



HIGH MACH

Serving the World's Premier Flight Simulation Test Center



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AEDC reduces customer power costs by almost \$5 million



The Large Rocket Test Facility J-6 uses "night ops," a program in which testing is conducted during the night of summer months. The program is in its fourth year of implementation. (Photo by Rick Goodfriend)

By Kathy Gattis
Aerospace Testing Alliance

AEDC averted a \$4.86 million energy bill for its customers with a program called night operations or "night ops."

As part of night ops, tests that require the most energy consumption are done during the evening and into the morning of the next day when power is cheaper and more readily available.

"It's not that we (AEDC) use less power at night to accomplish our test mission, but night ops provide a significant cost avoidance for our customers," ATA's Manager of Integrated Scheduling Branch Gary Bryant said.

AEDC's rate structure with TVA

(Tennessee Valley Authority) drives a higher energy cost during peak power periods or when the demand for power is the greatest.

"By keeping our large plants down during that period and moving operation to non-peak times, we can reduce the amount of money spent on power, and those savings are passed on to the customer," Bryant said.

In these tough economic times, customers have fixed budgets and savings from tests go directly into more hardware for the war fighter or more capable systems being fielded.

Another benefit of night ops is the improved availability of cooling water. With the naturally cooler raw water

temperatures during the nighttime hours, equipment capabilities are improved allowing certain test conditions to be more easily attained.

A potential downside of the move to night ops is felt by AEDC employees who are involved in test and maintenance activities. Some engineers, craftsmen and support personnel are asked to temporarily change their shift work hours.

Even though there is an integrated plan in place for a smooth transition to the shift changes, ATA still wanted to monitor the impact to employees.

"Safety is always our first priority," Bryant said. "ATA does vigorous analyses to ensure that personnel and equipment safety are not compromised by the

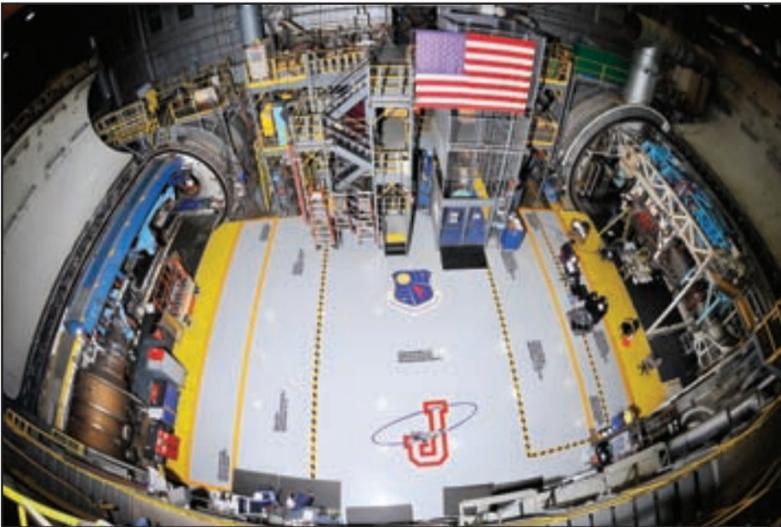
movement from a more normal first and second shift operation to night ops. I think (the) Beyond Zero (safety campaign) has really helped make everyone more aware of the importance of safety and reminded folks that we need to look out for each other, and that is exactly what our employees are doing. Their awareness is heightened."

No accidents or safety incidents have been connected to night ops. The program is used primarily in the Propulsion Wind Tunnel, Engine Test Facility and Von Karman test complexes because these are the areas that require the most power during testing.

"Though this scheduling change was

See NIGHT OPS, page 5

Newly painted J-1/J-2 area floor functional, eye-catching



The newly painted floor at J-1/J-2 clearly denotes load ratings and is emblazoned with the AEDC shield and the "Flying J" symbol. (Photo by Rick Goodfriend)

By Shawn Jacobs
Aerospace Testing Alliance

It's amazing what a fresh coat of paint will do, even for a test area floor.

The J-1/J-2 high bay floor, a part of Arnold Engineering Development Center's (AEDC) Engine Test Facility (ETF), is all the talk because it combines functionality with two attractive decals that contribute to pride in the workplace.

The area is an elevated concrete floor, which causes certain areas of the floor to have a different load rating than other sections. Knowing the load rating for each different section of the floor is important when installing and removing test articles in or out of the J-1 and J-2 test cells, according to McGhee Caperton, a J-2 test/installation engineer who oversaw the painting project.

"Prior to the paint job the areas of concern for loading capacities were designated by yellow and black paint stripes with stenciled lettering detailing the capacity of the particular area," Caperton said. "The old paint for the stenciling was starting to wear and it wasn't as obvious what the load ratings were."

The safety aspects of the floor include the ability to distinguish between the different load areas, the area of concern during hatch operations. The new paint has a mixture of grit in the top coat to help protect against slips during routine work in that area, Caperton said.

In years past, attempts were made to try and find the time to get the area painted. It was always difficult to find time in the busy test schedule of J-1/J-2 to

See FLOOR, page 4

East Coffee Elementary visits AEDC



About 50 third graders from East Coffee Elementary School in Manchester visited AEDC as a part of the Spark program. In addition to touring AEDC facilities and learning about the basics of flight, the students also visited the Fire Department and learned about fire safety and fire prevention. See more pictures of their visit on page 10. (Photos by Rick Goodfriend.)

Annual Arnold Community Council banquet is Nov. 16

The Arnold Community Council (ACC) will host its annual banquet Nov. 16 at Cravens Hall on the campus of the University of the South.

The guest speaker will be Tim Gard, who will present "Developing a Comic Vision."

The reception begins at 5 p.m. and the dinner will follow at 6 p.m.

Table sponsorships and individual seats are available for purchase.

A discount is available for anyone who pays by Nov. 2.

Gold sponsorships are \$650 (\$625 with discount) and include

10 seats at a reserved table, 10 one-year memberships to the ACC and recognition in the program; silver sponsorships are \$325 (\$300 with discount) and include five seats at a reserved table and five one-year memberships to the ACC and recognition in the program; and individual seats are \$75 (\$65 with discount) and include one, one-year membership to the ACC.

For more information or to purchase a table or individual tickets contact the ACC at 2010banquet@arnoldcommunitycouncil.com.

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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.

**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

**Core Values**

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

Can you see the light? Share your knowledge

By Col. Michael Panarisi
AEDC Commander



Panarisi

We've had a fantastic string of events in the last couple of weeks, and they shared a common theme ... I saw a real spark in people's eyes, and that's feedback that's pretty rare these days.

It's so easy to get in a rut, focus on our own issues or just hunker down in the face of adversity.

But here's another approach.

Look for something you can do to make a difference in someone else's life and see how your perspective might change.

I heard a local radio personality refer to this as "never miss a chance to 'rock someone's world.'"

There's no doubt in my mind we did just that!

We hosted some really special guests recently.

Over the last month,

we took on the challenge of paying tribute to our veterans when we executed our annual "Veterans' picnic."

If you missed that event, you missed something truly special.

These veterans are residents of the local VA hospital and getting out of that environment for a day means the world to them.

Just sitting with them, sharing a meal and hearing their stories will make a believer out of just about

anyone.

You can't miss the fire in their eyes as they recall their contributions to our nation's defense and, for some of them, their wars were over four decades ago.

We also expanded our "Evening at Arnold" series and are now running that show on a quarterly basis.

Thanks to the generous support of our Arnold Community Council, we have brought more than 200 teachers to see the base and made valuable contacts in our community.

These contacts are the ticket to helping these teachers see how we can help them in the classrooms, with guest speakers, demonstrations or just simple ideas on how to enrich their science and math lessons.

I saw some really ex-

cited teachers that night!

Many of them have followed up and are now planning lessons with the sights and sounds of Arnold at the core of their plans.

And, in one of my favorite events, we brought almost 375 eighth graders around the base as part of our Minds in Motion campaign. (See photos on page 9)

You just have to see the looks on their faces when we take them inside the big wind tunnel or over to SL-2.

Sure, we can't possibly hope to "reach them all," but for those that took notice, it was obvious.

The beauty of all this is you don't have to gin up a big program to make a difference in someone's life.

Sometimes it's as simple as a kind word, an unexpected "thank you," or a call out in a meeting.

Dig a little deeper, and you probably know someone who just needs a lift.

Maybe you know a student who is still struggling with a certain lesson, or needs a little guidance on what to pursue as a career.

Whatever the case, your choice to get involved will pay big dividends, and seeing the "light in their eyes" is all the payback you'll ever need.

Give it a try.

If you'd like to participate in one of our formal programs, just talk to the POC and find out how you can pitch in. Or think about a local group that might need a boost, maybe the Scouts or a 4-H club.

It could be as close as the "boy next door."

Wherever you find the need, your work will not go unnoticed.

And the difference you make can last a lifetime.

Gifts and the holiday season: What can you accept?

With the holiday season rapidly approaching, parties, receptions, and the exchanging of gifts occur. However, even at the holiday season, the Standards of Conduct apply.

To ensure you don't unwittingly violate the standards, a brief summary of the applicable rules that pertain to the giving of gifts is set out below.

If you have any questions, please contact the AEDC Legal Office at extension 7814.

Although there are exceptions, as a general rule, federal personnel may not accept gifts from "prohibited sources," such as a contractor like ATA or its' personnel.

One such exception is referred to as the "20/50" rule.

With this exception, federal personnel may accept gifts (although not cash) not exceeding \$20

dollars in value, as long as the total amount of gifts accepted during the calendar year doesn't exceed \$50.

Another exception pertains to gifts that are based on a bona fide personal relationship.

These personal gifts are actually paid for by the contractor employee rather than the actual contractor.

There are also rules that apply to giving and accepting gifts from non-prohibited sources.

Generally, supervisors may not accept gifts from subordinates or federal personnel who receive less pay.

During the holiday season, as an exception, supervisors may accept gifts (other than cash) from subordinates as long as they are valued at \$10 or less.

Also, if a subordinate is invited to a social

event at the supervisor's residence, he or she may bring a hospitality gift of the type and value customarily given on such an occasion.

Gifts from contractors, even during the holidays, may not exceed \$20.

If you would like to give a gift to a contractor or a contractor employee, you should check with the contractor first as many have rules of ethics or business practices that are similar to our Joint Ethics Regulation (JER).

Be mindful to take that into consideration before offering a gift that they may not be able to accept.

If your office wants to give the office supervisor a holiday gift, you may do so but you are not permitted to solicit the other employees for contributions to a group gift.

Group gifts are permitted only for special, infrequent occasions such

as retirements.

Under no circumstance may you solicit a donation from a contractor employee, as it is considered soliciting a gift from a prohibited source.

If your office wants to have a gift exchange (to include contractor employees), there are also rules that apply.

If gifts are chosen at random or traded, there are no monetary limits, other than common sense because the purchaser of the gift doesn't know who will eventually receive it.

Gift exchanges between employees that occur via a random drawing of names are more troublesome.

Where contractor personnel are involved, a \$20 limit applies.

Where an employee may buy a gift for a superior, the \$10 limit is prudent.

Lastly, there are also rules pertaining to private holiday parties.

As a federal employee, a gift of food and refreshments to a contractor does not violate the JER.

However, the contractor may or may not be able to accept based upon the contractor's ethics rules.

If you are hosting a

party and a contractor employee brings a gift, it may not exceed \$20. If such a gift is edible and it exceeds the \$20 limit, the host may accept it on behalf of all the guests and share it with them.

If a contractor employee is having a private party, government employees should normally decline such an invitation as this would be viewed as accepting a gift from a prohibited source.

There are some exceptions that may permit attendance.

Under the \$20 rule, if the average cost per guest does not exceed \$20, you may accept.

However, if the cost per guest is \$40, the "I won't eat more than \$20 worth of food" defense won't work.

The AEDC Legal Office wishes everyone the best of the holiday season.

Please remember the guidance above only highlights common questions. Should you need additional guidance, please don't hesitate to contact an ethics counselor or at extension 7814.

Happy holidays!

Information furnished by the AEDC Legal Office

Sacrifice puts things into perspective

By Faye Banks-Anderson
78th Air Base Wing PA

Robins AFB, Ga. – Everything was put into perspective for me Oct. 2 when the flag-draped coffin of Senior Airman Michael Buras was removed from an aircraft on the Robins AFB flightline.

It was the first time I had witnessed a dignified transfer of a fallen military member.

Airman Buras, 23, of Fitzgerald, Ga., died Sept. 21 of wounds suffered during an IED detonation in Kandahar, Afghanistan.

What I saw made me realize all the problems I thought were important are really not that significant. Seeing the coffin of this warrior who gave his life for our country his grieving family, and the Robins AFB Honor Guard made me realize it's time to stop complaining, stop feeling bad when my job isn't all I



Robins Honor Guard members carry the casket of Senior Airman Michael Buras to an awaiting hearse on the Robins flightline. (Photo by Gary Cutrell)

think it should be and stop blaming everyone else when things don't go the way I think they should.

But what the ceremony did most was remind me of the importance of my job, which is to support the warfighter.

