meetings and other areas, e.g. PMEL, where Air Force regulations specifically prohibit.

Due to the nature, appearance, and safety concerns of electronic cigarettes (also known as "e-cigs"), they are considered to be in the same category of tobacco products whose use is governed by Air Force Instruction (AFI) 40-102, Tobacco Use in the Air Force. Therefore, all rules stated above for tobacco products apply to electronic cigarettes.

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 letter supersedes previous letter dated 28 October 2006, subject as above.

Starr this year's speaker at Engineers Week banquet

By Philip Lorenz III
Aerospace Testing Alliance

This year's celebration of National Engineers Week will take place Feb. 19-25. Local area activities will include a student design competition, an engineer-for-a-day program and a banquet.

Local area National Engineers Week event sponsors are the Tullahoma chapter of the Tennessee Society of Professional Engineers (TSPE), the Highland Rim chapter of the American Society of Mechanical Engineers (ASME), the local Tennessee chapter of the International Test and Evaluation Association (ITEA) and the Tennessee section of the American Institute of Aeronautics and Astronautics (AIAA).

The theme for National Engineers Week this year is "7,000,000,000 people, 7 billion dreams, and 7 billion chances for engineers to turn ideas into reality."

The National Engineers Week banquet will be held Feb. 23 at the Manchester/Coffee County Conference Center. The guest speaker will be Rogers Starr, the president of Jacobs Technology.

Starr leads the company's delivery of test and evaluation, technical operations, and engineering support to a wide range



Starr

of aerospace, defense, energy, and automotive acquisition, engineering and development programs. The unit consists of 22 dedicated business segments, employing 15,000 personnel, supporting defense, NASA, DOE and auto-

motive customers. Previously, he served as general manager of test operations at AEDC from 1997 to 2000. From 1994 to 1997, he led major programs supporting DOD, NASA and automotive compa-

nies. From 1990 to 1994, he was general manager of the Technology Group with responsibility for the design, build and activation of major ground testing facilities globally.

Starr is a member of the AIAA and of the National Society of Professional Engineers where he has held several offices and served on several committees. He was an NSPE Congressional Fellow. He is the author of more than 20 journal articles and conference papers. He received a master's in science degree in aerospace engineering from the University of Tennessee (1967) and a bachelor's degree in aerospace engineering from Georgia Institute of Technology (1966).

The banquet begins at 5:30 p.m. with a social, followed by dinner at 6 p.m. and then a presentation at 7 p.m. titled, "Engineering: A team sport." The menu will be prime rib, potatoes and vegetables with a dessert. Cost per person is \$30. The deadline to purchase banquet tickets is Friday, Feb. 17.

To purchase tickets or for additional information, contact AEDC's Paul Kelly, Tullahoma TSPE chapter member and chairman for the Engineers Week activities, at (931) 454-6542 or call Harry Clark at (931) 454-4495.



Peavy

ETF director selected for promotion

The 2011B Colonel Line of Air Force Selection Board has selected Lt. Col. James Peavy for promotion to colonel.

Peavy is the director of AEDC's Engine Test Facility.

In all, the 2011B Colonel Line of Air Force and Nurses Corps Central Selection Boards selected 539 lieutenant colonels and 112 captains for promotion.

The boards considered 4,100 lieutenant colonels and 180 captains for promotion.

RSVP for Heritage Luncheon by Feb. 9

The RSVP deadline for this year's African American Heritage Luncheon is Feb. 9.

The luncheon takes place 11 a.m.-1 p.m. Feb. 16 at the Arnold Lakeside Center.

The guest speaker for "Black Women in American Culture and History" is Tennessee State University President Dr. Portia Shields.

To RSVP, call Jackey Gates, 454-4823; Artious Walker, 454-6486; Tina Bonner, 454-6804 or Sharon Vance, 454-6557.

Team members wanted for Relay

Team members are still being sought for AEDC's American Cancer Society Relay for Life team.

This year's event takes place May 18-19 at the Coffee County Administration Complex.

People interested in participating can contact Dee Wolfe, 454-4313 or dee.wolfe@arnold.af.mil or Shawn Wolfe, 454-7732 or shawn.wolfe@arnold.af.mil.

Giving back to the community



ATA made a donation to the Middle Tennessee State University (MTSU) NASA Robotic program Jan 27. Philip Stich, deputy ATA general manager, presents the check to MTSU Engineering Technology majors Jordan Qualls, Kristen Zaloudek, Aaron Thompson and Dr. Walter Boles, chairman of the MTSU Engineering Technology Department. (Photo by Rick Goodfriend)

AEDC INFORMATION PROTECTION EMPHASIS

The FBI estimates that billions of U.S. dollars are lost each year to both foreign and domestic competitors who deliberately target economic intelligence in flourishing U.S. industries and technologies, and who gain intelligence by exploiting open source information and company trade secrets.

On Feb. 8 AEDC will deploy an Information Dissemination process that will provide individuals with detailed guidance regarding how to properly categorize information, and how to submit requests via eMatrix to designated AEDC DOD personnel for final determination, and authorization to release if required.

Category of information	Protection required	Marking
For Official Use Only (also applies to OPSEC Critical Info)	Locked Protection/Access Control Destroy via locked Cintas bin	"For Official Use Only" or "FOUO"
Scientific and Technical Info (STINFO) ITAR/EAR export-controlled	Locked Protection/Access Control Destroy via locked Cintas bin	Applicable Distribution Statement
Commercial Proprietary or Competition Sensitive	Locked Protection/Access Control Destroy via locked Cintas bin	"Company" Proprietary or "Company" Competition Sensitive
Information Intended for Local Use Only and Not Reviewed for Release Outside AEDC	Locked Protection/Access Control Destroy via locked Cintas bin	"Local Use/Not Reviewed for Release outside AEDC"
Information Determined by the Government Owning Activity to be "Not Sensitive"	No Protection Required	"Not Sensitive"
STINFO Approved for Public Release	No Protection Required	"Approved for Public Release" plus AEDC Public Affairs Control Number
Information Compiled from Open Sources	No Protection Required	"Information Compiled from Open Sources"

The following are steps that AEDC individuals who handle or create controlled unclassified information must take to ensure it is protected from unauthorized access:

1) Recognize that there is both an insider and an outsider threat

to AEDC-owned and customer-owned unclassified information requiring access controls

2) Ensure appropriate protection for information to which access should be controlled

3) Develop and implement a proactive plan for safeguarding

controlled unclassified information

4) Secure physical and electronic versions of controlled unclassified information

5) Apply need-to-know as required

6) Complete training to raise security awareness

Information Protection Self-Assessment:

Q1: Who is responsible for identifying, marking and protecting controlled unclassified information at AEDC?

Q2: How do you know whether or not information is sensitive?

Q3: Do AEDC employees generate or work with unclassified information to which access should be controlled?

Q4: What are some categories of "controlled" unclassified information?

Q5: Are there times when AEDC conducts concurrent testing for both foreign customers and U.S. military customers? Should that result in increased awareness and compliance with Information Protection requirements?

Q6: Are any of AEDC's test customers in competition for large multi-million dollar federal contracts? Should that result in increased awareness and compliance with Information Protection requirements?

Q7: Are any of AEDC's test customers developing commercial capabilities that aren't owned or controlled by the U.S. military, yet have Proprietary protection requirements? Does that type of testing result in economic and competitive advantage for the commercial customer and is therefore significant to their fiscal health as a company?

Q8: Are any of AEDC's test customers experiencing financial challenges in today's economy?

Q9: Is AEDC experiencing financial challenges in today's economy, and should we increase our Information Protection awareness and compliance to ensure we spend resources protecting only what requires protection?

Q10: What can you do to ensure unauthorized access does NOT occur? How well are you doing your part?

Q11: Is there a clear understanding of how to report an unauthorized disclosure of controlled unclassified information?

