

Engine Test Facility upgrade Improving exhaust handling efficiency

By Raquel March
ATA Public Affairs

Military and commercial aircraft engine developers rely on simulated altitude testing conducted at AEDC's Engine Test Facility (ETF) for their research and development of engine capabilities. The condition of the test facility

determines the quality of the test and there is an ongoing upgrade project for two of the intercoolers that aid in handling engine exhaust in the C-Plant Exhaust System.

The large intercoolers, measuring 46 feet diameter at the widest section and 62 feet long, are an important configuration for handling large volumes of engine

exhaust. When a turbine engine test is conducted inside the C-Plant test cells, the engine exhaust flowing from the engine can reach temperatures of approximately 850 degrees to 3,000 degrees Fahrenheit. To create the proper conditions and pressures for a test of up to 75,000 feet altitude and an engine capable of operating

at 100,000 pounds of thrust, the C-Plant Exhaust System houses coolers and compressors that cool and draw the engine exhaust.

Marilyn Graves, the ATA program manager for the C-Plant Exhaust Intercooler Upgrade, explained the need for the upgrade.

"The purpose of this project is to replace the aging cooling coils and demister pads in the WC11 and WC12 Intercoolers located in the C-Plant Exhaust yard area," Graves said. "Each intercooler, or cooler, has three banks of coils

— bank A, B and C — with each bank housing 20 coils for a total of 60 coils to be replaced for each cooler.

"The intercoolers cool and dehumidify exhaust gas between stages of exhaust compression to improve compressor performance and efficiency and to keep the exhaust gas temperature within working limits of the equipment. The water-cooled coils currently located in coolers WC11 and

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AEDC workers inspect the intercooler coils between banks C and D. On the left (bank C) is a bank of coils and on the right (bank D) is a bank of demister pads. (AEDC Photo)

AFTC Commander Maj. Gen. Bunch visits the AEDC Fire Department



During a recent visit to AEDC, Air Force Test Center Commander Maj. Gen. Arnold Bunch (third from left) prepared for live structure fire training with AEDC Firefighter Brandon Gunn (second from left). Gunn explains the operation of the variable stream fog nozzle before the training to Bunch as part of the West Virginia University Fire Service Extension Service mobile burn trailer. Bunch, in full protective clothing, deploys a 1.75-inch hose line to combat multiple propane fueled fires in a smoke filled environment capable of reaching temperatures in excess of 1,200 degrees Fahrenheit. The purpose of the demonstration was to give the commander a greater sense of the demanding environment firefighters face during emergency operations. AEDC firefighters John Templeton (left) and AEDC Fire Department Driver Operator Ken Locker (right) also participate in the training. (Photo by Rick Goodfriend)

Bob Rogers retires with longest years of service:



Bob Rogers, an administrative professional in the ATA Contracts, Purchasing and Property Department, retires from AEDC after 57 years of service. (Photo by Rick Goodfriend)

57 years, four contractors

By Raquel March
ATA Public Affairs

Bob Rogers is retiring from ATA, his fourth contractor employer at AEDC, after 57 years of service.

Rogers, a Tullahoma resident, began his career at AEDC in November 1956 under the Arnold Research Organization (ARO), Inc. contract.

"I have been employed by various contractors including ARO, Inc., Calspan [Corp.], Sverdrup [Technology, Inc.], and currently ATA," said Rogers, an administrative professional in the ATA Contracts, Purchasing and Property Department.

Rogers retires as AEDC prepares for another contract transition in fiscal 2015.

"Contract transitions are never easy. The learning curve expands exponentially with the complexity of the transition, which affects both productivity and morale," he said.

After experiencing contract transitions throughout the years, Rogers is consistent in his appreciation of the workforce and work at AEDC.

Rogers said, "Retirement will be an interesting experience to which I'm looking forward but I will certainly miss the challenges provided by working at AEDC and of course will miss the daily interaction with the many talented and efficient coworkers."

When Rogers was recognized for his 50 years of service and when the Complex celebrated its 60-year anniversary, he stated that his job was interesting and challenging because there were new things happening every day. He also felt that the personnel at AEDC were like a family.