Whether you're a civilian, a contractor, an officer or an enlisted Airman, manager or employee, know your job also supports those in harm's way and is important.

It's not often we have such poignant reminders of the battles in which our country is engaged.

It's not every day our sacrifices, no matter how many and no matter how big or small, are justly put in to perspective.

But, every day, the sacrifices of Senior Airman Buras and the other brave Americans who made the ultimate sacrifice, should never be far from our thoughts.

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/PORTALimages/Smoking area map. pdf](https://lpapro.arnold.af.mil/PORTALimages/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.

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.

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 Panarisi
AEDC Commander

“Johnson Junction” creator honored for contributions

By Shawn Jacobs
Aerospace Testing Alliance

Arlis Johnson retired as an engineering specialist around 1997, but his legacy at AEDC lives on.

The Tullahoma resident was recognized for a couple of his contributions in a casual ceremony Sept. 29.

One is the “Johnson Junction” box, which he developed in 1986 when the Department of Defense (DoD) issued a security directive requiring all terminals connected to a computer that can perform classified work to be in a closed area.

Dr. Ralph Jones, branch manager for the Technology and Analysis Branch, explained, “It was basically a switch box to allow folks to connect or disconnect a computer terminal from the network that housed the supercomputer. If we didn’t have the ability to switch them ... we would have basically had to have made the whole building a closed area, so it was a tremendous efficiency gain because it let folks connect to the classified network, do their work and then get back off.

“There were actually three of the boxes that were mounted on a wall on the second floor of the DO (Directorate of Operations) Building because we basically had our entire computational group contained in this building. They had individual computer terminals, so they each had a switch to change their connectivity.”

The second floor of the DO was remodeled last year, and one of the boxes was saved

and presented to Johnson at the ceremony.

At the time of the development of the Johnson Junction, it was estimated the device would save AEDC \$335,000 in one-time costs and \$87,500 annually in lost productivity.

Dr. John Adams, retired director of the Applied Technology Department, also helped present Johnson with a copy of High Mach from August of 1986 which contained an article describing the invention.

“Arlis did what he did best in his career, and that was take care of the guys trying to do their job,” Dr. Adams said. “Arlis did his job.”

Ed Dorman, manager of Network Engineering also helped with the presentation.

“I worked for Arlis from ’86 until he retired in ’97,” he said. “He combined technical expertise with the concern for the national security aspect that you had to do things the right way, so that basically you could get the information to the people who are supposed to get it but keep it away from the bad guys.”

Johnson had also worked on a concept called “virtual presence,” a project to give test customers the ability to monitor on-line testing on their own site as if they were at AEDC. Dorman said Johnson worked on both the technical and security aspects of the plan.

The idea was postponed at the time due to a lack of interest among test customers. Johnson’s plan was pulled off the shelf last year, however, when a customer requested the



Dr. Ralph Jones displays one of the original “Johnson Junctions,” which allowed AEDC terminals to access the main computer without making every office a “closed area.” (Photo by Andrea Stephens)

capability.

Randy Sloan, manager of enterprise server support, revealed the new capability has been given the acronym ARLIS, for Arnold Remote-Link Information System.

“A lot of his [Johnson’s] concepts were folded into this,” Sloan said. “This is still in its infancy and really starting to pay dividends.”

Johnson said it was very gratifying – and surprising – to have his work recognized in this way.

“I thought I was coming out for a coffee for the guys to kind of acknowledge themselves for having accomplished what they were talking about today,” he said. “It turns out that I got to be the focal point, so I was flattered and kind of caught off guard. I



Arlis Johnson, second from the left, was honored for his contribution to AEDC known as the “Johnson Junctions.” From left to right, Dr. John Adams, Johnson, Randy Sloan and Ed Dorman. (Photo by Andrea Stephens)

loved it and it was great.

“The ARLIS concept was very flattering – to come up

with an acronym like that. It was very enjoyable, very humbling.”

AFMETCAL audit team examining AEDC measurement equipment

By Shawn Jacobs
Aerospace Testing Alliance

In the data intense world of test before flight, the accuracy of scientific measurement is critical.

A team of three auditors from Air Force Metrology Calibration (AFMETCAL) is on base to ensure the AEDC calibration laboratory is providing accurate data to customers.

The team includes Chief Master Sgt. Matthew Brown, Master Sgt. Roy Lee and Master Sgt. Jacob Nichols.

Tech. Sgt. Jamie Johnson is section chief of the Precision Measurement Equipment Laboratory (PMEL) and Chemistry Laboratory.

As government oversight for PMEL, Sergeant Johnson ensures the laboratory is compliant with local and Air Force policies and procedures.

“The AFMETCAL team is going to inspect the laboratory to ensure that they’re making measurements that are accu-

rate, reliable, safe and traceable through national standards for the facility,” Sergeant Johnson said. “The quality of data is paramount to our overall operations; therefore, it is extremely important for our instruments to be properly calibrated so we are able to maintain measurement integrity.

“The PMEL performs maintenance of test equipment in the form of calibration, alignment and/or repair. While at PMEL, the equipment will be tested to ensure its accuracy before it is sent back out into the field for use. AEDC has a multitude of different types of test equipment which is used in a wide variety of applications. Some of the items that PMEL supports include pressure transducers, force load cells, temperature/humidity equipment voltage/current/resistance devices, and vibration measurement devices.”

The biennial audit began Thursday with an in-brief of Air Force and ATA leadership.

It runs until Oct. 25 and con-

cludes with an out-brief where the results of the audit are announced.

“The PMEL maintains a high level of standard throughout the year, so when the AFMETCAL audit approaches they’re not scrambling at the last minute to get the lab ready, Sergeant Johnson said. “Critical to the lab’s success is their end product quality. It’s monitored throughout the year by an in-house quality team.

“Their quality program is given a thorough evaluation by the auditors. Other areas which will be assessed include the PMEL’s management system, the PMEL’s facility, environment and laboratory calibration processes.”

Sergeant Johnson said he is looking forward to this year’s AFMETCAL audit.

“Past inspectors spoke very highly of this calibration laboratory. The team is looking forward to seeing what we do here, and we’re looking forward to showing them.”

Upcoming technical forum to feature the work of ‘early career’ engineers

By Darbie Sizemore
Aerospace Testing Alliance

October’s Technical Excellence Forum will focus on the projects currently being worked by AEDC’s early career engineers.

On Thursday, 27 of these engineers will present posters highlighting their work over the last two years. The event, which is proposed to become an annual event, is sponsored by the AEDC Technical Societies.

The engineers who all have 15 years or less of experience represent all areas of AEDC and Tunnel 9 and include members of the military, government and contractor work forces.

“This is a great opportunity for early career engineers and scientists at AEDC to not only showcase their projects but also the knowledge that they have gained while working at the center,” said Dustin Crider, who helped organize the event. “We wanted to showcase the

work of the people who are the foundation for the future of AEDC.”

The posters will be on display from 11:30 a.m. to 12:30 p.m. in the Large and Small DO Conference rooms in building 1099.

The following have submitted posters that will be included in the forum:

- Andrew Alexander, TE53, *Coherent anti-Stokes Raman Scattering (CARS) on Variable Mach Number Through Microwave Heat Addition*
- Brian Binkley, TE52, *Modeling and Analysis of Eductor System Performance*
- Mary Breeden, TE53, *Four-Color Imaging Pyrometer*
- John Claybrook, TSTS, *Verification and Validation of the Characterization of Combined Orbital Surface Effects Chamber using Comparative Spectral Analysis Incorporating the MISSE-6 Program*

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AEDC Team Excellence and Technical Award winners



The AEDC General Lee Gossick Team Excellence Award was presented to the AEDC Installation Restoration Team for its excellence in project development, design, installation and management of 112 environmental restoration projects at AEDC. These projects are cooperative efforts between the U.S. Air Force, the Tennessee Department of Environment and Conservation, the US Army Corps of Engineers, and the Air Force Center for Environmental Excellence. Team members are Dennis Flatt, ATA section manager and team leader, SS42, Stephen Arnold, SS42, Mike Hathorn, SS42, Barry Henderson, SS42, Rich Merrill, SS42, Greg Sandlin, SS42, and Dennis R. Timmons, compliance restoration manager, Asset Management Section. Also pictured are ATA General Manager Dr. David Elrod and AEDC Executive Director Britt Covington. (Photo by Rick Goodfriend)



The AEDC Technical Achievement Award was presented to the Dual Aperture Periscope Team for development and implementation of an afterburner surveillance camera for simultaneous health monitoring and high speed imaging for the F135 engine. The team members are Gregg Beitel, team lead, TE531; Joshua Meeks, Air Force project manager, Technology Branch; Marcos More, ATA project manager, TE21; Todd VanPelt, TE531; Danny Catalano, TE531; Marcus Conner, TE531; Larry Stanford, RP71; Gregg Adams, FA84M; John Adams, FA84M; John King, TE533; Brad Besheres, TE533; Steve Lepley, TE533; Jim Lynch, TE533; McGhee Caperton, TE11; Chris Hagge, TE11; and Alan Horrocks, ATA/TE11. Also pictured are ATA General Manager Dr. David Elrod and AEDC Executive Director Britt Covington. (Photo by Rick Goodfriend)

Captain presents paper at flight test symposium

Capt. Brandon Herndon, AEDC/TSTW Test Project Manager, presented his "Ground Test to Flight Test Smarter" paper to the Society of Flight Test Engineers at their 2010 Symposium, Sept. 14-16 in Washington, D.C.

The focus of the symposium was "Enhancing Air Vehicle and Mission Systems Flight Testing in an Austere Fiscal Environment."

Capt Herndon's presentation focused on increased cooperation and communication between the ground test and flight test communities, as well as how the two can synergistically work together to shorten the overall program acquisition cycle, and therefore reduce cost.

Ultimately, the warfighter receives their end product for less cost to the taxpayer.

Keeping program costs under control has long been a major challenge for Program Managers across the DoD. Recent tightening of the DoD's budget only highlights the need to do more with less.

According to Capt. Herndon, "There is the

saying that 'We don't have enough time to do it right but we always have enough time to do it over.' We need to spend more time in the development stages to get it right the first time. This will save us a lot more time and money in the future."

The work done at AEDC is often done in the development stage and is thus a natural impetus to link our ground test capability with smarter flight test planning, and strengthening the feedback "loop" from flight test execution to the ground tests.

"For example, any anomalies or flaws that are experienced in flight test need to be fed back to the ground test community," he said. "This way we can look back at our (ground test) data and determine if there was anything indicating that an anomaly would occur that we may have overlooked at first glance."

Captain Herndon used this briefing opportunity to introduce AEDC's Test Division new Analysis Branch.

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accommodate painters without impacting testing or test article reconfiguration.

"However, this year with a little luck (persistent flexible scheduling) and the ability of Volunteer Paint (the Manchester contractor that performed the job) to accommodate a time frame when a base-wide raw water outage was in effect and the ability to work on the Saturday prior to Labor Day, the paint job was a success," Caperton said.

The AEDC shield was placed on fresh, gray paint to show a sign of pride to be able to work at AEDC and provide top quality testing support for the Air force. The "Flying J," which was created in years past as a symbol of teamwork present in the J-1/J-2 test cells, was painted below the shield. The "Flying J" was modified to show an F-35 Lightning II aircraft flying around the "J." The F-35 was chosen because it is considered the aircraft of the future and both J-1 and J-2 have supported F-35

propulsion system testing, according to Caperton.

Since being hired in November 2004, Caperton said he's seen the pride the crews have about working at AEDC and at J-1/J-2, which are approaching 60 years old.

"The floor paint just simply brings attention to the area to outsiders, who otherwise would not think twice about the hard work, pride and dedication of the J-1 and J-2 test cell crews," he said. "Pride is about doing your job and doing it right, whether it be preventative maintenance, test customer support, or testing.

"The J-1 and J-2 test cell crews take pride in what they do and not only care about doing the job right; they care about each other and keep safety as a key part of any task. The test area supervisors along with the other engineers associated with the J-1 and J-2 test cells help provide pride and safety in the workplace by example."

Public is invited to attend "Let Freedom Ring"

By Philip Lorenz III
Aerospace Testing Alliance

The Company Grade Officer's Council (CGOC) is inviting military members, veterans, their families and the public to "Let Freedom Ring," a military/veterans appreciation program being held from 2 - 4 p.m. Nov. 7 at the Franklin County High School (FCHS) Gymnasium.

The doors at FCHS will open for the event, which is open to the public, at 1 p.m. AEDC Commander Col. Michael Panarisi will be giving the opening remarks and Arnold's Honor Guard will post the colors and perform a POW/MIA table ceremony.

A group of third grade students from Good Shepherd Catholic School in Winchester will lead those attending in singing for the event.

The school, which 'adopted' Tennessee's 278th Armored Cavalry Regiment, will sing a special song for the Army

National Guard unit.

The event will also feature a bagpiper, local singers and a gospel group called the Cavaliers.

ATA Deputy General Manager Steve Pearson, who is president of the Franklin County Historical Society, will speak at the event as well.

"We encourage everyone on base and in surrounding communities to attend this worthy event," said 2nd Lt. Rachael Clark, an investment program manager with the AEDC's Test Systems Investment Branch.