Q12: How significant are the consequences for non-compliance? Think about what would happen to AEDC's reputation and customer confidence if we violated their trust when supporting scenarios addressed in Questions 5-7 above. Think about individual and organizational consequence if non-compliance resulted in violations of federal Economic Espionage or Export Compliance laws.

The following are Information Protection points-of-contacts at AEDC, to be contacted for reporting or assistance:

AF Information Protection Office: Danny Lewis 454-7610, Nick Edwards 454-7608 or Jack Glasser 454-3290

ATA Information Protection Office: Jeannie Bowden 454-5891, Angelia Garrard 454-3131 or Elise Sherrell 454-3194

HOWARD from page 1

“These are true working meetings,” he said. “Our agenda for this (most recent) meeting has us starting at 8 o’clock and adjourning at 6 p.m. every day. We take an hour for lunch. During lunch, depending on where we hold the meeting ... we’ll grab sandwiches and bring them back in.”

Howard is a member of the technical standards SAE E31 subcommittee, which deals with aircraft emissions. Committee members are developing a document that will establish an international standard for measuring particulate emissions from turbine engines.

Recently, Howard was recognized by SAE International “For outstanding contributions in furthering the goals of the Technical Standards Board and this Council, which are to serve the public, government and industry, through standardization, documentation and dissemination of information aimed at improving and advancing transportation safety and technology.”

Particulate emissions are already regulated in industry and other areas. The difficulty in measuring emissions from turbine engines is the extreme conditions of the exhaust, according to Howard.

“(Inserting a probe) is very different from sticking it into an exhaust stack at an industrial plant or at the exhaust of a car or tractor-trailer truck,” he said. “You have to be able to make the hardware survive, and then because of the really high gas velocities and the high temperatures at the high-power engine conditions, you have issues with getting the samples from that probe tip to the instrument without changing the sample.”

The work Howard and other committee members are doing is specifying how to measure nonvolatile particles, which are carbonaceous particles – commonly referred to as soot.

(Volatile particles can form once the gases from the engine have left and mixed with the surrounding air. They are not measured because they don’t exist near the exit plane of the engine, and the interior of a sample line cannot easily reproduce the conditions in the atmosphere.)

A standard for measur-

ing particulate emissions is needed by everyone involved – the military, aircraft manufacturers and regulating bodies like the Environmental Protection Agency and the European Aviation Safety Agency. Many of those groups are represented on the SAE E31 committee.

“The EPA wants to have confidence that you’re getting a comparable measurement, and the military wants to be sure they’re using test standards for making aircraft engine exhaust measurements,” Howard said. “They don’t want to develop their own techniques independently and then have to argue with EPA that these are correct or acceptable.”

A native of Grimsley, Tenn., Howard began his career at AEDC in 1987. As an engineering specialist in ATA’s Instrumentation and Diagnostics Group, he helps develop and apply different types of diagnostics as needed by AEDC’s test facilities and sometimes for off-base customers such as NASA.

Much of Howard’s research has been with projects like the Aircraft Particulate Experiment (APEX), DOD’s Interim Particulate Matter Test Method (IP-MTM) Development and Alternate Aviation Fuel Experiment (AAFEX). NASA has been a major participant in most of the work, along with universities, private companies and the Air Force.

Starting with APEX 1 at a NASA Dryden facility, Howard and other project participants began developing a method to measure particles and then refining the process as they saw what worked and what didn’t.

The most recent work was an AAFEX 2 measurement test at a NASA facility near Edwards Air Force Base last year. Working with NASA to characterize engine exhaust products has funneled into his work with SAE E31.

“As we’ve marched forward through these campaigns there is less and less tinkering, because we become more confident in what we’re doing and how we were doing it,” Howard said. He also credits work from his ATA colleagues Katie Stephens, Roy Carroll, Gary Storey, Brad

Besheres, Steve Lepley and Danny Catalano as being essential to accomplishments on those projects.

At the same time, other committee members in Europe have been involved in their own research on measuring particulate emissions.

Everyone’s work will go toward a final document that will define sampling methodology and the instrumentation needed to analyze those samples, which is what manufacturers are waiting for.

“The instruments are rather expensive, and altogether the engine companies will have to invest a few hundred thousand dollars for infrastructure changes to make this work,” Howard said. “They want to know the committee has settled on the approach and how the measurements should be made before making the investment.”

Howard and other committee members have been working on the procedure and document for the better part of a decade. He expects another two to three years before the document is finalized, but says committee members hope to have a good working draft complete by the summer. After that, it’s a matter of tweaking the procedure based on manufacturers’ testing.

“The major components are how to do the sampling, the instrumentation to measure mass, and the instrumentation to measure particle number density,” Howard said. “So what the draft document will be lacking is applying this prescribed system to several different engine types, getting experience with the procedure and identifying shortcomings or practical issues engine manufacturers have in applying this technique, so then we can refine the document to better specify how these measurements should be made.”

And while his wife, Martha, and other spouses see the sights and sounds of places around the world, Howard is OK with seeing most of it from a car window between an airport and a hotel.

“It feels gratifying,” he said. “You get a gratification from working on something that you feel has a need and an urgency by lots of agencies and groups.”



Above, Dr. Robert Howard and his wife Martha stand on a bridge over the River Avon in Bath, England, in 2007. Below, they pay a visit to Stonehenge. Occasionally Howard’s wife accompanies him when he travels to Europe, but Howard spends the majority of his time working with a subcommittee of the Society of Automotive Engineers to establish an international standard for measuring particulate emissions from turbine engines. (Photo provided)

**TEST** from page 1

The Turbine Engine Test Complex pulled together a team of government and ATA engineers and management to consider various options and associated risks. A proposal to perform the AMT at AEDC

was determined by OCA and Propulsion leadership at Wright-Patterson AFB, Ohio, to be the “best value” alternative.

Patty Stiggins, AEDC’s Air Force project engineer on the TF34 engine test,

said the Air Force’s decision to conduct the AMT in SL-1 will help fulfill requirements to validate more recent component improvements to further extend the life of the engine.

FELLOWS from page 1

ation as an AEDC Fellow must personally have made sustained, notable and valuable contributions in aerospace ground testing at AEDC.

A E D C L i f e t i m e Achievement Fellow nominations may be submitted by any present or former AEDC government or operating contractor/subcontractor employee. AEDC Lifetime Achievement Fellows are reserved for exceptional candidates and are not necessarily selected each year. All current or retired military, civilian and operating contractor/subcontractor personnel assigned or previously assigned to AEDC can be

considered candidates for selection as an AEDC Lifetime Achievement Fellow. Candidates qualified for consideration as an AEDC Lifetime Achievement Fellow must personally have made notable and valuable lifetime contributions to AEDC in any area relevant to the AEDC mission.

Only AEDC Fellows may submit a nomination for an AEDC Honorary Fellow. AEDC Honorary Fellows are reserved for exceptional candidates and are not necessarily selected each year. Candidates qualified for consideration as an AEDC Honorary Fellow must have made sustained, notable,

valuable and significant contributions to AEDC. These eminent individuals need not have worked at Arnold AFB.

Newly selected AEDC Fellows are honored annually on or about June 25, the birthday of general of the Air Force Gen. Henry “Hap” Arnold.

For more information, including the format for AEDC Fellows nomination submissions, contact AEDC Historian David Hiebert at (931) 454-4203. Nominations must be submitted in written form with supporting materials to: AEDC/CZ, 100 Kindel Drive, Suite A327, Arnold AFB, TN 37389-1327.

AFMC observing American Heart Month in February

WRIGHT-PATTERSON AIR FORCE BASE, Ohio – February is American Heart Month and a good time to educate ourselves on how to prevent heart disease. Cardiovascular disease, including heart attack and stroke, is the number one cause of death for men and women in the United States. According to the Centers for Disease Control, every 25 seconds an American citizen will have a coronary event, and every week more than 10,000 Americans will die from a coronary episode.