Rogers worked with systems

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Fair events
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HIGH MACH

Arnold Engineering Development Complex
An Air Force Materiel Command Test Complex

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Core Values

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



"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

Security viewed from a different perspective

By Warner Holt
AEDC Contributing Writer



Col. Warner Holt, U.S. Army

It is safe to assume that all of us associated with AEDC are focused on doing our part to ensure the Complex and the surrounding communities are secure places to work and live. It is a privilege to have had the opportunity to serve as a government contractor here at AEDC for the past 28 years, knowing that what we do here ultimately supports the warfighter. Our ATA leader, Steve Pearson, frequently reinforces to us that "ATA's vision is to be a trusted partner in delivering best value warfighter support and asset stewardship to AEDC..."

The term warfighter brings to mind different images for each of us. Technically, a warfighter is anyone who serves his or her country in one of the armed services. Warfighter, to some people, may conjure up images of our fighter pilots who deliver ordnance when and where needed. To many, the warfighter we ultimately support here at AEDC is the airman, Marine, sailor or soldier who is serving his or her country in a combat zone in need of some form of fire support. The fire support AEDC is most focused on providing is referred to as Close Air Support (CAS) delivered by the many combat air platforms we test and support here at AEDC.

The "different perspective" referenced in the title of this editorial comes from the fact that I have personally had the unique opportunity to function as a warfighter on-the-ground in a combat zone on two different occasions. Once in Afghanistan as an embedded trainer with the 196th Field Artillery Brigade working as an advisor for an Afghan National Army Infantry Kandak (Battalion), and once as a Field Artillery battalion commander with the 278th Armored Cavalry Regi-

ment in Northern Iraq. Our time in Afghanistan afforded me and a few of my close friends the unique opportunity to be American warfighters on the receiving end of the very products we test and improve here at AEDC.

While in Helmand, Afghanistan, our small team of advisors called for and received close air support from various aircraft (including A-10s, F-16s, AC-130s and Predators) on over 25 different occasions. Today, my team and I can attest that there is no sweeter experience than to hear the sound of a tactical aircraft approaching at a high rate of speed to deliver a full measure of well-placed ordnance on an enemy position. This type of precision close air fire support would not be available to our nation's defenders if not for your contribution to the mission here at Arnold Air Force Base.

To you, the ladies and gentlemen who work here at Arnold, please do not ever take for granted the importance of the work that you do here at AEDC and know, from a warfighter's perspective, that what you do here at this great test center does indeed make a difference! On behalf of the warfighters of this great nation who have benefited from close air fire support and military air support in general, thank you for your dedication and hard work.

Please come out to the upcoming Security Fair scheduled April 28-30 to hear more about security from a different perspective.

Goals: How many of us have them?

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

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

deployment than my first two combined.

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

As the individual setting the goal, you should also make sure that it is known to people who can

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

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

AEDC SECURITY FAIR

AEDC ~ We Make a Difference...

28-30 APRIL 2014

MAIN AUDITORIUM

(MUST ATTEND BRIEFING TO RECEIVE TICKET FOR GIVEAWAY ITEMS)

11:05-11:15 ATA WAGE EMPLOYEES (DOORS CLOSE AT 11:05)

11:35-11:55 ATA NES/SALARIED EMPLOYEES AND DOD PERSONNEL (DOORS CLOSE AT 11:35)

Guest Speaker:
Col. Warner Holt
*Director, Strategic Plans (J5)
Joint Forces HQ, TNG
Nashville, TN*

COL. HOLT, AFOSI, FBI WILL ADDRESS ATA NON-WAGE AND DOD PERSONNEL

FREE Giveaway Security Awareness Items!

\$5 Lunch Outside (After the Briefing)
Burger, Chips, Bottled Drink
(POC: AEDC Services)

WHY?

- * Raise Security Awareness
- * Foster Pride In Work
- * Understand Importance Of AEDC
- * Avoid Security Incidents
- * Help Maintain Security Focus
- * Enjoy Something Fun And Motivational
- * Prepare For Increased Workload

Smoking Policy

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

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

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

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

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

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

Action Line

Team AEDC

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

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

Col. Raymond Toth
AEDC Commander

ATA employee suggestions result in significant cost savings, avoidances for AEDC

By Vicki Peters
AEDC Contributing Writer

ATA's Employee Suggestion Program is a major component of the company's innovation and continuous improvement program. Six suggestions were implemented during the last quarter (December 2013 – February 2014). Two of these were intangible improvements. Four resulted in annualized cost savings or avoidances ranging from roughly \$14,583 to \$256,644 for a total of \$330,584.

Like its parent company Jacobs Engineering, ATA recognizes that "our employees are our greatest asset," and the Suggestion Program provides a venue for recognizing employee insight and innovation.