She and 2nd Lt. Bradley Chronister are CGOC members and had coordinated a drive for donations of basic homecare items on base and encouraged participation from their co-workers. The items were donated to the Alvin C. York Veterans Home in Murfreesboro.

In January, Gayle Haywood, the chairperson for the event and the

community education director for Senior Advantage at Southern Tennessee Medical Center, had asked the pastor of her church about holding a military appreciation event. He said yes and that's when the idea took hold.

"This is actually the first year for 'Let Freedom Ring,'" she explained. "I started talking to people about what I wanted to do. The idea took off and within two weeks I knew I would have to find a larger venue. I started asking for volunteers and the project continued to grow.

"We now have volunteers from Coffee, Moore, Grundy and Franklin counties."

Haywood, who was raised in a military family, said she joined the U.S.O. when she was 18.

"The military has always been close to my heart," she said. "I feel that our military, our veterans and their families don't get the respect and the thanks they deserve. I want to see

the Franklin County High School Gymnasium filled to capacity, with the citizens of our surrounding counties, there to say 'thank you' to our veterans, our military and their families, for the sacrifices they have made and continue to make for our freedom."

She said that besides the program for the military, veterans and their families, there will also be volunteers on hand to issue special invitations to a reception following the public program.

"Alvin C. York Veterans Home in Murfreesboro is also sending a bus down with some of our veterans," she said. "We are arranging for a veterans motorcycle club to meet them in Manchester and escort them to the high school."

For additional information, contact 2nd Lt. Rachael Clark at 454-4779 or 2nd Lt. Bradley Chronister at 454-6485, or Gayle Haywood at 931-967-8368.

Former credit union president passes away

By Greg Davis
Ascend PR Coordinator

Jimmie Bearden, former president and chief executive officer (CEO) of AEDC Federal Credit Union (now Ascend Federal Credit Union), passed away Monday following an extended illness.

She was 77.

Bearden started as a clerk in 1956, just five years after the credit union was created. Four years later, she was promoted to loan officer, and, in 1967, she was appointed assistant manager. In 1968, she became president and CEO, a title she held until her retirement in January 2004.

Bearden saw the credit union grow from literally a one-room "branch" located at Arnold AFB to the largest federally chartered credit union in Tennessee with 15 locations serving nearly 148,000 members and 762 select employee groups.

"She was a leader not only here but within the credit union industry as a whole," Ascend President and CEO Caren Gabriel said in an email to employees Monday. "Under her leadership, AEDC FCU was one of the first credit unions to go from a single select employee group to multiple groups, offer

share draft accounts, IRAs, ATMs and online account access. The foundation for much of the success that Ascend and its members enjoy today is due to her leadership."

In 2005 the credit union created the Jimmie Bearden Leadership Scholarship.

The \$2,500 scholarship is awarded annually to a graduating Tullahoma High School student who exemplifies leadership in his or her school and community.

Bearden is survived by two sons; James (Julia) Bearden, Nashville, and Richard (Sherry) Bearden,



Bearden

Murfreesboro; a daughter Diane Bearden, Murfreesboro; and three grandchildren, Lex Bearden, New York; Cole Bearden, Murfreesboro; and Lann Brumlik (Luke) Field, Cincinnati.

AS AN AIR FORCE CIVILIAN, WHERE CAN I FIND HELP?

We all face challenges, but we don't have to face them alone.

IF YOU NEED HELP WITH... TRY THESE AGENCIES & THEIR RESOURCES

Health & wellness planning	AFMC Wellness Support Center	www.afmcwellness.com
Health screenings & education	Civilian Health Promotion Services	(931) 454-6440
Work, personal or family issues	Employee Assistance Program	(800) 222-0364
Mental health & substance abuse	Centerstone	(931) 461-1300
Unplanned pregnancy	Crisis Pregnancy Assistance Center	(931) 728-6440
Suicide prevention	National Suicide Prevention Lifeline	(800) 273-8255
Sexual assault & victim advocacy	Sexual Assault Response Coordinator	(931) 581-7494
Crime victim advocacy	Victim Witness Assistance Program	(931) 454-4657

Two AEDC hikers conquer the highest point in the U.S.

By Shawn Jacobs
Aerospace Testing Alliance

If you look around Ron Polce's office you'll see photographs of his various hikes, climbs and other outdoor conquests.

But the latest adventure by Polce, chief of the Test Systems Division, and John Casey, an ATA technical specialist in Environmental Compliance, has given the two friends a special sense of achievement.

From Aug. 23 through Sept. 9, the men hiked about 200 miles of the John Muir Trail and ascended Mount Whitney, the highest point in the lower 48 states at 14,495 above sea level.

Polce said the idea of the hike began about five years ago after both men and their wives had spent some time in Yosemite National Park.

"Having spent a couple weeks in the High Sierras, backpacking and camping, we decided one day we wanted to do the John Muir Trail," Polce said. "This trail actually runs from Yosemite Valley to the top of Mount Whitney and ultimately ends at Whitney Portal ... about 227 miles. John and I decided one day we just wanted to do it all, and that time came this year."

"We started in Tuolumne Meadows in Yosemite National Park and we summited Mount Whitney Sept. 9," Casey said. "It took another day to get off the mountain and we flew back home on the 11th."

"Our wives were with us for the first four days and we hiked about 35 miles from Tuolumne Meadows to Mammoth Lakes Calif. They were real good troopers and they really enjoyed the trout fishing along the way. That was probably the more scenic of the northern part of the trail."

Polce agreed some of the best sites of the Sierras are on the first part of the trail.

"Of course, there are

a lot of spectacular spots along the way that you can only see by doing the long hike," Polce said. "We enjoyed having our wives Veronica [Polce] and Janie [Casey, who works in the Information Technology group as a system architect], but it was a little scary the day they let us off for the next 15 days and turned us loose on our own."

For the next 15 days, Polce and Casey hiked about 10-to-14 miles per day away from civilization.

"So if you had an issue it would be a two-day trek out to get help," Casey said. "But we were pretty self-reliant and in pretty good shape, and we were blessed to have a good, safe trip."

Polce said the weather also cooperated, with clear skies every day, and they remained comfortable, sleeping in tents at night.

"We had a weather front or two move through, and it dropped the temperature in the mountains to the low 20s [a couple of nights]," Polce said. "We actually had a few snow flurries early on, and on the day before we summited Whitney it actually was down to about 20 degrees that night. [We] woke up to a little dusting of snow, so it made for a pretty exciting morning as our water continued to freeze as we hiked our way to Whitney."

"We had exceptional weather – never got rained on," Casey added. "Most days were windy, but your typical highs would be 60, 65, 70, maybe, and then lows at night, 30s."

There are definite limitations when it comes to making preparations and packing provisions for such a trip. Polce said they started as early as two years ago thinking about how to plan for the trek.

"We read a lot of the journals of other people who'd done it, a lot of the guidebooks," he said. "As far as supply along the trail, there are opportunities early on like what we

did at Tuolumne Meadows or at Mammoth Lakes, but once we got midcourse, at Muir Trail Ranch, which was about halfway, we had the next 100 miles – next 10 days – with no resupply. "And you're constrained by having to keep your food in a bear proof canister, so you have this little barrel and everything you have with you that smells good or tastes good needs to go in that canister. We ended up having less than 2,500 calories a day to work on for that last 10 days."

While bears can be a problem in the Yosemite Valley, Polce said bears actually were not an issue for them in the high country, due partially to the control measures such as keeping food in canisters.

The presence of fellow hikers was a different story, however. The men saw anywhere from fewer than 10 to as many as 20 people on various days, including 15-to-20 hikers at the summit of Mount Whitney. Many of them had come in the "easy" way, via the Whitney Portal, according to Casey.

Cell phones do not work in such remote areas, but the men did have emergency communication with the outside world.

"We actually took a satellite phone with us just to give our wives piece of mind that we were OK on the trail," Polce said.

Everything went as planned with no scares or injuries.

"Although, I'll say that, even with our experience before, it turned out to be much harder than what we anticipated, doing the major climbs and then the major descents," Polce said. "Overall, we ascended over 40,000 feet crossing eight major passes ranging in heights from 11,000 to 13,000 feet."

Casey and Polce obviously enjoyed their trek, despite the many challenges it presented. Still, one might ask, "Why take on such a task?"

"I guess you could use the Sir Edmund Hillary



Ron Polce and John Casey on the summit of Mount Whitney. (Photo provided)



John and Janie Casey, Veronica and Ron Polce at the beginning of their hike on the John Muir Trail. (Photo provided)

quote, 'Because it's there,' but that's not really why," Casey said. "You just do it because it's a personal challenge; it's an accomplishment. You think, 'Well, I wonder if I could

do that?'"

"The Sierra Nevada is an absolutely incredible mountain range," Polce added. "The diversity is so great with streams and the lakes and the high

mountaintops, and I loved the trout fishing all along the way. You just have to experience the West to understand why someone would want to hike those mountains."

Night Ops from page 1

transparent to the majority of AEDC employees, we should recognize the contributions of those test and plant operations folks that sacrificed to achieve these savings," ATA's Director of Resource Provisioning David Eldridge said. "In many cases, they worked extended hours on non-typical shifts. While you and I were asleep, they were here at AEDC conducting tests.

"Besides the fatigue brought on by unusual work hours, they had to adapt to different sleep schedules and make changes in their

lifestyles to accommodate these work requirements. They remained committed to the mission and were able to maintain the high level of test proficiency AEDC is known for. I salute their efforts."

Some may wonder why AEDC doesn't use night ops throughout the year.

It all goes back to the rate structure of TVA and the power fluctuations the agency must address to make sure we have the power we need as we go home and do our normal activities.

This is the fourth year of

night ops, but the first time it has netted a significant customer savings. In 2007, the first year of night ops, the savings were slightly more than \$600,000.

Test workload was down in 2008 and 2009 and that, combined with summer maintenance/investment outages, resulted in only minimal savings.

AEDC also reduces its own energy bill by doing maintenance during the summer and saving energy whenever possible.

Night ops is only used during the summer months, June 1-Sept. 30.

Carb junkies unite! Understanding what you eat

By Col. Michael Panarisi
AEDC Commander

I bet I've heard this a thousand times!

"I spend all this time in the gym, and I just can't seem to lose any more weight!"

We've explored lots of reasons for this, however one of the lesser known characteristics of our programs involves our body's natural reaction to the types of food we eat.

Nutritionists and dietitians (who also like to sound sophisticated!) are well aware of the relationship between food types and weight loss issues and have formed a body of knowledge centered on a term they call "glycemic index."

If you find yourself struggling to drop that "last 10 pounds," you may just find an answer here.

Lots of different diet programs tout advantages of certain food groups over others.

We've all seen low fat diets, low carb diets, high protein diets, and the ever famous grapefruit diet.

Unfortunately, the success rate for these focused intake type diets is relatively low.

Why? Perhaps the biggest reason is that these extreme dietary changes are not sustainable.

In the initial stages of a weight loss program, these diets often prove very useful, however over the long term, the weight typically tends to creep back.

Eventually, there are just not enough minutes in the day to burn off all

the calories needed to re-ignite a stalled weight loss program, and we end up back where we started.

By understanding how our bodies react to each type of food, we can take advantage of this relatively recent bit of science and keep our programs on track.

In creating a "glycemic index," dietitians have categorized different foods by the way our body changes blood sugar levels in response to the food we eat.

These blood sugar changes are most closely tied to the carbohydrate content in a food.

It's well understood that our blood sugar will rise rapidly if we eat something very high in sugar (like honey) and won't rise at all (at least for a while!) if we eat something like ham (no carbs).

But the rise in blood sugar is not the only issue.

If we are preparing for a short race, a rise in blood sugar may be exactly what we're looking for.

But over the long term, these rapid changes in blood sugar spell disaster.

When our blood sugar rises rapidly, our body will react by secreting insulin. This insulin reaction is perhaps our greatest enemy in a sustained weight loss program.

Avoiding these reactions and maintaining a more constant blood sugar level will pay big dividends over the long term.

A food's glycemic index describes the intensity of the blood sugar reaction

that food will generate.

Foods with a low glycemic index cause relatively small reactions, and foods with a higher index can cause very high reactions.

A classic example is orange juice.

There are plenty of good reasons to drink orange juice, but anyone who knows a diabetic will tell you that when a diabetic's blood sugar gets dangerously low, orange juice is one of the first things they reach for.

As you might expect, orange juice has a very high glycemic index.

This doesn't mean we should never drink orange juice, instead, like so many elements in a fitness program, the term "everything in moderation" applies.

Juices are a great element in our diet, but they pose a significant risk...they are relatively concentrated and very easy to "overdo."

So one technique is to limit juice portions to "the juice you could squeeze from the amount of fruit you'd be willing to eat at the same time."

Getting back to our orange juice example, if your diet would include one medium sized orange at breakfast, this guideline would limit you to only three or four ounces of juice.

Most dietitians would prefer that you eat an orange, but if you are going to try just the juice, you have to avoid the temptation to drink a more normal-sized glass.

Or, go for "50-50."