You can make healthy changes to lower your risk of developing heart disease by:

- Maintaining healthy weight
 - Controlling blood pressure
 - Knowing your numbers
 - Limiting the amount of dietary fat, cholesterol, and alcohol consumed
 - Exercising regularly
 - Managing stress
 - Quitting smoking and avoiding secondhand smoke
- To help prevent heart disease and increase



awareness of heart healthy lifestyle habits, Civilian Health Promotion Services and the Health and Wellness Centers will be

conducting heart healthy activities during American Heart Month. Activities will include:

- Cholesterol, hy-

pertension, and other heart healthy education classes

- Cardiac Risk Profile Screenings (for Department of Defense civilians only)
- Blood Pressure Screenings (for everyone)
- The Heart and Sole Walking Initiative

During the month of February, Air Force Materiel Command will be promoting its Heart and Sole Walking Initiative. This initiative involves the use of the AFMC Wellness Support Center website (www.AFMCWellness.com) and the 10,000 Steps

a Day program. The goal of the initiative is to log steps into the 10,000 Steps a Day program five days a week during the month, with a goal of reaching 200,000 total steps. Individuals who complete the task will receive a travel fitness kit. The Heart and Sole Walking initiative is open to all active duty military and appropriated-funded AFMC civilian employees.

To sign up for the Heart and Sole Walking Initiative, visit www.AFMCWellness.com or contact your local CHPS team for more information.

CPR/AED training and certification pays off at AEDC

By Philip Lorenz III
Aerospace Testing Alliance

February is American Heart Month and according to the Centers for Disease Control and Prevention (CDC), heart disease is the leading cause of death in the United States.

The CDC encourages people to take preventative measures like maintaining a healthy diet low in fat and cholesterol, getting regular exercise and to avoid or quit smoking.

Even when people follow the best cardiac health-care advice, they may not be aware of an existing medical condition or a situational risk that threatens their lives.

“A cardiac event can happen at any place, any time and to any age group,” said Wade Campbell, AEDC’s Emergency Medical Services (EMS)/Safety Officer. “More people trained in CPR (cardiopulmonary resuscitation) means quicker access to lifesaving intervention and a better chance of surviving the event. Add an AED (automated external defibrillator) and the possibility of surviving the event increases even more.”

Tony Rollins, ATA’s public access defibrillators (PAD) program manager, is the primary CPR/AED instructor for the general work force.

Safety had been his professional focus since he served in the Army National Guard and throughout his 20 years at AEDC. Rollins said knowing how to apply CPR properly is a skill that can have a wide impact.

“It’s not just important at AEDC,” he said. “It’s important training you can carry anywhere you go,

whether you’re at the mall, at church, whether you’re in the public library, a ball game or wherever. You have that ability to help someone who may not receive help if no one knew the process.”

Rollins said the goal at AEDC is to have at least five people per facility CPR/AED trained and certified. He said one of the most convincing testimonials on the value of this training came from someone at AEDC.

On Feb. 11, 2010, Michael Bunch, an ATA instrument technician at AEDC’s Aerodynamic and Propulsion Test Unit (APTU) passed out due to a heart attack while working at a calibration bench at the Precision Measurement Equipment Laboratory (PMEL).

The quick actions of Gary Fergus, Dale West, Brad Pearson, others at PMEL and Jessica McNeese, a CORE nurse practitioner at the base dispensary, saved Bunch’s life. Less than a month later, he was able to return to work.

Bunch was fortunate that Emily Crosier, an x-ray technician at the dispensary, and backup CPR instructor, and Jimmy Phillips, AEDC fire department crew chief, Tim Mansfield, base paramedic/crew chief and L. E. Brown, EMT/firefighter, were also on hand that day.

“The folks at PMEL set-up the successful resuscitation by recognizing the problem quickly and starting CPR,” Campbell said. “Fire department personnel responded, defibrillated and started transport. McNeese and Crosier were picked-up at the dispensary

to help maintain intravenous access and assist with drug administration during transport.”

Bunch said of the experience, “[It’s] hard to describe. As my wife Tracy says, I died. My coworkers helped bring me back. I’m very thankful they were able to do what was needed so I could stay around a while longer.”

Bunch, who has also had CPR/AED training, is ready to help others.

“I believe the quality of the training was great,” he said. “When I finished, I felt prepared to render effective CPR to help someone and that I could use the AED to help that individual survive until professional help arrived.”

The training at AEDC is voluntary and Bunch encourages others to get trained and certified.

“My cardiac event happened to occur at PMEL, where everyone is required to be CPR-qualified and where there are usually several people nearby,” he said. “What if I’d been somewhere with only one or two qualified people in the facility and for some reason they didn’t happen to be around at the time? What if I had been out in town or out on the road? You would have to hope that someone nearby knows what to do. Things could have turned out very differently. I feel it would be better for all of us if everyone was CPR-qualified.”

Rollins said there is another reason to stay current on CPR/AED training and certification.

“It has tremendously changed since the mid to late 1970s,” he said, noting how the ratio of breaths



Far left and right, Jim Phillips and Tim Mansfield, ATA paramedics with AEDC’s Fire Department, watch as PMEL’s Dale West and Gary Fergus demonstrate how they administered CPR to a coworker, Michael Bunch, Feb. 11, 2010. Phillips and Mansfield were the two EMTs who responded to the 911 call placed that day by Brad Pearson, an ATA instrument technician in the lab. Emily Crosier and Jessica McNeese, from the base’s dispensary, were also on hand to assist. (Photo by Rick Goodfriend)

to chest compressions has changed and continues to evolve.

Dale West, the PMEL supervisor, said when encountering the unexpected, being proactive is paramount.

“Be prepared,” he said. “When an emergency situation presents itself, we must take action. There is no time to prepare ourselves for action after the emergency occurs.”

“The CPR/AED training on base is excellent and provides an opportunity for all employees to prepare themselves for emergencies both on and off the job.”

Having the opportunity to put his emergency re-

sponse training to use was an invaluable lesson for Brad Pearson, an ATA senior instrument technician at PMEL.

“The experience showed me firsthand how important CPR/AED training is and that it can help save lives,” he said. “CPR administered correctly can restore partial blood flow to someone during those critical minutes until medical help arrives.”

“If this event happened years earlier the outcome could have been different.” McNeese emphasized how critical reaction time is for a cardiac event.

“The American Heart Association identifies five links for the ‘chain of sur-

vival’ when someone experiences sudden cardiac arrest,” she said. “First is early recognition of the emergency and activation of 911. Secondly, follow up with early bystander CPR initiation. Third is early delivery of shock (AED use if available), fourth is early advanced life support and fifth, coordinated care afterwards. The average person with basic training can initiate the first three steps of this chain and chance of survival has been reported from 49 up to 74 percent with a witnessed cardiac arrest.”

Check with your supervisor to find out more about CPR/AED training.

Civilian developmental education applications due beginning in March

By **Debbie Gildea**

Air Force Personnel, Services and Manpower Public Affairs

RANDOLPH AIR FORCE BASE, Texas

– Air Force civilians interested in developmental education should work on their nomination packages now, Air Force Personnel Center officials advised.

The official call for nominations will be in March, but some people may need more time to gather information and coordinate their package, said Joan Gudinas, AFPC civilian developmental education (CDE) program manager.

“Waiting until the last minute to prepare your package may result in preventable errors,” said Gudinas. “Developmental teams and CDE board members noted last year that there were spelling, grammar and punctuation errors that could have been avoided. There are frequently other errors too – like using the wrong

forms and format – that can be avoided if you start now and contact us when you have questions.”

A variety of CDE programs are available for civilians at every level, including Civilian Acculturation and Leadership Training, Defense Civilian Emerging Leader Program, Squadron Officer School, Education with Industry, and intermediate and senior developmental education, Gudinas said.

Options vary by grade, she explained, so AFPC has scheduled several March webcasts that will focus on opportunities available to civilians in each grade.