Repurposing components from an inactive high-pressure air system, a suggestion submitted by Aeropropulsion Operations and Maintenance engineer Arnold Grigsby, netted a significant cost savings/avoidance of \$256,644.

Grigsby recommended removing, refurbishing and certifying the inactive components from another facility rather than purchasing new ones for a test cell modification.

A simple change to the control sequencing of high-pressure air for the 16-foot transonic wind tunnel reduced the use of high-pressure air time required for a recent test. This innovation from Engineer Nathan Payne and Information Technologist Ronnie Rogers produced a cost savings/avoidance of \$34,921.60.

Space and Missiles Operations and Maintenance Manager Michael Wilson and Technical Specialist Bill Coppeans submitted a joint suggestion to modify the service air system in the Aerodynamic and Propulsion Test Unit (APTU), resulting in a cost savings/avoidance of \$24,435.60.

Refrigeration Mechanic Tommy Henley's suggestion to provide a secondary containment system for a roof-top mechanical

It is both easy and beneficial for employees to provide us with their ideas, insights, and solutions for doing better things and doing things better.

Tina Bonner

equipment room will provide protection to office areas below and result in a cost savings/avoidance of \$14,583.40 in the event of a leak.

Program Control employee Melissa Wenger's intangible suggestion to rename a web link to the ATA Portal reduces confusion for employees seeking to connect to the ATA internal website from the AEDC internal website on their computer desktops.

Ollie Vincent, a pipefitter in ATA's Propulsion Wind Tunnel Mechanical Operations and Maintenance crew, found a simple, low-cost way to reduce a safety hazard when removing the vault cover

on the main gas valve. He suggested welding a loop handle on each corner of the cover for easy and safe removal.

Former Suggestion Program Administrator Tina Bonner commended these employees for their insight and contributions to process improvement, adding that the suggestion submission process is simple.

Bonner said, "It is both easy and beneficial for employees to provide us with their ideas, insights, and solutions for doing better things and doing things better."

"Employees receive a recognition gift just for submitting ideas, and can get a monetary award if the

suggestion is approved. An ATA company procedure explains that awards for approved intangible suggestions, where no cost savings is involved, range from \$25 to \$100 dollars. Suggestions involving a cost savings or avoidance are eligible for a cost share once the suggestion is implemented. The share is 10 percent of the documented savings or avoidance up to a maximum award of \$3,000."

Bonner, who has been the Suggestion Program administrator since ATA came on board, said that Kimberly Vanzant assumed the role of Suggestion Program Administrator this spring. Vanzant extended

an invitation to all ATA employees to submit their ideas to the Suggestion Program and noted that she would like to see more participation from craft employees.

Suggestions may be submitted electronically through Matrix or via a hard copy using form GC-1390 to the appropriate department suggestion coordinator. Suggestions that have potential cost savings or avoidances must be submitted on form GC-1570 Cost Analysis Summary. Department coordinators are Joane Cassady, Test and Asset Support; Pam McCullough, Mission Support; Cindy Bernd, Information Technology; Gail Bryant, Test and Evaluation; Wendy Carr, Performance Management; and Cynthia Northcutt and Judy Brewer, Office of the General Manager.

For more information, employees are encouraged to talk with their department suggestion coordinators or contact Kimberly Vanzant at 454-7459.

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Large cranes, shown in this photo, are adjacent to the C-Plant exhaust duct to remove and replace large cooler coils within the intercoolers. (Photo by Rick Goodfriend)

WC12 have been in existence for the past 30 years. Leaks as well as damaged or sagging coils have reduced the efficiency of the coolers."

Melissa Tate, the Air Force project manager for the upgrade, said the project is part of the Advanced Large Military Engine Capability Program (ALMEC), an Air Force Materiel Command program. ALMEC exists to improve and modernize key Air Force Aeropropulsion Test

Facility Systems.