Just cut the orange juice with an equal amount of water. It will taste a little funny at first, but after a few servings, you'll be just fine with the taste of the lower concentration.

Another element of glycemic index studies looks at "buffering."

If there's a food on your list with a relatively high glycemic index, you can reduce the insulin reaction by eating a lower glycemic index food at the same time.

The impact of that

orange juice can be reduced if you add an egg white omelet to the list at breakfast.

And drink the orange juice towards the end of the meal, rather than at the beginning.

High fiber foods are also good buffers. And as you'd expect, high fiber foods tend to have a lower glycemic index.

By considering a food's glycemic index, we can better regulate our sugar levels throughout the day, and eliminating big

variations (another good reason to eat several small meals a day!) we can avoid hunger spikes, "sugar crashes" and those pesky insulin reactions that stand in the way of your goals.

Lots of websites list the glycemic indexes of common foods, so the next time you put a meal plan together, look at your list and compare the "GI" of some alternatives.

You'll probably find a few good trades that will help you stay on track!

Annual CFC kicks off



AEDC employees had an opportunity to talk to representatives from various charities during the Air Force's annual Combined Federal Campaign (CFC) kick off. The Air Force CFC campaign runs through Nov. 17. The new dates for the CFC Blitz (Open to DoD civilians and military) are Nov. 8-10. The AEDC DoD CFC goal is to raise \$50,000 and contact 100 percent of DoD employees. If you have any questions about this year's campaign, please call Jeannie McFaddin, chairperson, at (931) 454-4583 or Tony Echols, co-chairperson at (931) 454-4291. (ATA also has a charity campaign via payroll deduction and runs through the calendar year.) (Photo by Dee Wolfe)

Program can help AEDC military personnel transition to classroom

By Shawn Jacobs
Aerospace Testing Alliance

Troops to Teachers is a U.S. Department of Education and Department of Defense program that helps eligible military personnel begin new careers as teachers in public schools where

their skills, knowledge and experience are most needed.

According to Cliff Yager, director of Tennessee Troops to Teachers, the program is designed to assist separating or retiring military personnel in pursuing a second career in public education (elementary, secondary or vocational) while also facilitating employment in public schools. The long-term goal of the program is to help improve American education by providing

mature, self-disciplined, experienced and dedicated teachers for the nation's classrooms.

"Tennessee's Troops to Teachers office has counseled hundreds of interested military personnel, advising them on routes and programs to achieve full teacher certification in the state and referring them to school districts for employment," Yager said. "Financial assistance may be available to help pay for the cost of a teacher certification program or

as an incentive to teach in Tennessee's 'high-needs' schools."

Jeannie McFaddin, chief of work force development, and Stacy Jones, education technician, help publicize the program at Arnold AFB.

"Mr. Yager has visited Arnold a couple of times this past year," McFaddin said. "We appreciate Mr. Yager taking time out of his schedule to visit and talk to military members who are thinking about teaching as a second

career."

Interested individuals may register through a self-qualification process by applying at www.ProudToServeAgain.com. For state of Tennessee

information, you may contact Yager at 615-253-0079 or by e-mail at cliff.yager@tn.gov.

At AEDC, you may call McFaddin at 454-4583 or Jones at 454-5134.

Forum from page 3

- Marcus Conner, TE53, *Diagnostics Development on the UTSI/J85 Test Stand*
- Dr. Terrance Dubreus, TTSY, *Development of a Mid-Pressure Arc-Heated Facility for Hypersonic Vehicle Testing*
- Andy Escue, TE59, *Transient Model of a Steam Accumulator*
- Andrew Fist, TSTB, *Dynamic Compressor Model Characterization Using Response Surface Methodology (RSM)*
- Nick Galyen, TE53, *Laser Hygrometer*
- Marcus Golden, TE53, *AEDC GIGE DVR*
- Gary Hammock, TE41, *Cross-Flow Heat Exchanger Analysis for High Enthalpy Flows*
- Capt. Brandon Herndon, TSTW, *FY03 NDAA Impacts on the Acquisition Decision Making Process*
- Inna Kurtis, TE60, *TSP System Development and Implementation at AEDC Tunnel 9*
- 1st Lt. J.J. LaBouliere, TSTS, *RSLP Gas Generator Diffuser Test*
- Dan Lewis, TE60, *Improved Measurements of "Tunnel Noise" Pressure Fluctuations in the AEDC Hypervelocity Wind Tunnel No. 9*
- Brandon Lucy, TSTB, *A Survey of Turbine Engine Temperature Distortion Generator Requirements and Concept Trade Study*
- Wesley Meredith, TSTS, *CAH Transient Performance*
- Tyler Neale, TSTW, *CFD Analysis of G-II for Laminar Flow Control Flight Experiment*
- Joe Norris, TE60, *Global Wind-Tunnel Measurement Techniques at Tunnel 9*
- James Perryman, TE59, *Control System, Design of Experiments Model Building, and Algorithm Development of TAPS System*
- Carrie Reinholtz, TTSY, *Background-Oriented Schlieren Capabilities (BOS) at AEDC*
- Kenneth Scott, TE53, *Recent Improvements to Background-Oriented Schlieren (BOS) Capability at AEDC*
- 1st Lt. CharMeeka Scroggins, TSTW, *Store separation capabilities at AEDC and how it affected the F/A- 18 E/F Series XV Test*
- Greg Tolley, IT43, *Virtualization in a HPC Environment*
- Todd VanPelt, TE53, *High-Speed Digital Imaging of Turbine Engine Afterburner Combustion*
- Kent Wilcher, TE53, *Combustion Diagnostics Using Extractive Gas Analysis*

Each engineer will provide a short presentation based on his or her poster to a team of judges who will determine the top three posters.

An RSVP is not required to attend the forum, however, since food will be provided, organizers are asking anyone planning to attend to contact Crider no later than Tuesday.



Students from Westwood Junior High and Coffee County Middle School toured AEDC and UTSI as a part of the Minds in Motion program. Minds in Motion is an educational outreach program designed for eighth graders where the students spend part of the day at AEDC and the other part at UTSI. At both locations, the students tour facilities and participate in hands-on demonstrations which are tied directly to the work done at each location.



Photos by Rick Goodfriend and Scott Van Zandbergen



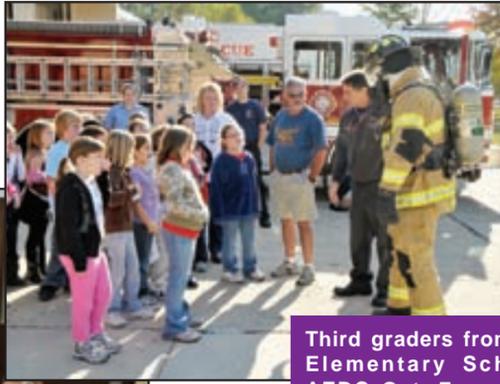
For information about the Minds in Motion program or to volunteer to help with the tour, contact Darbie Sizemore at 454-5942.



Minds In Motion



spark



Third graders from East Coffee Elementary School visited AEDC Oct. 7 as a part of the Spark program. Spark is AEDC's educational outreach program for area elementary schools.



The students began their Spark adventure with a visit to the AEDC Fire Department where they learned about fire safety and prevention.



Photos by Rick Goodfriend



For more information about a Spark program, contact Darbie Sizemore at 454-5942.



Part of the students' tour included a demonstration that illustrated the basics of flight using a balloon, a straw, sting and a weight.



Make sure your vehicles' tires ready for winter driving

By Col. Michael Panarisi
AEDC Commander

With winter fully upon us now (it must be...I saw 34 degrees on my ride in yesterday...it was c-o-l-d!), it's time to get our vehicles ready for the rough weather and conditions ahead.

Getting this accomplished BEFORE you need it is the way to go.

Up north, we call this "winterizing," and we get all crazy about anti-freeze, wiper fluid, water grabbing gas additives, and wiper blades.

All good things to take care of here too, but the top of my list is the TIRES.

Maybe some of you are thinking "what's this guy know about tires?"

Well, I ran my own garage before I entered the Air Force, and I raced cars for four years.

In my prep for a degree in mechanical engineering, I took a couple extra courses in automotive applications.

One of them spent an entire section on tires. It was fascinating, and I've been a student of tire technology ever since.

Tires

If you run "summer tires" it's time to put those back in the garage.

Most of us run "all season" tires, so all we need to do is check the condition, age, and pressure.

The condition is the hard part...tread depth, road damage, and sidewall cracks.

On many newer tires, the manufacturer molds in a "wear indicator bar" to help out. If your tires have these, you'll see a solid line of rubber running across the tread when the tread gets too shallow.

Time to hit the tire store. Without these wear indicators, you need to measure.

Most tire manufacturers want to see a minimum of around 1/16 of an inch (the famous Lincoln's head on the penny trick) and with all the rain we get around here, I'd be real nervous about getting that close to the limit, so I like the

If you need to add air to your tires, use the air hose at the Motor Pool for free.

"Washington's head on the quarter" trick better.

Good news is, most tire shops will check your tread depth with a cool gauge for free, so you don't have to dig around under the couch for lost coins.

Damage can be hard to find, so spend some time looking here. And don't tolerate sidewall cracks.

Sometimes called "dry rot," these deterioration patterns suggest the rubber is nearing the end of its lifespan, and trying to stretch this can leave you stranded or much worse.

Get a pro to look at this, and expect them to advise you to get new rubber. Time is not your friend here ... if your tires are over five years old, it's time to think about an update.

How do you know how old the tires are?

Easy! Every tire has a "birthday" stamped on the side. Of course, it's in code, so here's the "magic decoder ring"...

Note the "US DOT Tire Identification Number" stamped on the sidewall near the rim.

Hmmm ... can't find it on your tire?

Yes, on some tires it's "hidden" on the "axle side," more commonly on raised white lettered tires.

So you might have to scoot around under the car a bit to find it, but it's a gold mine of info.

Not only can you see who made your tires and what plant they came from, this code contains the tire's birthday.

The last four-digits of the DOT number reveal the week and year the tire came out of the factory, so 2809 would be the 28th week of 2009.

One caution ... the Y2K bug is alive and well here.

Prior to the year 2000, the code was three digits, so 289 could be from '99 or '89...you'd never know.

That brings us to the topic of pressure.

The ONLY tire pressure that matters is the one on the vehicle data plate. Most of these are on the driver's side door jam.

It displays the manufacturer's recommended tire pressure, as their judgment of the best compromise between traction, handling, noise, wear, etc.

They tune the suspension components around this number, and have carefully determined how the tread contacts the road (called the "contact patch") at that pressure.

Any deviation makes you the test pilot.

The factory recommended pressure is a "cold" pressure.

The engineers know the pressure will rise with heat, and if you are using the OEM tires, no worries.

If you change the tires, you need to make sure the max allowable pressure for that tire (also printed on the sidewall) gives you some headroom as the tire heats up.

The only way to know how much margin you need is to stop and take a reading on a hot day after some time at highway speeds.

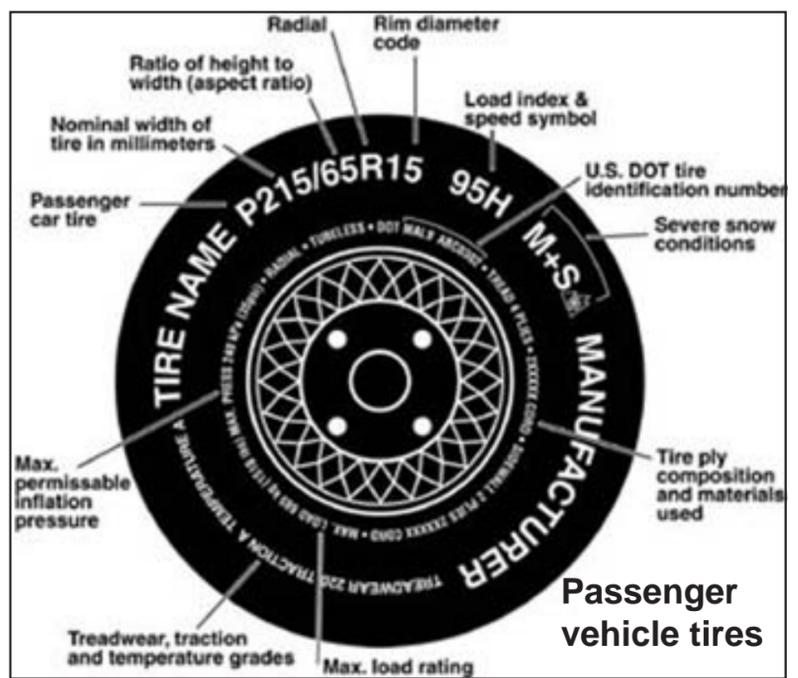
Most tires only pickup 3 or 4 psi on a hot run down the highway, but you want to know what you're dealing with if your tire has less than 10 psi margin.

Interestingly, on my Ford Expedition, the recommended pressure is 35 psi.

The max for the tire (even though it's a heavy duty "light truck" tire) is 44 psi. I had no idea it was that close!

That temperature sensitivity (about 1 psi for every 10 degrees F) means you have to adjust the tire pressure as the seasons change, and as we just discovered, they are changin'!