Webcasts will be held at 9 a.m. and 5 p.m. central standard time March 1 for GS 14 and 15; March 8 for GS 12 and 13; and March 15, 21 and 29 for GS-7 through 11.

Developmental educa-

tion experts will provide a presentation during each webcast, followed by question and answer periods.

A big change this year, Gudinas said, is that applicants are no longer required to have 12 months in their current position to be able to apply.

“In the past some civilian employees who were ready for developmental opportunities were unable to pursue them because of the 12 month requirement,” she said. “That not only affected their ability to pursue personal goals, but also delayed their ability to gain knowledge from CDE experiences to help improve the Air Force. That didn’t make sense, so the requirement has been eliminated.”

Another change benefits senior civilians.

This year, GS-14 and GS-15 civilians will be able to apply for the Defense Senior Leader Development Program (DSLDP) for academic years 2013

and 2014.

“This year, we are advertising both academic years to align the Air Force

selection process with the tight DOD timeline,” said Gudinas. “The nomination sheet from the DOD appli-

cation is the only portion required initially when See **EDUCATION**, page 8

Longtime custodial employee proud & thankful for AEDC career

By Shawn Jacobs
Aerospace Testing Alliance

When employees at AEDC report to work each morning, most arrive to find their offices and hallways clean, restrooms and water fountains sanitary and buildings ready to support the work at the most advanced complex of flight simulation test facilities in the world.

What many employees may take for granted is Debbie Taylor's mission, a job the custodian has been doing for 32 of her 34 years at AEDC. She worked her first two years at the Green Fly lunch wagon that traveled the base and then moved over to custodial operations. While her job may not seem very glamorous by some people's standards, few would doubt that it's essential, and Taylor is proud of the contribution she makes to the center.

"It's provided a good living for me," she said. "A lot of people say, 'How can you stand to be on the job that long – that many years?' But it's been a good living, and I'm proud of it."

"I do the general cleaning – what we all [custodians] do – restrooms, trash, vacuuming, dust mopping. I'm in six different buildings every day."

Taylor's day lasts from 7 a.m. to 3:30 p.m. and be-

gins at the A&E Building.

"Thursday is trash day," she said. "I think night shift gets most of the garbage over here [A&E], but I get all the secured areas that are locked up. When I leave here [A&E], I go to building 1088 [Space and Missile Ground Test Complex], then Warehouse VI, the ODC center [Ozone Depletion Center], 903 [Engine Test Facility-C Exhauster Building] and part of ASTF [Aeropropulsion Systems Test Facility]."

Taylor said the best part of her job is meeting people because she's a "people person."

"It's like one big happy family," she said. "I've had some good times out here, and I've enjoyed my job."

"You really get close to some of them [the people]. I've seen a lot of them come and go. A week or so ago we looked back and were counting up how many had passed away who I had worked with. It's sort of sad, and all my supervisors back these 30-some years – I think only two of them are living now. I've seen a lot of changes."

One of the changes involves the contractors for whom Taylor has worked over the years, which is quite a few. She currently is employed by Premiere Building Maintenance, a subcontractor for ATA.

Premiere performs custodial and refuse services at the center.

Taylor, who lives in Winchester with her husband, Troy, is also involved in a variety of community activities, including her church, the White Oak Grove Church of God, near Decherd.

She assists her sister in teaching the primary class and is also secretary of the ladies' Willing Worker Team.

"It's a ladies ministry; we say it's [for] whoever's willing to work," she said. "We have monthly meetings. All the ladies get together and do things. We've got seven widows in our church, so we went out [in December] and bought them gifts and fixed up food baskets."

"We work in the Bible School; we have it every year. We have senior trips, too, that go like for three days up on Signal Mountain. We have a lot of fun there for senior people, 55 and up."

Taylor is also a cancer survivor, so she volunteers with the American Cancer Society (ACS), including the Relay for Life fundraiser held each year in Winchester. Her church also participates in that event.

She follows her husband Troy Taylor is retired



Debbie Taylor at work in the photo lab, Jan. 3, 2012. She's been an AEDC employee for 34 years. (Photo by Rick Goodfriend)

driving 5/8-scale race cars.

"He calls them 'dwarf' cars, the smaller cars," she said. "They go to Huntsville and Nashville a lot. He really loves the car racing. I go with him some but not all the time."

Troy Taylor is retired

from American Can in Shelbyville but operates a tire shop there part time.

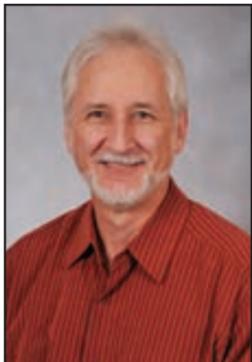
While Debbie doesn't have children, family is still very important to her. She is very close to two nieces and visits her mother every Sunday and takes

her to church.

For Debbie Taylor, it's a life well-lived.

"I'm just proud and thankful for my job," she said. "I put God first. I've been through a lot, and I've made it through. I'm just thankful for everything."

Milestones



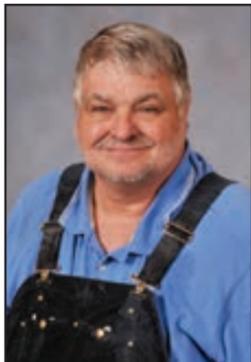
Paul Chadwick Jr.
40 years

30 YEARS

Thomas Schmidt, ATA
Alan Milhoan, ATA
Kelly Hollowell, ATA

25 YEARS

Sherry Ramanathan, ATA
Linda Cizunas, ATA
Kimberly Jones, ATA



Howard Hobbs
35 years

Steven Taylor, ATA

20 YEARS

Janet Dent, AF
Peggy Gray, AF
Gregory Power, ATA
Lial Williams, ATA
Lawrence Bradford, ATA
Susan Rymer, ATA



Mary Holton
35 years

Don Metcalf, ATA

15 YEARS

Carol McGinnis, ATA
Kathleen Jones, ATA

10 YEARS

Glenn Smith, ATA
Them Bui, ATA



Ronald Tolbert Jr.
35 years

David Eisentraut, ATA

5 YEARS

Jody Hayes, ATA
Daniel Henley, ATA
Danny Kelly, ATA
Markalene Monday, ATA
Benjamin Murray, ATA
Jonathan Parks, ATA



Dr. Heard Lowry III
35 years

James Ring, ATA
Philip Brown, ATA
James Bryan, ATA
Steve Cowan, ATA
William Horton, ATA
Scott Pogue, ATA
Donald Wilt, ATA

INBOUND MILITARY

Col. Patrick Tom, AF
Capt. John Dayton, AF

OUTBOUND MILITARY

1st Lt. Jason Lackey
Master Sgt. Michael Arena

RETIREMENTS

Capt. Peter Shore, AF
J.Y. Parker, AF
Carl Guerette, AF
Ginger Delius, ATA
Arthur Finger, ATA
Robert Bear III, ATA
James Davis, ATA
Carl Brasier, ATA

PROMOTIONS

Carl Shettlers, ATA

GRADUATE/DEGREES

Bret Boylston, MS
Kayla Fann, MBA
Jerrime Ball, MBA

EDUCATION from page 7

applying for DSLDP. Once employees have been vectored by their developmental teams, we will contact them to have them complete their DOD application."

The nomination process starts with the employee, Gudinas said. The first step is for an interested employee to complete the AF IMT (form) 4059, and submit

it to their supervisor for coordination and approval through the chain of command.

"The coordination process could take time, so that's another reason to start preparing the package now," Gudinas said. "The first general officer, Senior Executive Service member or installation or wing

commander in your chain of command must endorse the nomination. We recommend that you provide your leadership with ample time to review and sign off on your package."

In addition, Gudinas explained, the submission process this year will require that employees submit their own application packages

to AFPC via the Air Force Personnel Services website after the packages have been coordinated through the chain of command. Instructions for submission will be included in the March call for applications, she said.