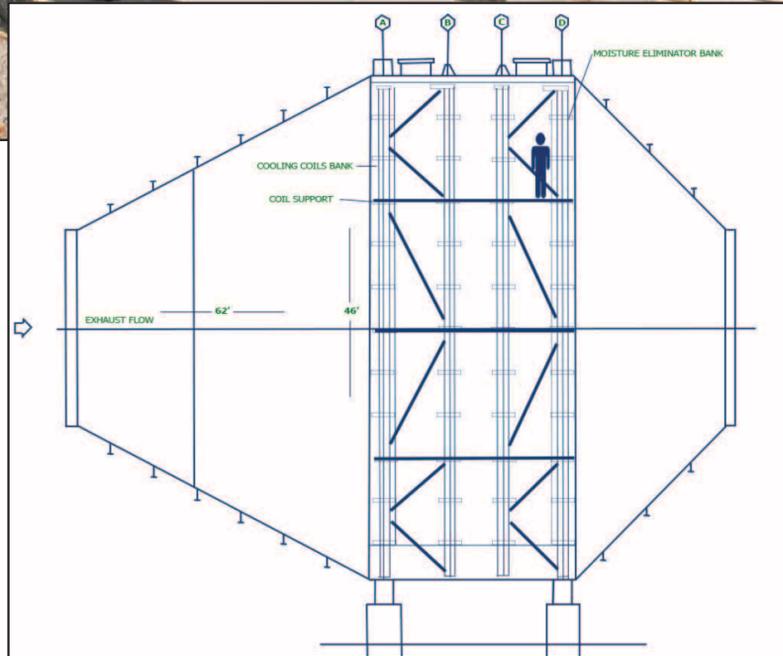
Planning for the project began in 2009 and involved considerations for conducting testing during the removal and installation upgrade process as well as safety in removing and handling the coils and demister pads.

Graves said, "There was a considerable amount of planning involved with the Intercooler Project – everything from generating specifications for the replacement coils and demister

pads to laying out schedules for the installation to determine the length of an outage period needed.

"In addition, there was considerable planning regarding safety issues – what hazards would be encountered, what PPE [personal protective equipment] would be required, what equipment and skill level of worker was needed."

The expected completion date for the project is the summer of 2014.



This is an image of an intercooler in the C-Plant Exhaust System. (AEDC graphic)

ROGERS from page 1

engineers and maintenance managers to help identify and make available the materials they needed in their area through requisitions, spare parts management and benchstock areas as well as providing mate-

rials analysis and data collection throughout his career at AEDC. He has also occupied two offices in the von Karman Gas Dynamics Facility for 57 years. One office was in the VKF compressor building and the other

office, from 1970 to present, was in the VKF high pressure addition section of the compressor building.

When asked what his plans were for retirement he said, "A wise person once said, 'If you are de-

pressed, you are living in the past. If you are anxious, you are living in the future. If you are at peace, you are living in the present.' I plan to 'live in the present.'"

Part of his "living in the present" will involve

his personal activities and keeping up-to-date on the events occurring at AEDC through his subscription to the High Mach base newspaper.

At age 79, Rogers enjoys jogging, dancing, playing piano and organ,

and working in various areas of his church at First Christian Disciples of Christ Church in Tullahoma.

See page 5 for AEDC events that occurred with each change of the AEDC contract within 57 years.

Law Day 2014: A 50-year look at voting barriers and the democratic process

By Capt. Sarah Kress
AEDC JAG Contributing
Writer

It's early October and the year is 2016. You are deployed in support of a humanitarian operation in Eastern Europe.

Even though it's not quite Election Day in the United States, you made sure to request an

absentee ballot several weeks in advance. You return to your office to see it sitting on top of your mail. Without hesitation, you fill it out, return it to the envelope, and drop it back in the mail. And just like that, you cast your vote.

About a month later you turn on the news to watch the coverage from Election Day. You

can't help but get distracted by the news coverage – particularly the discussion on absentee voter ballots. Some commentators suggest the future of absentee ballots is less than certain. They cite recent controversies from previous election years as proof that our system of absentee voting is broke, in need of repair,

and possibly elimination. Even though you made a timely ballot request, completed the ballot, and returned it to your state of registration, you can't help but think to yourself: *did my vote count?*

On the first day of May we celebrate Law Day. This year's Law Day Theme is, "American Democracy and the Rule of Law: Why Every Vote Matters."

The intent is to call on Americans to reflect on the importance of the right to vote and the challenges we still face in ensuring that all Americans have the op-

portunity to participate in our democracy.

This year also marks the 50th anniversary of the Civil Rights Act of 1964 and the Voting Rights Act of 1965. Much time has passed since the enactment of these laws. In that time we've grown as a nation, not only in the eyes of the law, but culturally and socially as well. Despite such progress, news stories similar to the fictional one described above still irritate our democratic process.

As Americans we are not strangers to voter barriers. It is part of our

history. We study these historic events to gain a deeper understanding and appreciation of the democratic process because we recognize that voter barriers harm not only the voter, but our system of *representative* government as a whole.