Now that we routinely see temps in the 30s, many of you are probably seeing



Passenger vehicle tires

some tire pressure warning lights if your vehicle has a tire pressure monitoring system.

Shame on you! Should have been in front of that and added a little BEFORE you get the warning.

The fact that the light goes out in a couple miles doesn't count.

The tires are heating up and the pressure is rising above the warning threshold.

If you filled your tires when it was 90 degrees outside, now that it's in the 30s ... you could be low by nearly 10 psi. Just checked mine this week ... I was four psi low.

But timing matters here.

It's best to check first thing in the morning and in the shade. That will give you a true "cold" reading.

If the sun is shining early in the morning, one side will heat up more than the other, so what you think

See TIRES, page 12

Tires from page 11

is “even pressure” all around is actually higher on the sunny side.

I read an article where they tested this ... sure enough, after just two hours after sunrise, the “sunny side” was 3 psi higher than the shady side.

Bad news...that means in the spring you may have to let a little out, unless your tire leaks at about .5 psi a month.

Most do. If so, you’ll think “that guy doesn’t know what he’s talking about, I checked the pressure in the spring, and it was fine!”

Well, it’s fine because the tire deflated about as fast as the temps came up.

No magic here, just physics that even aero engineers can understand

with some tutoring.

But make it a habit to check.

With gas prices on the rise, there’s a temptation to “add a little extra” with thoughts of decreasing rolling resistance and increasing gas mileage.

Don’t fall for this trap.

That extra air consumes your margin and causes the contact patch to change shape and it mucks with the handling, wet traction and braking effectiveness, plus it makes the center of the tires wear out faster than the edges.

You paid for some real engineering when you bought the car, so don’t substitute mythology trying to get some mpg benefit.

It’s worth noting that most of the drag on the car

is not the tires, it’s the shape, (more than 75 percent of the drag is aerodynamic at highway speeds) so increasing the tire pressure beyond the recommended number will have a very small impact.

In fact, in a recent test of the best “high mileage” tires, the very best eeked out only a 3-5 percent increase in mpg.

That’s about 1 mpg for cars that are already on the miserly end of the spectrum (30-ish mpg).

Raising your tire pressure alone just can’t beat the serious work done to optimize these new tires.

A 3-percent improvement can make a difference in your total ownership/fuel cost over the lifetime of a tire, particularly if you have a long commute (some tire companies advertise \$50 - \$100 a year saved in fuel), but to get that benefit, buy the “high mpg” tire, don’t try to simulate it with your tires and a bad pressure profile.

One more thing ... rolling resistance and traction are related.

Don’t make a bad trade and find out you’ve been penny wise and very pound/life/dollars foolish!

Speaking of mythology, I’ve seen tons of misinformation on the claimed benefits of using nitrogen in your vehicle tires.

It would take pages to dispute all the rhetoric out there on this subject, so let’s just cut to the big ones.

First, remember that air is around 80 percent nitrogen to begin with, so we aren’t talking huge differences to start out with.

I’ve seen claims that nitrogen is a good deal because it leaks out more slowly (backed up by

pointing out a slightly larger molecular radius).

“Consumer Reports” studies show this is somewhat true ... but on the order of 1 or 2 psi ... A YEAR.

Since you have to adjust your tire pressure at least twice a year anyway, that difference isn’t going to buy you anything.

Others trump the notion that since aviation tires use nitrogen, we should too.

Let’s not forget that we fill aircraft tires to around 200 psi, and they experience huge temperature and pressure variations that our cars, trucks and SUVs will never see.

What about all those reports of improved gas mileage?

Frankly, these just defy the laws of physics.

Think about it. The car manufacturers are totally under the gun to improve gas mileage.

If they could get significant improvement by just changing what they fill the tires with...they’d have done that a long time ago.

Yes, it would add to the cost of the vehicle, but since they fill millions of tires every year, they have plenty of products to spread the cost of the nitrogen producing equipment across.

They spend WAY more than that trying to engineer a more efficient engine and shape.

I saw a blog where a guy claimed he got 3 mpg better using nitrogen.

Unless you have a controlled study, run across tightly controlled conditions (hmmm...sounds like the kind of work we do here!) you just can’t back up those claims.

And since our cars are exceedingly sensitive to

wind and temperature, it’s very hard to claim you did a controlled study if all you did was record your mileage on your way to Walmart.

Now if this guy’s tires were really under inflated to start with, the benefit came from getting rid of the excess drag, not some magical qualities of the gas inside.

So what’s the REAL game changer in the nitrogen vs. air war?

Proper inflation and water vapor.

Air coming out of the garage compressor in the garage contains water vapor.

Properly processed commercial nitrogen (note I mention properly processed!) does not.

So yes, if you use regular air, that water vapor will expand and contract more than nitrogen would, causing higher pressure variations with temperature, and thus altering gas mileage, particularly if you let it run low when it gets cold outside.

But if you keep your tires properly inflated, the impact on gas mileage is not measurable under everyday conditions.

Yes, water can contribute to the corrosion inside your wheels, so nitrogen does offer benefits along these lines, but you better do the math before you commit to paying for a nitrogen fill.

I’ve never found corrosion to be a cost driver in my wheels, so unless the nitrogen is free, the math isn’t on your side.

Here’s the real kicker.

What if you discover you are a little low at the nearest convenience store/filling station?

They won’t have a nitrogen hose, so again, unless you get it for free,

you’ll have to trash your investment and get it purged later.

Safe to say, I’m not a fan unless it’s free. And make sure “free” means “free.”

Less than reputable tire shops are famous for hiding the charges somewhere in the bill, more than likely in the cost of the tire itself.

If you look online for tire prices, you can get a pretty good idea of what a competitive price would be.

If your tire shop is offering “free nitrogen with your tire purchase” you need to check the price of the tire.

If they have the best price in town for the tire, competitive rates on mounting, balancing, disposal and alignment, and nitrogen is “free,” then knock yourself out!

But almost nothing is free, except of course, keeping your tires properly inflated.

For some reason, we just don’t.

A recent survey of oil change shops revealed that mroe than 80 percent of the customers’ tires were 5 or more psi low coming in the door.

That’s just throwing dollars out the window.

Wear, gas mileage and, most importantly, low pressure is the second leading cause of highway blowouts (second only to overloading).

Bottom line, keeping up with the tire pressure is probably the single most important user-safety and gas savings task you can accomplish, and it does take some intervention as the seasons change.

But this is not the place to get creative.

Follow the factory numbers, check it often and STAY SAFE!

Bloodmobile coming Oct. 25

The American Red Cross bloodmobile will arrive at AEDC Oct. 25. Donation times are from 10 a.m. to 3 p.m. at each location.

The location schedule is as follows:

Oct. 25 – ETF
Oct. 26 – PWT
Oct. 27 – A&E
Oct. 28 – EAF
Oct. 29 – Main Cafeteria

All donors will receive a camouflage hat. While all blood types are needed, there is a greater demand for Type O.

Type O is used in trauma cases where there is no time to cross-match the blood types and it is the most common type of

transfused to newborns.

Locally, patients need 800 pints a day.

To be eligible to donate you must be healthy, at least 17 years old, weigh at least 110 pounds and not have given whole blood in the past 56 days or a double red cell in the last 112 days.

You may not give blood if you have received any notification asking you not to donate. Please bring identification or your donor card.

If you have any further questions, please call Emily Crosier at the Dispensary, at 454-4559 or 454-5385.

Paper from page 4

The new branch is another demonstration of AEDC’s commitment to providing an integrated test and evaluation (IT&E) solution for our customers.

“In the near future, instead of data analyses being done on a ‘by request, at cost,’ we will be able to conduct independent analysis on what will be most beneficial to the customer based on historical data, community inputs and new

analysis tools,” he said. “We want to help the higher level program managers make smarter decisions throughout the acquisition cycle for greater impact.”

The new ‘organic’ analysis capability is one cornerstone of an IT&E solution – modeling and simulation, ground tests and analyses.

The journey to develop the paper and brief at the symposium was a little tougher for Capt. Herndon

than he originally expected.

“When the call for abstracts came out last spring, my prior squadron commander, Lt. Col. Vanessa Bond, thought it would be a good idea to highlight how the ground test community at AEDC could support the flight test community and vice versa” said Captain Herndon. “Once the initial draft was completed, the Propulsion Wind Tunnel team formed a ‘murder board,’ or peer review, to polish the briefing. Board members were from the government and ATA team – subject matter experts, the Wind Tunnel Technical Director and Dr. [Ed] Kraft.”

“We threw Brandon a couple ‘softball’ questions to warm him up, then we got down to business with

tough questions and tough feedback,” said Lt. Col. Lee Davis, Director of the Wind Tunnel Complex. “The end result was a well-prepared briefer and a polished brief that was on message, on target.”

According to Capt Herndon, “We were the only ground test people at a flight test conference, and the briefing was received very well. It wasn’t ‘us’ and ‘them,’ it was only ‘us.’”

“Our message got across, and thus our mission was accomplished,” Colonel Davis said. “I’m proud of our team and especially Capt. Herndon for his ability to articulate to the test community how AEDC’s capabilities can be brought to bear on today’s complex challenges.”

AF Security Forces Museum exhibit honors fallen Airmen



Jackie Chavis looks at the new Air Force Security Forces Museum exhibit honoring the eight security forces Airmen killed in conflict since 2005. Mrs. Chavis's son, Airman 1st Class LeeBernard Chavis, is among the Airmen honored by the exhibit, "Into the 21st Century." Airman Chavis was killed Oct. 14, 2006, while on duty in Baghdad. (Photo by Robbin Cresswell)

By Mike Joseph
502nd Air Base Wing PA

There was no hesitation for the mother of a fallen security forces Airman when the invitation was extended three months ago.

I'm going, she thought about the memorial run/walk and opening of a new exhibit at the Air

Force Security Forces Museum Sept. 28 here. The events honored the eight security forces Airmen killed in conflict since 2005.

"It was important to me because (Lackland Air Force Base) was a part of the beginning," said Jackie Chavis. "I came to (my son's basic military training) graduation, he did his

time, and then he was gone.

"I knew I had to be here. It was in my heart that I couldn't miss this," she said.

Mrs. Chavis' 21-year-old son, Airman 1st Class LeeBernard Chavis, from the 824th Security

See MUSEUM, page 15

Postal Service sets holiday mail deadline

The recommended mailing deadline for sending economy-priced holiday packages to servicemembers in Afghanistan, Iraq and other places around the world is Nov. 12, officials at the U.S. Postal Service said.

"Shipping holiday packages early helps ensure that they arrive in time for the holidays," said Pranab Shah, the vice president and managing director of global business at the Postal Service. "They are a great morale boost for those men and women serving their country in places far from home."

Other deadlines for arrival by Dec. 25 are Nov. 26 for space-available mail; Dec. 3 for parcel airlift mail; Dec. 10 for

priority mail and first-class mail, letters and cards; and Dec. 18 for express mail military service.

Holiday packages and mail headed for Iraq and lines above, postal officials said. Express mail military service is not available to those destinations.

The Postal Service offers a discount on its largest priority-mail flat-rate box, a 12-inch by 12-inch by 5.5-inch carton that can accommodate laptop computers, small conventional ovens, and military care packages.

Mail sent to overseas military addresses

See MAIL, page 15

Air Force has a new motto: ‘Aim High ... Fly-Fight-Win’

Incorporating extensive inputs from all ranks and career fields in the development effort, Airmen have selected “Aim High ... Fly-Fight-Win” as the service’s motto.

An enduring statement of Airmen’s pride in their service, the motto is a two-part expression – a call to action, with a response of commitment.

“The call and the response are two sides of the same coin,” said Air Force Chief of Staff Gen. Norton Schwartz. “Airmen indicated ‘Aim High’ and the response ‘Fly-Fight-Win’ as indicative of their enduring commitment to do just that in defense of our nation.”

When the Air Force motto team embarked on the project, they committed to Airmen buy-in in an inclusive, well-researched

effort, rooted in Air Force culture and identity.

“Airmen recognize a motto should represent something enduring,” General Schwartz said. “It must be bigger than any single person, something that gives voice to the pride of service of all who’ve worn this nation’s Air Force uniform -- past, present and future.”

“We took the time to try to get this right,” General Schwartz said. “A service motto belongs to those who serve, and we’ve done our best to give voice to how Airmen feel about serving this nation.”

The chief master sergeant of the Air Force, the director of Air Force Public Affairs, the Air Force director of force management policy, and the commander of Air Force Recruiting Service provided the leadership

oversight for the motto team research experts.

In early 2010, the motto team engaged in almost nine months of hands-on research that began with extensive face-to-face meetings with nearly 300 total force Airmen from all job specialties and in every major command. Airmen described to the team what they thought it means to be an Airman, to serve and what is unique about the Air Force.

“The exhaustive research process showed that Airmen share a core set of identity concepts that serve as a basis for an Air Force motto,” said Gen. Stephen Lorenz, Air Education and Training Command commander.

“No matter what career field they serve in, Airmen consistently told us they see themselves, and they see the heritage of the Air Force, as

those entrusted by the nation to defend the modern, complex security domains -- first air, then space and now cyberspace,” General Lorenz added. “Airmen take this sense of mission very seriously.”