When completing the application form, Gudinas reminds applicants that they can identify up to three programs.

"Don't limit yourself to one program – take advan-

tage of all the opportunities you can," she said.

Packages will be due May 1, with developmental team boards slated to meet during the summer to rank and vector the packages. The CDE board will convene in the early fall and final approval of primary and alternate candidates will be released around October.

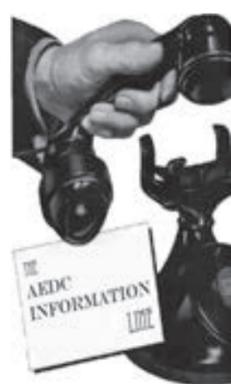
"CDE is part of the civilian continuum of learning that ensures the right combination of education, training

and experience is available to help all Airmen develop as Air Force leaders," said Gudinas. "Opportunities are out there, but Airmen must put the time and effort into the process and apply for the opportunity to compete."

For more information about civilian developmental education opportunities and other personnel issues, visit the Air Force Personnel Services website at <https://gum-crm.csd.disa.mil>.

454-3600

The AEDC Information Line is available for ATA employees to get the latest information on a wide variety of emergency circumstances that could impact base operations or driving conditions.



Government award winners



Capt. Timothy Calver
Company Grade Officer

Captain Calver, space chamber test project manager, was recognized for conducting a \$1.8 million hardware-in-loop test and laying groundwork for a \$13 million Cryo Sustainment program to keep AFMC capability viable.



Master Sgt. George V. Allen
Senior Non-Commissioned Officer-in-Charge

Sergeant Allen, quality assurance evaluator, was recognized for positioning the Logistics Readiness Office for budget reductions and collaborating with the Air Force Auditing Agency on ground fuels.



Tech Sgt. John A. Bankston
Non-Commissioned Officer-in-Charge

Sergeant Bankston, financial services, was recognized for reducing processing time for military pay items, taking over the CSA program and ensuring zero delinquencies and alleviating leave issues by identifying a data mismatch.



Senior Airman Tara J. Kindermann
Airman of the Quarter

Airman Kindermann, financial services technician, was recognized for strengthening AEDC's fiscal acumen, ensuring fast payment for travel vouchers and resolving travel inquiries with zero negative feedback.



1st Lt. John Labouliere
Honor Guard Member

Lieutenant Labouliere distinguished himself by performing flawlessly in more than 90 percent of all honor guard details Oct.-Dec. 2011. His outstanding performance, positive attitude and professional appearance exemplify the epitome of the United States Air Force Honor Guard.



Pamela K. Hinton
Civilian of the Quarter
Clerical/Technical Support

Hinton, secretary, was recognized for ensuring the Civil Engineer Branch and Mission Support Division ran smoothly through multiple absences and clerical manning reductions in other offices.



Simon K. Choi
Civilian of the Quarter
Scientist/Engineer

Choi, project manager, was recognized for his work on five critical test infrastructure upgrade efforts valued at \$34 million and leading the effort to install new data acquisition systems in Wind Tunnels A, B, C and 4T.



Robert R. Nelson
Civilian of the Quarter
Administrative

Nelson, senior cost analyst, was recognized for developing an analysis articulating AEDC's financial impact and benefit to the local community and for serving as the cost team lead for the Water and Waste Water privatization initiative.



Jacky Payne
Services Employee of the Quarter, Category I

Payne, maintenance worker, was recognized for working diligently to improve the health and hygiene for Outdoor Recreation and for leading the way on a landscaping project for the Gosick Leadership Center.



John Garner
Services Employee of the Quarter, Category II

Garner, recreation assistant, was recognized for serving as acting Outdoor Recreation manager for five weeks and for accomplishing tasks with a supportive and positive attitude.

ATA

Team Member of the Quarter

The ATA Team Member of the Quarter is Carrie McInturff.

McInturff, a project engineer in the Project and Design Engineering Department, was recognized for outstanding project management and technical skills through efforts in the development of the Space Threat Assessment Testbed (STAT) facility.

McInturff also led the effort to attain Information Assurance (IA) accreditation on all STAT information technology systems. Recent changes to the process for attaining IA accreditation on these systems required her to explore and develop more than 100 IA controls with minimal similar historical precedence to use as a reference.



McInturff

Craft Team Member of the Quarter

The ATA Craft Team Member of the Quarter is Ken Maxwell.

Maxwell, an instrument technician in the Integrated Test and Evaluation Department, was recognized for his leadership and support on the Rolls Royce Trent Extra Wide Body (XWB) Commercial Engine Test Project. He was instrumental in providing support in the design, installation, testing and removal phases.

With Maxwell's help, there were less than .1 percent discrepancies in the more than 5,000 instrumentation parameters on the project.

Maxwell was also cognizant of the fact security was of the utmost importance on the project and made sure all aspects of safety were performed correctly.



Maxwell



Will Perkins
Team Member
Facilities Operations and Maintenance

Perkins, mechanical system engineer, was recognized for his efforts getting a new dessicant dryer unit operational for an extremely complicated test.



Steve Underwood
Team Member
Facilities Operations and Maintenance

Underwood, plant operations engineer, was recognized for careful planning and preparation and direct support of the Rolls-Royce Trent XWB commercial turbine engine program.



Matthew Stiggins
Team Member
Integrated Test and Evaluation

Stiggins, test engineer, was recognized for technical expertise that has been vital to the success of the Rolls-Royce Trent XWB engine testing.



David Yoder
Team Member
Integrated Test and Evaluation

Yoder, flight project systems engineer, was recognized for his excellence in project management and customer support to the Air Force Research Laboratory.



Phil Medley
Team Member
Information Technology and Systems

Medley, senior engineer, was recognized as ATA's Test, Measurement and Diagnostic Equipment expert.



Biff Butler
Team Member
Information Technology and Systems

Butler, lead test project instrumentation engineer, was recognized for taking ownership on several test projects, including the B-52H testing in 16T.



Bob Rogers
Team Member
Resource Provisioning

Rogers, administrative professional, was recognized for his work in coordinating stock/stored material validation and oversight of the benchstock supply program.



Chester Stovall Jr.
Craft Team Member
Facilities Operations and Maintenance

Stovall, pipefitter, was recognized for his work as a seasoned professional who transforms pipe into highly complex finished products.



Brandi P. Harmon
Craft Team Member
Facilities Operations and Maintenance

Harmon, electrician, was recognized for taking over the primary responsibility for the high voltage test crew work at AEDC and training new employees.



Dennis Holt
Craft Team Member
Resource Provisioning

Holt, storekeeper, was recognized for his work in achieving the most efficient delivery cycle time with the lowest error rate in the past eight years.



Mason Counts
Craft Team Member
Integrated Test and Evaluation

Counts, journeyman pipefitter, was recognized for continuing to provide outstanding support to the Aerodynamic and Propulsion Test Unit test team through innovative piping solutions.



Don Golden
Craft Team Member
Support Services

Golden, police officer, was recognized for providing protection to test facilities and other national security critical resources.



Trent Loman
Customer Service – Internal
Information Technology and Systems

Loman was recognized for developing software to automatically calculate dynamic data and transfer the data from the AEDC data acquisition system to the customer analysis system, reducing decision-making time for test direction.



Jody Frame
Customer Service – Internal
Facilities Operations and Maintenance

Frame was recognized for making it a personal priority to define issues related to base steam and water distribution systems, including overseeing the base steam outage which included long-awaited leak repairs to the J1/J2 steam supply.



Nathan Payne
Customer Service – External
Integrated Test and Evaluation

Payne was recognized for a focus on communications, project management and cost control that contributed to meeting and exceeding customer expectations and delivery of a complex test on cost and on schedule.



Lisa Bigham
Customer Service – External
Integrated Test and Evaluation

Bigham was in charge of providing training and scheduling of escorts for foreign national customers during the Rolls-Royce Trent XWB program. Her familiarity with AEDC security guidelines, export requirements and foreign national visitor plans was a great asset to the project.