An Air Force-wide survey to validate and quantify input from discussions indicated Airmen have a shared pride in their abilities to adapt to meet any threat, and they feel empowered to bring innovation and excellence to the mission of national defense.

After understanding the shared identity, the motto team began transforming words and concepts into a unifying, enduring and credible motto, said Lt. Col. Clark Groves, Ph.D., the lead scientist for the project.

“The research team held more meetings with nearly

250 Airmen on bases in each major command, discussing scores of identifying words and concepts tied to the core Airman identity,” he added.

“These discussions, information from Air Force historical archives, and input from total force Airmen, Air Force civilians, retired Airmen, and the public provided the basis for identifying the ideal motto candidates,” the colonel said.

That led to an Air Force-wide survey.

Five potential mottos emerged and were presented at CORONA for final consideration.

“This really was a process grounded in inputs from Airmen,” Colonel Groves said. “We went Air Force wide four times, including face-to-face discussions at bases in every major command twice, and in two Air Force-wide surveys.”

General Lorenz said, “The data provided quality information on everything from accessions and retention, to diversity and

broader Air Force cultural initiatives.”

Airmen can expect to gradually hear and see more of the motto as it is included in Air Force presentations, correspondence and products. It will also be introduced in the coming year into basic training, professional military education, Reserve Officer Training Corps and U.S. Air Force Academy courses.

“This motto encompasses what Airmen say about what it means to serve in this great Air Force,” said Chief Master Sgt. of the Air Force James Roy. “‘Aim High ... Fly-Fight-Win’ gives our service a new and lasting tradition for voicing our pride.”

The chief noted an important distinction between slogans and mottos.

“Slogans and ad phrases come and go, but a motto is meant to be passed from one generation of Airmen to another,” Chief Roy said.

“This is for the hundreds of thousands of Airmen who now serve, who have served and who will serve in the future.”

Museum from page 13

Forces Squadron, was killed Oct. 14, 2006, while on duty as a turret gunner with Iraqi police in Baghdad.

Family members of five of the eight fallen security forces Airmen were at the museum for the ribbon cutting of the newest exhibit, “Into the 21st Century.” The opening culminated a four-year project that began as an idea by Milita Rios-Samaniego, the museum director/curator, to tell the security forces story of new and expanded roles in Southwest in overseas contingency operations.

In a show of support, more than 1,100 security forces Airmen from Lackland and Randolph Air Force bases lined the street in front of the museum as Brig. Gen. Jimmy McMillian addressed the families before the ribbon cutting

ceremony.

“We, the defenders that surround you, are grateful and humbled by your presence here,” said General McMillian, director of security forces and the deputy chief for Air Force Logistics, Installations and Mission Support.

“These brave Airmen stared danger in the face, protected their defenders and paid the ultimate sacrifice for our country,” he said. “We will never forget their selfless service. We owe you and them a tremendous debt of gratitude. We’ll always think about what they contributed to us as a nation and especially our career field.”

As the sun rose on the morning of the opening, Airmen and family members participated in a memorial 5K run and mile

walk. It offered the opportunity to reflect on the possibility of retracing a loved one’s footsteps.

“The run was such an honor with all of security forces out there,” Mrs. Chavis said. “My son was part of an awesome group of people from the beginning. They’ve always been there.”

Michael Chavis, Airman Chavis’ younger brother, felt a kindred spirit during the run. He pushed himself to the finish with the belief he had followed his brother’s footprint.

“As I saw (Airmen) go by, I kept going because they’re running for my brother like I was running and walking for him,” Mr. Chavis said. “I knew he walked and ran on these same streets. I felt connected.”

Mail from page 13

costs the same as domestic mail, and the usual price for the large flat-rate box is \$14.50. But for packages heading to APO/FPO addresses, the Postal Service charges \$12.50 or \$11.95 for those who print the priority-mail postage label online.

Priority-mail flat-rate boxes are free at any post office and can be ordered online at <http://shop.usps.com>.

Postage, labels and customs forms can be printed online at the Postal Service website.

For specific restrictions and mailing prices to an APO/FPO address, visit the Postal Service’s online price calculator or a local post office, or call 800-ASK-USPS.

Arnold Lakeside Center (ALC)
454-3350

Be a part of **Football Frenzy** at ALC and win prizes.

Watch Sunday NFL games every week and Saturday college games every week beginning Oct. 23.

Thursday games will also be shown Nov. 11, Dec. 2, 9 and 16. Other special games will be Sugar Bowl, Jan. 4; Cotton Bowl, Jan. 7; and College Championship, Jan. 10.

The grand finale of Football Frenzy will be Super Bowl on Feb. 6.

The ALC will be open 11:30 a.m. to 8 p.m. on Sundays, 11:30 a.m. to 10 p.m. on Saturdays and 5 to 9 p.m. on Thursdays.

Times will vary once bowl games and playoffs begin in Jan.

There will be no games shown on Nov. 27, Dec. 11, 18, 25 or 26.

While attending a Football Frenzy game event, all Members First Plus members are eligible to enter to win a trip to two regular games and Super Bowl.

Each winner will receive two airline tickets, hotel accommodations, rental car and two game tickets. A bonus drawing will be held for 10 lucky winners to receive \$500 each.

Only one entry per member per visit. Members and nonmembers are eligible to compete in local contests and giveaways.

Food specials will be offered with member and non member prices or order from the Hap's Pizza or Express menus.

Regular dinner menu is available on Saturday nights in the Four Seasons dining room from 5-9 p.m. November specials and contests are listed. Watch for more details or call 454-3350.

November contests and food specials are as follows:

Nov. 6 – Chicken Quesadillas \$4.99 member, \$5.99 nonmember. Minute to Win It – series of three games, winner with most points at end wins prize

Nov. 7 – Meatball Sub and Chips \$5.50 member, \$6.50 nonmember. Most Team Spirit – whichever member comes to the games totally decked out in support of their team wins. Get your jerseys, face painted, big pointer fingers and all the other goodies you can find.

Nov. 11– Supreme Nachos \$4 member, \$5 nonmember. NFL trivia

Nov. 13 – Half price pizzas for members only. Longest Toss – “Yards” will be marked on the floor and the person who tosses (underhanded) the furthest – without crossing the tossing line – on a combined three tosses wins.

Nov. 14 – 25 cent wings for members only. Football Trivia Contest – most correct answers wins (no cell phones allowed during contest).

Nov. 20 – Chicken Strips and Fries \$4.99 member, \$5.99 nonmember. Frozen T-shirt contest – T-shirts will be pre-frozen into a cube; members will divide into groups of three; the first team to get their shirt put on a teammate wins.

Nov. 21 – Club sandwich and chips \$5.50 member, \$6.50 nonmember. Football Toss contest – make as many tosses in 30 seconds through a target; most tosses wins.

Nov. 28 – Half price pizzas for members only. Deal or No Deal – there will be boxes with prizes and boxes with nothing; members get a chance to choose three boxes; get a prize then choose to keep it or risk choosing another box for something better . . . or nothing.

Sign up now for three months of free **club membership**. All personnel who join any Air Force club between now and Dec. 31 will automatically receive three months free dues, a free cash back rewards program, and two free lunches at their club. Pick up an application, fill it out, and experience the benefits of membership! The membership card provides numerous benefits. The Military Free Cash rewards program is an outstanding benefit to members. When you use your club membership card in any on-base Services activity, you earn 2 percent cash back on every eligible purchase including AAFES (to include gas) and Commissary. Additionally you earn 1 percent cash back on eligible purchases everywhere else including all off base purchases. In addition to being able to redeem points for cash back and gift cards, you now can also redeem for travel, to include airline tickets, hotel, and car

Children's Christmas Party returns Dec. 5



Santa and Mrs. Claus, along with other special guests, will be greeting guests at the annual Children's Christmas Party.

The annual Children's Christmas Party will be held from 1 – 5 p.m. Dec. 5 at the Arnold Lakeside Center (ALC) for ages 12 and under.

This event is free and open to all AEDC employees (active duty military, civil service, contractors), National Guard, Reserves, retirees and their immediate families.

The annual Tree Lighting Ceremony will be held in conjunction with this event and will begin when Santa arrives to help flip the switch.

Santa is scheduled to arrive at 2 p.m. by antique fire engine along with some of his friends. Santa and Mrs. Claus along with their elves will be in the Winter Wonderland tent to visit with the children immediately following the tree lighting ceremony.

Some of Santa's elves will also be in the Winter Wonderland tent to give out goodies to children age 12 and under.

It is important to sign up by Dec. 2 so the elves bring enough.

Santa and Mrs. Claus will have a num-

ber of special guests again this year. You may see Buddy the Elf, Frosty the Snowman or Rudolph just to name a few.

A special Santa Hotline, 454-SNTA (7682), has been setup for children to leave a message for Santa.

This number may also be used by parents to register children for the event.

Simply press 1 to leave a message or 2 to sign up. Be sure to specify how many children and how many adults will be attending.

For event parking the ALC and Wingo Inn parking lot is being reserved for lodging guests and those with special needs. All others are asked to park at the Gossick Leadership Center (GLC).

Buses will be used to transport to the ALC. Shuttles will begin running at 12:50 p.m.

We thank you in advance for being considerate of those in need.

Security will be assisting to ensure successful traffic flow and limited delays of party attendees.

Trunk or treat and Halloween car decorating contest coming Oct. 28

Bring your car to the Outdoor Rec Center decorated in its Halloween best and pop the trunk and fill with treats (store bought, individually wrapped candy only, please) and prepare for the trick or treaters.

While the little goblins make their way around collecting candy judges will be critiquing the cars to determine the best decorated.

The event gets underway at 5 p.m. with judging at the conclusion at 8 p.m.

The top three winners in the car decoration competition will receive prizes.

First place will win an iPod Nano plus \$25 in Services Bucks; second place will

win a Halloween figurine “Dead Creek Mill” plus \$15 in Services Bucks; and third place will receive Tae Kwon Do lessons for one month plus \$10 in Services Bucks. Participants may attend and participate in both portions of this event but it is not required.

The car competition is open to all ages but the trick or treating is limited to age 15 and younger.

Bring your children and their bags or buckets and get an early start on Halloween candy collecting.

Registration deadline for the car decorating contest is Oct 26, call 454-6084.

Outdoor Rec to take Fall Color Cruise Oct. 30

Cruise the Grand Canyon of the Tennessee River and see one of nature's most magnificent wonders dressed in its entire fall splendor.

Outdoor Rec is going to Chattanooga to take a ride on the Southern Belle Riverboat Oct. 30. Meet at Outdoor Rec at 10:30 a.m. and return approximately 6:30 p.m.

Cost is \$45 per person and deadline to sign up is Oct. 19 (nonrefundable if cancelled after Oct. 20).

There must be a minimum of 12 to make the trip and max number of participants is 28.

The cruise will take you on the famous Tennessee River Gorge to see nature's brilliant canvas of vivid fall colors.



There will be live entertainment for a foot stompin' good time, free bingo with gift shop prizes and a delicious buffet for lunch to include roast beef and rotisserie chicken.

Call 454-6084 for more information and to sign up.

Mulligan's Coffee Bar and Grill set to reopen Wednesday



An expanded breakfast and lunch menu as well as a great selection of popular beverages are in store for customers with the reopening of Mulligan's Coffee Bar and Grill.

Beginning Wednesday, hours of operation will be 5:30 a.m. to 2 p.m. Monday - Friday and 7 a.m. to 2 p.m. Saturday and Sunday.

A new feature is the addition of the “We Proudly Brew” coffee bar featuring Starbucks beverages including hot and iced coffee, lattes, macchiatos, frappuccinos, espressos, hot chocolate and a variety of teas.

A convenient “to go” parking area has also been created right outside the Mulligan's side door.

The soft reopening will continue through to the grand reopening and ribbon cutting scheduled for Nov. 1.

During the soft reopening and grand reopening week every purchase (food and/or beverage) will receive a \$1 Star Buck to be used toward any future purchase.

From Oct. 20-31, make it a combo for only \$1 more.

The ribbon cutting is set for 10 a.m. Nov. 1 and free Starbucks samples will be given all day. A punch card program will start Nov. 1 offering \$2 off any purchase after getting five punches (given with any purchase).

Every day of the grand reopening week, Nov. 1-5, there will be a door prize. Be sure to register while visiting the new coffee bar & grill. Other prizes will be issued if you find a “dot” on your cup. Present it to the staff to redeem your prize.

Watch for other specials throughout the reopening days.

ALC hosting Thanksgiving potluck Nov. 17

The annual Thanksgiving Potluck will continue at Arnold Lakeside Center on Nov. 17 from 6-8 p.m.

The ALC will provide turkey, ham, rolls and stuffing along with plates and silverware.

All attending are asked to RSVP to Lyle Russell or Bryan Larson with name, contact info, number of people attending and dish to be brought. Please bring serving utensils and remember to collect your items after the event.

Dinner will begin at 6:30 p.m. to allow everyone time to get things set up. Deadline to sign up for this event is Nov. 12.

The bar will not be open during this event.

Thanksgiving Day lunch buffet set for Nov. 25 at ALC

The Arnold Lakeside Center is hosting a Thanksgiving Day lunch buffet Nov. 25 from 10:30 a.m. to 1 p.m. with seatings every 30 minutes.

Cost is \$17.95 for members, \$19.95 for non members, \$9.95 for children under 12 and free for age three and under.

The menu will include turkey, ham, carved prime rib, bread stuffing, green beans, fried okra, macaroni and cheese, yellow corn, mashed potatoes with gravy, yams, pasta salad, rolls, assorted cakes and pies.

Reservations are required for this event and may be made by calling 454-3350.



Horizon is a Services Division publication designed to inform our customers of events and specials in Services Division activities. All program dates, times and prices are subject to change. Services Division mailing address is at 100 Kindel Drive, Suite C321, Arnold AFB, Tenn. 37389-3321

Services information written and provided by Tanya Heggard

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Services Division is an exclusive area available to all AEDC personnel, active duty, retired military, National Guard, Reserve military and others as approved by the commander. Services activities include Wingo Inn (lodging), Arnold Lakeside Center, Outdoor Recreation (Marina, FamCamp, Crockett Cove), Golf Course, Family Member/Youth Programs and Fitness Center. Those mentioned above are eligible to use any Services activity during regular operating hours unless it is specified as a “members only” event. Membership remains a personal choice, however, only members are entitled to discounts and other benefits associated with membership.

Services Division Phone Numbers

Area code 931 DSN 340
 Services Chief – 454-7779
 Services Deputy – 454-5915
 Community Services Flight Chief – 454-4062
 Complex Manager – 454-3367
 Arnold Lakeside Center (ALC) – 454-3350
 Arnold Lakeside Center catering – 454-3350

Hap's Pizza – 454-5555
 Membership Information – 454-3367
 Information, Tickets & Tours – 454-3303
 Fitness Center (FC) – 454-6440
 Outdoor Recreation (ODR) – 454-6084
 FamCamp – 454-4520 or 454-6084
 Marina – 454-6084 or 454-3838
 Recycling – 454-6068

Family Child Care – 454-3277
 Family Member/Youth Programs – 454-3277
 Human Resources – 454-5481
 Marketing & Sponsorship – 454-3128
 Barber Shop – 454-6987
 Wingo Inn – 454-3051
 Golf Course (GC) – 455-5870 or 454-7076
 Gossick Leadership Center – 454-3024

November 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 FC Body Pump Boot Camp 6 a.m. GC Mulligan's Coffee Bar & Grill Grand Reopening Ribbon Cutting 10 a.m. FC Cycle Pump Class - Zesty cycling 11 a.m. FC Yoga 11 a.m. FC Intramural Bowling, 5 p.m. FC Intramural Flag Football League, 6 p.m.	2 ALC AEDC Woman's Club luncheon meeting 9:30 a.m. FC Cycle Pump Class - Endurance Cycling 11 a.m. FC Karate 3 p.m. FamY Piano Lessons, 4 and 4:30 p.m., \$60 for four half hour sessions and instruction book, all ages, sign up by Oct. 25, 454-3277 FC Zumba 4:15 p.m. FC Intramural Volleyball, 6 p.m.	3 FC Body Pump Boot Camp 6 a.m. ALC Hap's Pizza, 11 a.m. – 1 p.m., also available Chef Salad or Surprise Special, call ahead 454-5555 FC Pilates 11 a.m. FC Intramural Flag Football League, 6 p.m.	4 FC Cycle Pump Class - Yellow shirt cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. ALC Dinner & Movie Night "The Sorcerer's Apprentice" PG dinner 5-8 p.m. movie 6 p.m. FC Intramural Volleyball, 6 p.m.	5 FC Piloga 11 a.m. ALC Catfish and Scallops, \$13.95 member, \$14.95 non member 4-9 p.m. ALC First Friday Jam Night, 6-10 p.m. FamY Movie Night, 5-7 p.m., age 9 and up, free popcorn, 454-3277	6 ALC Football Frenzy, 11:30 a.m. – 10 p.m., Special: Chicken Quesadillas \$4.99 member, \$5.99 non, play Minute to Win It to win prizes, members enter to win grand prizes ALC Pollo Formaggio, \$10.95 members, \$11.95 non members, 5-9 p.m.
7 ALC Football Frenzy, 11:30 a.m. – 8 p.m., Special: Meatball Sub and Chips \$5.50 member, \$6.50 non member; play Most Team Spirit to win prizes, members enter to win grand prizes	8 FC Body Pump Boot Camp 6 a.m. FC Cycle Pump Class - Zesty cycling 11 a.m. FC Yoga 11 a.m. FC Intramural Bowling, 5 p.m. FC Intramural Flag Football League, 6 p.m.	9 FC Cycle Pump Class - Endurance Cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. FC Intramural Volleyball, 6 p.m.	10 FC Body Pump Boot Camp 6 a.m. ALC Hap's Pizza, 11 a.m. – 1 p.m., also available Chef Salad or Surprise Special, call ahead 454-5555 FC Pilates 11 a.m. FC Intramural Flag Football League, 6 p.m.	11 FC Open 5 a.m. – 6 p.m. FC Cycle Pump Class - Yellow shirt cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. ALC Dinner & Movie Night "Eat Pray Love" PG-13 dinner 5-8 p.m. movie 6 p.m. ALC Football Frenzy, 5 – 9 p.m., Special: Supreme Nachos \$4 member, \$5 non member & NFL Trivia FC Intramural Volleyball, 6 p.m.	12 ODR Deadline to sign up for Bill Cosby trip to TPAC Jan. 15 FC Piloga 11 a.m. ALC Chicken or Shrimp Alfredo \$10.95 members, \$11.95 non members, 4-9 p.m. ALC Second Friday Karaoke, 6-8 p.m. family time, 8-10 p.m. adult time, 25 cent wings and 1/2 price pizzas for members only 7-9 p.m.	13 ODR Paintball, 9:30 a.m., \$20 includes lunch, ages 10 and up, 454-6084 ALC Football Frenzy, 11:30 a.m. – 10 p.m., Special: Half price pizza for members only; play Longest Toss to win prizes, members enter to win grand prizes ALC Stuffed Frenched Pork Chops, \$13.95 members, \$14.95 non members, 5-9 p.m.
14 ALC Football Frenzy, 11:30 a.m. – 8 p.m., Special: 25 cent wings for members only; play Football Trivia Contest to win prize, members enter to win grand prizes	15 FC Body Pump Boot Camp 6 a.m. FC Cycle Pump Class - Zesty cycling 11 a.m. FC Yoga 11 a.m. FC Intramural Bowling, 5 p.m. FC Intramural Flag Football League, 6 p.m.	16 FC Cycle Pump Class - Endurance Cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. FC Intramural Volleyball, 6 p.m.	17 FC Body Pump Boot Camp 6 a.m. ALC Hap's Pizza, 11 a.m. – 1 p.m., also available Chef Salad or Surprise Special, call ahead 454-5555 FC Pilates 11 a.m. FC Intramural Flag Football League, 6 p.m. ALC Thanksgiving Potluck Dinner, 6-8 p.m., sign up by Nov. 12, 454-3350	18 FC Cycle Pump Class - Yellow shirt cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. FamY 4-H Club Meeting, 4:30-5:30 p.m. ALC Dinner & Movie Night "Toy Story 3" G dinner 5-8 p.m. movie 6 p.m. FC Intramural Volleyball, 6 p.m.	19 FC Piloga 11 a.m. ALC Beef Liver and Onions, \$6.95 members, \$7.95 non members, 4-9 p.m.	20 ALC Football Frenzy, 11:30 a.m. – 10 p.m., Special: Chicken Strips and fries \$4.99 member, \$5.99 non, play Frozen t-shirt contest to win prize, members enter to win grand prizes ALC Oven BBQ Beef Brisket, \$10.95 members, \$11.95 non members, 5-9 p.m.
21 ALC Football Frenzy, 11:30 a.m. – 8 p.m., Special: Club sandwich and chips \$5.50 member, \$6.50 non, play Football Toss contest to win prize, members enter to win grand prizes	22 FC Body Pump Boot Camp 6 a.m. FC Cycle Pump Class - Zesty cycling 11 a.m. FC Yoga 11 a.m. FC Intramural Bowling, 5 p.m. FC Intramural Flag Football League, 6 p.m.	23 FC Cycle Pump Class - Endurance Cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. FC Intramural Volleyball, 6 p.m.	24 FC Body Pump Boot Camp 6 a.m. ALC Hap's Pizza, 11 a.m. – 1 p.m., also available Chef Salad or Surprise Special, call ahead 454-5555 FC Pilates 11 a.m. FC Intramural Flag Football League, 6 p.m.	25 FC, ODR, GC, FamY Closed ALC Thanksgiving Day Lunch Buffet, 10:30a.m. – 1 p.m., \$17.95 members, \$19.95 non members, \$9.95 age 11 and under, RSVP 454-3350 ALC Movie Night has been moved to Friday, Nov. 26, due to the holiday	26 ODR Deadline to sign up for Shrek the Musical trip Jan. 29 FC Piloga 11 a.m. ALC Membership Night – half priced pizzas for members, free kids' buffet for children of members, 4-9 p.m. ALC Movie Night, "Despicable Me", rated PG, 6 p.m.	27 ALC Prime Rib for Two, \$31.95 members, \$32.95 non members, 5-9 p.m.
28 ALC Football Frenzy, 11:30 a.m. – 8 p.m., Special: Half price pizza for members only; play Deal or No Deal to win prizes, members enter to win grand prizes	29 FC Body Pump Boot Camp 6 a.m. FC Cycle Pump Class - Zesty cycling 11 a.m. FC Yoga 11 a.m. FC Intramural Bowling, 5 p.m. FC Intramural Flag Football League, 6 p.m.	30 FC Cycle Pump Class - Endurance Cycling 11 a.m. FC Karate 3 p.m. FC Zumba 4:15 p.m. FC Intramural Volleyball, 6 p.m.	Children's Christmas Party is scheduled for 1-5 p.m. Dec. 5 at Arnold Lakeside Center for ages 12 and under. Tree Lighting Ceremony will be in conjunction with this event after Santa's arrival. Call 454-SNTA to sign up number of children and adults attending.			

Hours of operation

Arnold Lakeside Center – Special function luncheons available. Call 454-3350 for arrangements. Catering/Management offices Tuesday-Friday 10 a.m.-3 p.m.; Lunch: limited menu Wednesdays, 11 a.m. – 1 p.m., call 454-5555 to place orders; 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 p.m.
Family Member/Youth Programs – Tuesday through Friday 10 a.m. – 5 p.m., Saturday 12-5 p.m., First Friday Movie Night 5-7 p.m. Closed Nov. 11 & 25.
Outdoor Rec – Main Office, Check In, Marina and Auto Shop Tuesday through Sunday 8 a.m. – 6 p.m. Winter Hours begin Nov. 1: Main Office, Check In and Auto Shop Tuesday through Saturday 10 a.m. – 5 p.m., Marina by appointment only. Closed Nov. 11 & 25.
Fitness Center – Monday-Friday 5 a.m.-9 p.m.; Saturday 8 a.m.-4 p.m.; Sunday 12-5 p.m. Open 5 a.m. – 6 p.m. Nov. 11, Closed Nov. 25.
Arnold Golf Course – Pro Shop and Driving Range daily 7 a.m.- dusk, Mulligan's Grill: daily 7 a.m. – 2 p.m. New Mulligan's Coffee Bar & Grill hours begin Oct. 20: 5:30 a.m. – 2 p.m. Monday through Friday, 7 a.m. – 2 p.m. Saturday and Sunday. Winter Hours begin Nov. 1: Pro Shop 8 a.m. – 5:30 p.m., Driving Range open 24 hours with prepurchased key card. Closed Nov. 25
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.
Barber Shop: by appointment – Monday, Wednesday & Friday 8 a.m.-2p.m.; Thursday 8 a.m.-noon

BX/Commissary customer eligibility

AEDC government civilian and AEDC contractor employees have access to the following limited items at the base exchange (BX): consumable items including toiletries and over-the-counter pharmaceuticals, food items such as candy, chips, little meal items, hot dogs and soft drinks. **ALC**ohol and cigarettes are not included as consumable items. However, only active duty and retired uniformed services personnel and their dependents are eligible to use the base commissary next to the BX. The commissary hours of operation: Tuesday, Wednesday and Friday 9 a.m.-5:30 p.m., Thursday 9 a.m.-6:30 p.m. and Saturday 8 a.m.-4:30 p.m. The BX hours of operation: Tuesday through Friday 9 a.m.-5:30 p.m., and Saturday 8 a.m.-4:30 p.m. For more information contact Janie Warren, BX manager, at (931) 454-7153 or Jeff Lillard, Commissary manager, at (931) 454-3545.

AAFES Dividends

Dividends generated from the Army and Air Force Exchange Service (AAFES) overall earnings are a major contributor to Services nonappropriated fund (NAF) construction and renovation projects as well as equipment purchases. Services would like to thank all AAFES customers for their support. Dividends received for September 2010 totaled \$7,086.34.