Arnold Golf Course
454-7076

Check us out on Facebook!
Arnold AFB Golf Course

Mulligan's Coffee Bar & Grill is open 10:30 a.m.-2 p.m. Monday through Friday and 8 a.m.-2 p.m. Saturday and Sunday. Call ahead orders for dine or carry out, 454-FOOD (3663).

Arnold Golf Course has a new **winter special** good seven days a week through Feb. 28. Play all day for \$10 green fee. Regular cart fees apply.

Arnold Lakeside Center
454-3350

Check us out on Facebook! **Arnold AFB Services Arnold Lakeside Center and Arnold AFB Services Information, Tickets and Travel**

Café 100 Pizza is available 10:30 a.m.-1:30 p.m. Monday through Friday. Pizza is available by the slice in pepperoni or sausage for \$2 per slice or the works (pepperoni, sausage, ham, green pepper, onion, mushrooms, black olives, bacon and extra cheese) for \$3.50 per slice. Whole pizzas are available if ordered the day prior and will require completing an order form and paying in advance. Selections for whole pizzas come in thin or thick crust and 12 or 16 inch. Choose from cheese, pepperoni, sausage, Canadian bacon, veggie, works, meat lovers or build your own from a variety of toppings. Salads are also available for \$3 with choice of ranch, French or Italian dressing. The Café will be closed Feb. 20.

First Friday Jam is Feb. 3 starting at 6 p.m. Come to play, listen, dance and enjoy. Join in with the band to play an instrument or sing. Or take over and do your own performance.

Arnold Lakeside Center will hold a **Super Bowl Party** Feb. 5 beginning at 4:30 p.m. The Pizza and Express menus will be available. All attending are invited to wear their football attire and support their favorite team. The game will be shown on all televisions and on the big screen in the ballroom. All over age 18 will be eligible to put their name on the square board and any Members First Plus members will get to put their name on two squares on the board. The board will be filled in first come, first served until they are all gone. The winner for first, second and third quarter will receive \$50 in Services Bucks and the grand prize final winner will receive a one night stay at Renaissance Hotel in Nashville plus two Nashville Predators hockey tickets. In the event a square is blank for any quarter a random drawing will be held of those in attendance. During halftime there will be a trivia contest where teams of four will compete to win prizes.

Books Are Fun is back for a **book fair** Feb. 7 from 9:30 a.m.-3 p.m. in Café 100. Discounted selections include paperbacks, best sellers, educational, reference, cookbooks, children's items, gift selections and more. Save up to 70 percent off retail prices.

The AEDC Woman's Club **Valentine Dinner**

Dance is set for Feb. 11 at Arnold Lakeside Center and is open to all base employees. This year's theme will be "Fire and Ice." The Timeline Band will perform dance favorites. A silent auction will be held to benefit the Woman's Club Scholarship Foundation. Social will begin at 6 p.m. with dinner at 7 p.m. Cost is \$35 per person and dress is semi-formal. RSVP by Feb. 6 to Patti Mathis at (931) 580-8898.

Weekend dining room specials (all include two sides and salad bar):

Friday 4-9 p.m.

Feb. 3: Meatball sub with fries, \$6.95 member, \$7.95 nonmember.

Feb. 10: Fried catfish plate, \$9.95 member, \$10.95 nonmember.

Feb. 17: Fried chicken plate, \$9.95 members, \$10.95 nonmember.

Feb. 24: Prime rib for two, \$29.95 members, \$31.95 nonmember.

Saturday 5-9 p.m.

Feb. 4: Cream cheese & prosciutto-stuffed chicken, \$12.95 member, \$13.95 nonmember.

Feb. 11: AEDC Woman's Club Valentine Dinner Dance, \$35 per person, RSVP to 580-8898.

Feb. 18: Lynchburg rib-eye, \$13.95 member, \$14.95 nonmember.

Feb. 25: Pizza and Express Menu only plus Fight Night Specials dozen wings and fries, \$3.25 member, \$4.25 nonmember or double bleu cheese bacon burger and fries, \$4.25 member, \$5.25 nonmember.

All specials and times are subject to change without notice. Please call ahead to ensure availability and openings.

Last Friday Trivia Contest returns 6:30 p.m. Feb. 24. Teams can have up to four people. No cell phones are permitted during the event. Anyone using a phone while a question is underway will be disqualified. Questions in random categories will be given. Prizes for top finishers.

The **Ultimate Fighting Championship** returns to Japan with an event slated for the Saitama Super Arena. Lightweight champ Frankie Edgar will face number one contender Benson Henderson in the main event. Arnold Lakeside Center will air the fight in The Landing Feb. 25 beginning at 9 p.m. Fight Night special will be a dozen wings and fries, \$3.25 for members and \$4.25 for nonmembers or double bleu cheese bacon burger and fries, \$4.25 for members and \$5.25 for nonmembers. This special will be available 8-11 p.m. The pizza and express menus will also be available. This event is for ages 18 and up unless accompanied by parent. Drink special in The Landing will be five-bottle domestic buckets for \$9.75. Other fights include Jackson vs. Bader, Hunt vs. Kongo, Akiyama vs. Shields, Pettis vs. Lauzon plus seven other preliminary fights.

Daytona 500 tickets available at discounted prices through ITT (Information, Tickets and Travel). The race will be Feb. 26 and various packages are available. Call 454-3303 for details.

Family Member/Youth Programs (FamY)
454-6440

Check us out on Facebook! **Arnold AFB Services Youth Programs**

Pretty Discoveries is back for a **jewelry fair Feb. 10** in Café 100 from 8 a.m.-2 p.m. Now is the time to get your loved ones that special Valentine gift. All jewelry prices are below \$20 and there will be door prize drawings for free jewelry. Pretty Discoveries also carries belts and handbags.

Valentine Specials: Get a Valentine Mylar balloon with candy for only \$5! These will be available during the jewelry fair in Café 100 on Feb. 10 and again on Feb. 13 from 8 a.m. -2 p.m. Call ahead to preorder.

Fitness Center
454-6440

Check us out on Facebook! **Arnold AFB Services Fitness Center**

The Fitness Center will be **open 5 a.m.-6 p.m. Feb. 20** in observance of the federal holiday. Classes will be held as scheduled.

BYOT: Bring Your Own Towel. Remember to bring your towel as the Fitness Center no longer provides towel service.

Push up, Pull up, Sit up Competition is set for Feb. 15 and may be completed anytime during the day. The top finisher in each category will receive a reward for the highest number of reps performed in proper form.

Group Class Schedule (for eligible users only):

Boot Camp Monday, Wednesday and Friday 6-7 a.m. on the basketball court

Yoga Monday 11 a.m.-12 p.m. on the basketball court

Cycling Monday, Tuesday and Thursday 11 a.m.-12 p.m. upstairs

Zumba Tuesday and Thursday 4:15-5:15 p.m. upstairs

Karate Tuesday and Thursday 3-5 p.m. on the basketball court

Pilates Wednesday 11 a.m.-12 p.m. on the basketball court

Piloga Friday 11 a.m.-12 p.m. on the basketball court

Hours of operation:

Arnold Lakeside Center: Catering/Management offices by appointment. Dinner: Arnold Express Menu or Hap's Pizza only Thursday 5-8 p.m., dinner or Arnold Express Menus and Hap's Pizza Friday 4-9 p.m. and Saturday 5-9 p.m.; Main Bar Thursday 5-8 p.m., Friday 3:30-10 p.m. and Saturday 5-10 p.m.; Social Hour Friday 4-6 p.m., Movie Night Thursday 6:30 p.m.

Café 100: Monday through Friday 6:30 a.m.-1:30 p.m. **Closed Feb. 20.**

Barber Shop: by appointment – Monday, Tuesday, Thursday & Friday 8 a.m.-4 p.m.