Body Pump Boot Camp New group exercise program available

This Boot Camp is now a regular class on Mondays and Wednesdays at 6 a.m. at the Fitness Center lasting an hour. It incorporates plyometrics, jump squats, burpees, mountain climbers, jacks, tonics, jumping calks, sit ups, push-ups, and strength training utilizing dumbbells, medicine balls and your own body weight. It will also address cardiovascular endurance and core conditioning in interval fashion. Forums will also use concepts such as team exercises – grab a partner for additional fun and exercise. This class will be progressive as the weeks go on and a progress sheet will be developed for all participants to track their improvement. This class is geared towards all levels of fitness so come out and have some fun. Classes are for eligible users only (Members First Plus members, active duty military, retired military and DoD civilians).

Football Frenzy Win a trip to the Super Bowl!

Or one of two Regular Season Games

Plus, End-of-Season Bonus drawing for \$5,000 in gift certificates

All trips include:

- Airfare for two
- Hotel accommodations
- Car rental
- Tickets to the game

www.afclubs.net

Offer good at participating locations. No purchase necessary. *Award and bonus event at your Club for a chance to win a trip!

Members FIRST USAF SERVICES

Briefs from H1

rental – super flexibility – and it is all free, as a benefit of club membership! Air Force Clubs offers members numerous free and inexpensive activities including discounts on every meal to include special functions, an annual \$25,000 scholarship program, Football Frenzy, Air Force Hoops, and other member's only programs. Your Club is a great place for entertainment and meeting new friends in a fun and safe environment. Join now – enjoy free lunch and the first three months are also free on us!

Karaoke is now a Second Friday event each month. Karaoke will be Nov. 12 from 6-10 p.m. All ages are welcome from 6-8 p.m. but 8-10 p.m. is reserved for adults only. Special for members only 7-9 p.m. – 25 cent wings and half-priced pizzas. Dining room special will be chicken or shrimp alfredo for \$10.95 members and \$11.95 non members served 4-9 p.m. Call ahead for dinner reservations at 454-3350.

Wednesday Lunch is available for dine in or carry out from 11 a.m. to 1 p.m. Call ahead to 454-5555 to place orders. No delivery available. For better service, you may call on any day and preorder. In addition to the Hap's Pizza menu, chef salad is available for \$4.50 which comes with ham, turkey, cheese and boiled eggs. Add grilled or fried chicken for \$2 more. Call to see what other specials are available each week.

Movie nights are every Thursday with movie start time of 6 p.m. and dinner available from the Express or Pizza menus from 5-8 p.m. The schedule for November is: **Nov. 4** – “The Sorcerer’s Apprentice,” rated PG starring Nicolas Cage. Master sorcerer Balthazar Blake recruits a seemingly everyday guy in his mission to defend New York City from his arch-nemesis, Maxim Horvath. **Nov. 11** – “Eat Pray Love,” rated PG-13 starring Julia Roberts. A married woman realizes how unhappy her marriage really is, and that her life needs to go in a different direction. After a painful divorce, she takes off on a round-the-world journey to “find herself”. **Nov. 18** – “Toy Story 3,” rated G starring voices of Tom Hanks, Tim Allen, Joan Cusack and Ned Beatty. The toys are mistakenly delivered to a day-care center instead of the attic right before Andy leaves for college, and it's up to Woody to convince the other toys that they weren't abandoned and to return home. **Nov. 26**: Friday instead of Thursday due to holiday - “Despicable Me,” rated PG starring voices of Steve Carell, Jason Segel and Russell Brand. When a criminal mastermind uses a trio of orphan girls as pawns for a grand scheme, he finds himself profoundly changed by the growing love between them.

Friday night dining room specials available from 4-9 p.m. Nov. 5: Catfish and Scallops, \$13.95 members, \$14.95 non members. First Friday Jam is 6-10 p.m. **Nov. 12:** Chicken or Shrimp Alfredo, \$10.95 for members, \$11.95 for non members. Second Friday Karaoke 6-10 p.m. Member's Special: .25 cent wings and ½ priced pizzas

7-9 p.m. **Nov. 19:** Beef Liver and Onions, \$6.95 members, \$7.95 non members. **Nov. 26:** Membership Night – half priced pizzas for members, free kids' buffet for children of members. Special movie presentation: “Despicable Me,” 6 p.m. Please call for reservations to ensure special is available. All specials and times are subject to change without notice. Please call ahead to ensure availability and openings.

Saturday availability and specials: Nov. 6: Pollo Formaggio, \$10.95 members, \$11.95 non members. **Nov. 13:** Stuffed Frenched Pork Chops, \$13.95 members, \$14.95 non members. **Nov. 20:** Oven BBQ Beef Brisket, \$10.95 members, \$11.95 non members. **Nov. 27:** Prime Rib for Two, \$31.95 members, \$32.95 non members. The dining room is open on Saturdays from 5-9 p.m. unless otherwise specified. Please call for reservations to ensure these specials are available. All specials and times are subject to change without notice. Please call ahead to ensure availability and openings.

Family Member/Youth Programs (FamY) 454-3277

Youth Movie Night will be Nov. 5 from 5-7 p.m. Ages 9 and up are invited to the Open Rec Center to watch a movie. There will be free popcorn, juice and water.

Piano Lessons will begin a new session on Nov. 2 for all ages with half hour sessions each week for four weeks. A new session will begin every four weeks as long as there are at least two students registered for the class. A maximum of four students per month will fill the 4-5 p.m. timeframe of half hour classes. Cost is \$60 and includes instructional book. Deadline to sign up for the second session is Oct. 25. Future sessions will require sign ups the last Monday of the month for the next month's classes. If you've ever wanted to get your hands on a piano but didn't know where to start or worried because you couldn't read music that's no problem. This class will have you playing music in no time. Call 454-3277 now to sign up.

4-H will meet Nov. 18 from 4:30-5:30 p.m. The 4-H program offers many different opportunities such as the Demonstration Contest, Clover Bowl, Judging Teams, showing livestock, camps and many more opportunities. When you join 4-H you are joining the world's largest youth organization. 4-H is also not just an American organization as there are 4-H clubs in over 80 countries around the world. Some of the big contests that 4-H really encourages are the speaking events and the poster contest. These events allow 4-Hers to express their creative sides and develop skills that will come in handy later on in life. 4-H also offers many different contests, camps, and honor's programs that the members can become involved with. 4-H is always striving to teach young adults how to become better citizens and leaders through the many programs available. Call 454-3277 for more informa-

tion and to sign-up. Arnold Youth Programs 4-H Club is open to all AEDC affiliated children from 4th grade to 12th grade.

Fitness Center 454-6440

Fitness Center has assumed the roles and responsibilities of the Health and Wellness Center. The workout room in the A&E Building, Room C203 will now be referred to as the Fitness Center Annex. Programs and services designed to improve overall health as well as attaining a better sense of well-being will be offered. Among the services planned will be professional nutrition counseling, stress management, tobacco cessation, cancer, cardiovascular disease, diabetes and other preventative programs. These services and programs will be limited to installation active duty, DoD and NAF civilian workforce. Appointments must be made through the main Fitness Center by calling 454-6441.

The Fitness Center will be open **5 a.m. to 6 p.m. Nov. 11** in observance of Veteran's Day. Group classes will continue as scheduled. The Fitness Center will be **closed Nov. 25** for Thanksgiving.

Intramural Leagues underway. Bowling League has games every Monday (except Dec. 27) from 5-7 p.m. at Tullahoma Lanes. The league continues through March 28. Flag Football League has games every Monday and Wednesday starting at 6 p.m. at the Arnold Village Softball Field outfield. Volleyball League has games every Tuesday and Thursday starting at 6 p.m.

The Fitness Center staff welcomes any individual request for assistance in developing a specialized fitness plan to help complete your fitness and health objectives. Call for assessments, instruction and fitness/workout plans.

Outdoor Rec (ODR) 454-6084

FamCamp and Crockett Cove cut prices for winter months. Outdoor Rec will be marking down prices by half for camping from November through February 2011. Call for further information or to make reservations.

Paintball is set for Nov. 13. Ages 10 and older are invited to play. Meet at Outdoor Rec. at 9:30 a.m. Cost is \$20 and includes lunch. Remember to wear long-sleeved shirts and long pants.

Join Outdoor Rec for a trip to the Tennessee Performing Arts Center (TPAC) in Nashville to see **Bill Cosby Jan. 15, 2011.** Because this is a special trip with seats on the first and second row, the **deadline to sign up is Nov. 12.** There must be 18 to sign up in order to take the trip. Cost is \$82. Full price is due by Nov. 12 and is non-refundable. Meet at Outdoor Rec at 1 p.m. and arrive back at approximately 8:30 p.m. Showtime is 4 p.m. Bring extra money for food, drinks and souvenirs. Bill Cosby is one of America's

most prolific comedians of all time and has dazzled generations of fans with his comedy routines. His comedy transcends age, gender and cultural barriers and has been captured on his iconic albums and bestselling books such as Fatherhood and the groundbreaking “The Cosby Show”.

Outdoor Rec is headed back to Nashville on **Jan. 29 for Shrek the Musical** at TPAC. Sign up by Nov. 26 to ensure this trip is able to go. There must be a minimum of ten signed up and maximum group size is twenty. Cost is \$74. Fee is nonrefundable if cancelled after Nov. 30. Meet at Outdoor Rec at 5 p.m. and return approximately 12:30 a.m. Show time is 8 p.m. Remember to bring money for food, drinks and souvenirs. Shrek the Musical tells the story of a swamp-dwelling ogre who goes on a life-changing adventure to reclaim the deed to his land. Joined by a wise-cracking donkey, this unlikely hero fights a fearsome dragon, rescues a feisty princess and learns that real friendship and true love aren't only found in fairy tales. The show features a terrific score of nineteen all new songs, big laughs, great dancing and breathtaking scenery.

Reservations for pavilion usage by authorized personnel must be made through the Outdoor Recreation Program. This includes the two pavilions at Gossick Leadership Center Beach, the Arnold Lakeside Beach and two in the Crockett Cove area. Rental fee is \$25 per day and a \$50 refundable cleaning deposit is required. Reservations may be made up to 30 days in advance at Outdoor Rec (building 3055, previously known as Community Activities Center) or by calling 454-6084.

Corn Hole is available for rent for office functions and private events. Each set rents for \$10 per day or \$15 for two days. Four sets are available to accommodate larger groups. Rental reservations may be made through Outdoor Recreation (building 3055, previously known as Community Activities Center) or by calling 454-6084.

Reservation Policy: FamCamp and Crockett Cove reservations may be made 45 days in advance for active duty military and reserve components and 30 days in advance for all other eligible patrons. Marina reservations may be made 15 days in advance for active duty and reserve components and 10 days for all other eligible patrons. Reservations are made through Outdoor Rec, 454-6084.

The **Auto Shop** is a great place for do-it-yourself minor work and repairs. There is one stall available with a lift, air compressor, parts washer and a variety of tools. There is a fee of \$2 per hour. Staff can repair, mount, balance and rotate tires, by appointment. A repair using a plug is \$5 or a mushroom patch is \$10. The charge for mounting is \$3 per tire and for balancing is \$2 per tire. Tire rotation includes balancing for four tires and is \$16 for cars and vans and \$20 for trucks.

Wingo Inn 454-3051

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

The Gossick Leadership Center (GLC) may be used for events such as meetings, conferences, luncheons, dinners, etc. and is booked through the Services Conference Center Manager (CCM) up to one year in advance. Requests must be made in writing by email to arnold.glc@arnold.af.mil. All event coordinators are required to sign an agreement. Official unit functions are authorized at no charge and are defined as bona fide official meetings or training held as part of the normal duty day. Unofficial and private functions may be held for authorized users at a fee. Community members may host events with the approval of the Services Director for a fee. Outside food and beverages are not allowed. First consideration must be given to Arnold Lakeside Center. In the event they cannot accommodate, an outside source may be utilized with CCM approval. For more information contact the CCM at 931-454-3024.

AEDC Woman's Club 455-5676

The person behind the character Ms. Cheap of the Tennessean, Mary Hance, will be joining as the speaker for the November luncheon. She will have lots of advice to share on her favorite subject, how to get the most for less. Please join us for plenty of laughs and practical advice from an author of three books and a newspaper and television celebrity.

The meeting will be Nov. 2 beginning at 9:30 a.m. Make reservations by calling 455-5676.

The AEDC Woman's Club is a private organization which is not part of the Department of Defense or any of its components and it has no governmental status.

Chili Cookoff winners



Best Tasting \$200
Charles Who? - team captain: Jenny Conry

Best Decorated Booth \$100
One Hit Wonders - team captain: Tech. Sgt. John Bankston

Best Tasting Runner-up \$150
Dr. Strangelove - team captain: Leo Marple

People's Choice Award \$50
One Hit Wonders - team captain: Tech. Sgt. John Bankston

Most Unusual Ingredient \$50
Men in Black - team captain: Lyston Pierce (Ox Tail)

Cash prizes sponsored by Ascend Federal Credit Union (no federal endorsement of sponsor intended).