GLC: Monday through Friday 7 a.m.-3:30 p.m. May vary depending on bookings.

Family Member/Youth Programs: Tuesday through Friday 10 a.m.-5 p.m., Saturday 12-5 p.m.

Outdoor Rec: Main Office, Check In and Auto Shop Tuesday through Saturday 10 a.m.-5 p.m. Marina by appointment only.

Fitness Center: Monday-Friday 5 a.m.-9 p.m.; Saturday 8 a.m.-4 p.m. **Open 5 a.m.-6 p.m. Feb. 20.**

Arnold Golf Course: Pro Shop & Driving Range 8 a.m.-dusk. Driving Range open 24 hours with prepurchased key card. Mulligan's Coffee Bar & Grill Monday through Friday 10:30 a.m.-2 p.m., Saturday and Sunday 8 a.m.-2 p.m..

Recycling: Monday through Friday 7 a.m.-4 p.m.

Wingo Inn: Monday through Friday 7 a.m.-6 p.m., Saturday and Sunday 8 a.m.-4 p.m.

Nonappropriated Funds Human Resources: Monday through Friday 7:30 a.m.-4 p.m.

Outdoor Rec (ODR)
454-6084

Check us out on Facebook! **Arnold AFB Services Outdoor Recreation**

Come join Outdoor Recreation's **ski trips** as we hit the slopes in beautiful Gatlinburg Feb. 17-19 and/or March 2-4. Each trip leaves Friday at 4 p.m., arriving in the evening to check into the hotel with time to look around and do a little shopping. Wake up bright and early on Saturday morning to hit the slopes. There will be a one-hour lesson at 9 a.m. with the rest of the day to enjoy skiing. Saturday evening will be an opportunity for you to enjoy the night life of Gatlinburg. We will depart on Sunday at 11 a.m. The cost is \$300 per person or \$450 for couples per trip. If you would like to try snowboarding, the cost is an extra \$20 per person. This trip is for ages 8 and older and sign up deadline is Feb. 10 and 22 respectively. Cancellations after the sign up deadlines are nonrefundable. There must be a minimum of 10 to take the trip and no more than 14. Call 454-6084 to sign up.

Join Outdoor Recreation Feb. 26 as we head to the Chattanooga area to take one of the biannual **cruises through the river lock.** Blue Moon Cruises offers a special opportunity to cruise up or down river between their summer docking home at Chattanooga Pier and their winter home at Sale Creek Marina in Soddy Dai-

sy. On Saturday, Feb. 26 the boat will move back to Chattanooga to begin the spring, summer and fall cruises into the Tennessee River Gorge. Six miles above Chattanooga we go through the lock at Chickamauga Dam where we transition 42 feet between Nickajack Lake and Chickamauga Lake.

While on the four hour cruise, enjoy a barbecue buffet with all the fixings included in the price and a cash bar on the upper deck.

The Blue Moon Cruise is aboard a 70-foot luxury Skipperliner cruise boat featuring dual decks for your viewing comfort. If you like to feel the wind in your hair, the upper deck provides plenty of open space, while the lower deck has an enclosed climate controlled area as well as open viewing area on the forward deck.

From all levels and areas of the vessel you have clear views of the Tennessee River with plenty of opportunities to see the abundant wildlife along the river.

This relaxed-pace cruise includes a knowledgeable and friendly naturalist crew who are always within close range to answer questions and point out wildlife sightings.

Once we debark in Chattanooga there will be a 30-minute bus ride back to our vehicle at the Sale Creek Marina. Cost for this outdoor adventure is \$55 per person and is for all ages. Deadline to sign up is Feb. 8 and there must be at least 10 to take the trip and no more than 14.

Meet at Outdoor Rec at 6 a.m. and return approxi-

mately 3 p.m. Call 454-6084 today!

Paintball is every Saturday from 9:30 a.m. to 3:30 p.m. Anyone age 10 and older may play, but ages 10-17 must have a parent permission form. Interested participants need to call and sign up at least a day ahead of time to ensure equipment availability. Once the day comes everyone will meet at the paintball field. Cost is \$35 per person with equipment provided and includes 500 paintballs and a tank of air. It is \$20 per person for those with their own equipment and that also comes with 500 paintballs. All paintballs used must be purchased from ODR for \$13 per bag of 500 or \$45 for a box of 2000. If you're looking for some fun-filled scenario paintball, we will see you on Saturday.

Wingo Inn
454-3051

Check us out on Facebook! **Wingo Inn**

Reservations for Wingo Inn can be made 120 days in advance. Room rates start at \$39 per night. Please call 454-3051 for reservations.

Gossick Leadership Center
454-3024

Check us out on Facebook! **Arnold AFB Services Gossick Leadership Center**

February Movie Schedule

Movie nights are Thursdays with movie start time of 6:30 p.m. and dinner available from the Express or Pizza menus from 5-8 p.m.



Feb. 9 – "The Three Musketeers," rated PG-13 starring Logan Lerman and Milla Jovovich. They are known as Porthos, Athos and Aramis – three elite warriors who serve the King of France as his best Musketeers. After discovering an evil conspiracy to overthrow the King, the Musketeers come across a young, aspiring hero, D'Artagnan, and take him under their wing. Together the four embark on a dangerous mission to foil the plot that not only threatens the Crown, but the future of Europe itself.



Feb. 9

Feb. 16 – "Johnny English Reborn," rated PG starring Rowan Atkinson and Gillian Anderson. Johnny English, the most unlikely intelligence officer in Her Majesty's Secret Service, must stop a group of international assassins before they eliminate a world leader and cause global chaos.



Feb. 16

Feb. 23 – "Tower Heist," rated PG-13 starring Eddie Murphy and Ben Stiller. After the workers at a luxury Central park condominium discover the penthouse billionaire has stolen their retirement, they plot the ultimate revenge: A heist to reclaim what he took from them.



Feb. 23



CSAF: AF will be smaller but superb force

By Tech. Sgt. Richard A. Williams Jr
Air Force Public Affairs Agency

WASHINGTON (AFNS) – Air Force Chief of Staff Gen. Norton Schwartz explained the service's contributions to the new Defense Department strategy during a Pentagon press briefing here Jan. 27.

Schwartz said that as the Air Force approaches future constrained budgets, service officials will trade size for quality in order to ensure a ready force.

"We will be a smaller but superb force that maintains our agility, our flexibility and readiness to engage a full range of contingencies and threats," Schwartz said in the news conference, which followed the Defense Department's major budget decisions briefings on Jan. 26.

With Airmen regularly serving jointly and deploying with their coalition counterparts, the Air Force must ensure its unique contributions to national security are preserved, he added.

"Air Force capabilities are clearly instrumental to the major priorities of the new defense strategic guidance, such as deterring and defeating aggression, power projection in anti-access and area-denial environments, preventing the spread of weapons of mass destruction, space and cyber operations, and strategic deterrence," Schwartz said.

Future plans call for the Air Force to reduce its total force end strength by approximately 10,000 personnel, the general said. The changes will be tied to reductions in aircraft and other force structure, and are not being made to simply save money, he added.

Confronted by a complex security environment and significant reduction

in defense resources, the Air Force determined that the best path forward was to become smaller in order to maintain and protect a high-quality force, Schwartz said.

"To avoid a hollow force, we must and will protect readiness at any force level and strengthen our integration of the total force team of active, Guard and Reserve Airmen," Schwartz said. "It is our intent, indeed our obligation, to the American people and our Airmen that we will remain the world's finest Air Force in the years and decades to come."

Schwartz said the Air Force supports a new round of base realignment and closures as a way to reduce excess infrastructure, and echoed comments from senior defense officials that the Block 30 version of Global Hawk would be terminated.

"The reality is that the Global Hawk is not less expensive to operate than the U-2," Schwartz said, confirming that the Air Force would continue to use the U-2 rather than the Global Hawk Block 30 as a way to reduce costs. "And in many respects, the Global Hawk Block 30 system is not as capable, from a sensor point of view, as the U-2."

Schwartz also touched on the importance of the nuclear triad, stating "the diversity, the variety and the attributes associated with each leg of the triad actually reinforce each other to a great degree."

Other key programs and investment priorities for the Air Force include the KC-46A tanker, F-35 Lightning II and the future long-range strike bomber,

Schwartz said.

"The bottom line is these are important capabilities for the nation and ones that we will make sacrifices in other areas to sustain," the general said.

Schwartz ended the news conference by touching on the importance of America's servicemembers, and their families, to the success of the armed forces.

"I would just like to remind everyone that the real power of our Air Force, like our sister services, is our people, and not only in the excellence that they strive to provide, but also in the commitment that their families offer us on a daily basis," Schwartz said.



Air Force Chief of Staff Gen. Norton Schwartz delivers comments about the new defense strategy to members of the media in the Pentagon on Jan. 27, 2012. Throughout the ongoing budget process, Schwartz said, the Air Force will remain committed to its ongoing responsibilities to provide globally-postured, regionally-tailorable, full-spectrum airpower. (U.S. Air Force photo/Scott M. Ash)

AEDC's James 'Motor' Simmons leads the pack

By Philip Lorenz III
Aerospace Testing Alliance

For James Simmons, an Aerospace Testing Alliance (ATA) outside machinist, his profession and love of motorcycles share a lot in common.

This includes challenging work on powerful machinery, taking safety seriously, teamwork and family.

When Simmons first joined AEDC's work force in 2003, it was forklift experience that helped him land a storekeeper position in the warehouse.

However, it was years of experience working on automobile and motorcycle engines that got him into his true calling as an outside machinist in 2005, working on massive machinery, including hydraulic systems, pumps and gears.

"The size of everything we work on [at AEDC] is just huge," said Simmons, whose family members have worked at Arnold AFB for decades.

Whether it's working at extreme heights, de-energizing circuits or in confined spaces, he said, "safety is number one."

ATA outside machinists work with other craft workers to set up and operate machinery and equipment used both directly and in support of ground testing activities. They install, troubleshoot, repair and maintain the machinery used in AEDC's wind tunnels, space chambers, arc heaters, hyper-ballistic range, aircraft engine test cells and rocket motor test facilities. They also operate machines manually or through control mechanisms, inspect equipment and materials and communicate with co-workers, subordinates and managers.

Simmons said long before he came to work at AEDC, he had learned two important lessons – about safety and spiritual salvation – from Robert Reed, an uncle who is a chauffeur at AEDC. Reed is also a deacon at the church Simmons has attended for more than 12 years.

A firm commitment to safety and his faith has also guided Simmons in his off-duty passion for the past 18 years, motorcycle racing.

His love of motorcycles started early in life.

"The first one I had was a Suzuki 125, when I was probably 11 or 12 years old," said Simmons, who was learning about automotive and motorcycle engine maintenance and repair at the same time.

"My dad had hot rods and that's how I grew up, I was always around hot rods," he said. "He had plenty of old hot rods and I used to be right there helping him."

Simmons began working on cars and motorcycle engines, "ever since I could hold a wrench."

The Winchester, Tenn., native acknowledged his mother didn't share his enthusiasm for motorcycles, especially riding and racing them, for years, but more recently that has changed.

"She actually goes with us [to the races]," he said. "It's sort of a family deal – my wife, daughter, dad [and] my mom, pretty much most of my uncles, so it's family."

Simmons still has the Honda CBR 1000 his father let him borrow and keep.

A fourth bike, a turbo-charged Honda CBR 1100

XX, is undergoing modifications for Pro Street bracket racing.

"[With] bracket racing, you have a handicap," Simmons said. "It's hard to get all the bikes with the same horsepower, so, you can actually have a slower bike and let him take off and the computer figures out how much handicap the slower one needs to go in front of the faster bike."

"The faster bike then has to go and try to catch him – each one of them has a dialed in index and you can't break out of the time zones that you set for yourself. When they put it in the computer, [it] actually takes over and it has the lights drop down, one bike gets to take off and then the other ones start dropping down and then he gets to take off."

According to Bart Madison, the managing editor for MotoUSA, a motorcycle USA trade publication, quarter-mile times are a popular performance benchmark for cars and motorcycles. The popularity of quarter-mile performance numbers comes from drag racing, one of the most popular spectator motorsports in the United States.

The basics of calculating a motorcycle's quarter-mile performance are simple. The motorcycle begins from a standing start. Upon signal the clock starts and the motorcycle races in a straight line for a quarter-mile sprint. Crossing the finish line stops the clock. Top speed is also measured during the quarter-mile run.

A number of factors

contribute to the overall quarter-mile time of a motorcycle. Not the least of which are the skills of the rider, who must anticipate the start and effectively run through the gears for optimal performance.

At a drag strip, a device called a Christmas tree controls the rider's start via a sequence of lights. Starting at the top, a series of three yellow lights illuminate sequentially, followed by the green – the rider timing their launch with the green light.

Riding down a two-lane, quarter-mile track up to 200 miles-an-hour, racing is more than leather-clad bikers roaring by on sleek and powerful machines. Like at work, the contestants look out for each other. Even though they are fierce competitors, Simmons spoke about the bond between them.

"A lot of the guys I run against, even though you want to beat them very badly and they want to do the same to you, we still look out for one another," he said. "[If] somebody needs help preparing their bike, to go to the line, we have pitched in, even though you're going to run against this guy."

"We pretty much travel the same circuit, so it's pretty much a tight-knit family even though some of them live in Georgia, some may live in Kentucky, but everywhere we go it's pretty much the same crowd. So, we all know one another."

Rockingham, N.C., is the farthest he has travelled for a race, so far.



From left, Jason Kelly, Maurice Taylor, James Simmons, Keawanna Edminston, Sarah Reed and Charles Reed pose for a photo at Nashville's Music City Raceway after Simmons, an ATA outside machinist at AEDC, placed first in the annual Pinky's Labor Day Weekend Street Bike competition in September 2011. Kelly and Reed also work at AEDC. (Photo provided)

Simmons knows where the rubber meets the road, or sometimes where his body has met the asphalt surface of the racetrack. His advice for anyone racing motorcycles is universal.

"Ride as safe as you can and to the best of your ability," he said. "Other than that, it's just kind of point and go. We have to wear a leather suit – my leather suit saved me, and the good Lord, but I was pretty sore. I didn't have any abrasions. After I wrecked it, [about 12 years ago at the Huntsville Raceway], I came back around and got right back on it and finished the race with it, but I was sore."

Simmons said he feels blessed, by his own family and "the family" he works with at AEDC.

"I love the people, this group that I'm with," he said. "[I've] got a great

boss, great people to work around."

When it comes to mentoring a new person, Simmons said, "First thing I'd tell him is read up on safety. Safety is number one, it is. We're up on something high or down in a pit you know, 15-20 foot [in a] confined space."

Another ATA outside machinist, Jason Powers, is one of Simmons' coworkers at AEDC.

"I have never, in my whole time working with James, seen him in a bad mood," Powers said. "He brings laughter and makes the day go by so much better and faster, with him just being around. I have had the opportunity to know James outside of [work] and his personality here also reflects how he is outside of here."

Powers said, the best part

of being at AEDC is "Working on things that are unique and getting to work with some of the most talented people around and learning new things every day."

Asked what helps the craft workers get challenging projects accomplished, Powers said, "Teamwork is something we rely on more than anything here at Arnold [AFB]. Some of the machines we maintain here are big and it actually takes teamwork to keep maintained."

"Teamwork also is a big contributor to the safety of all of us. There are several times that we rely on our co-worker to, 'watch our back,' and without good teamwork, that couldn't get accomplished and could result in more injuries. So in my eyes, teamwork is one of the most important things here at Arnold Center."