Although modern day barriers to voting may not be as obvious as the Jim Crow laws of the early 20th century, they are no less insidious. This year on Law Day we encourage all voters to remember this important right and to be vigilant in protecting its integrity.

Armament Directorate reaches milestone with JASSM-ER

Joint Air-to-Surface
Standoff Missile Program
Office

EGLIN AIR FORCE BASE, Fla. – The Armament Directorate celebrated a milestone with the delivery of the first production lot of Joint Air-to-Surface Standoff Missile Extended Range missiles to Dyess Air Force Base, Texas, last month.

The JASSM family of weapons, JASSM and JASSM-ER variants, are autonomous, long-range, highly survivable, conventional air-to ground, precision guided missiles. The weapons provide focused lethality to strike highly defended, high value targets.

"JASSM can neutralize [targets] while keeping our nation's combat aircrews safely outside the range of threats," said

Kenneth Bandy, JASSM Director for Test and Integration.

The delivery of the first JASSM-ERs brings to fruition a greater capability to the warfighter, according to Bandy. The JASSM Program Office, located at Eglin Air Force Base, working in close coordination with contractor partner Lockheed Martin Missile Fire and Control, in Orlando Fla., jointly spearheaded the development, testing and fielding of this newest JASSM variant. After nine years of testing, fielding began this month.

With little change in design, the JASSM's newest accomplishment provides a weapon that can reach targets more than two and half times farther than its predecessor, while still hitting its target with accuracy. Seventy percent of the

hardware and 90 percent of software are common between the two variants.

"The initial delivery of the extended range variant of JASSM gives the combatant commander the ability to reach far deeper into contested areas with lethal precision," said Maj. Gen. Scott Jansson, Air Force Program Executive Officer for Weapons.

Although the B1-B bomber is the only current U.S. Air Force aircraft employing the JASSM-ER, there are ongoing efforts to bring it to other aircraft, including the F-15E, F-16 and B-52.

"JASSM-ER delivers a revolutionary capability to the warfighter," said Bandy. "A capability resulting from close collaboration between the end item user, acquisition community, and our contractor team."



A beginning to an end for Bob Rogers

Bob Rogers, 13th from left, is among those honored for five years of service with ARO in December 1961. Rogers is retiring after 57 years of service. (AEDC File Photo)

AEDC events recognized at various contract transitions

The first contract to operate the facilities was awarded in 1950 to Arnold Research Organization (ARO), Inc., a newly formed subsidiary of Sverdrup & Parcel (S&P). ARO, Inc., was issued a series of contracts on a sole source basis through fiscal year 1977. However, in 1970 Air Force Assistant Secretary published a memorandum directing the Air Force to examine the possibilities of compet-

ing several large operating contracts which had been awarded only on a sole source basis for many years.

As a result, the fiscal year 1978-1980 contract was the subject of a formal competitive source selection. ARO, Inc. submitted the winning offer.

Contracts to follow in 1981 included Sverdrup Technology, Inc., Calspan Corporation and the Pan Am World Services, Inc.

For the 1985 contract competition, the selected contractors included Sverdrup Technology, Inc., the Calspan Corporation, and the Schneider Services International,

Inc. (SSI Services, Inc.).

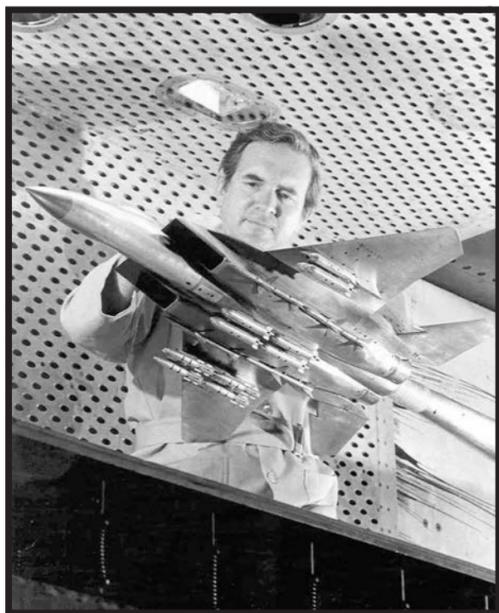
In 1990, Sverdrup Technology, Inc., the Calspan Corporation (Micro Craft Technology replaced Calspan in 1994-1995) and SSI Ser-

vices, Inc. were awarded the contract.

From 1995-2003, Sverdrup Technology, Inc., and the Aerospace Center Support (ACS), a joint venture of Computer

Sciences Corp., Dyncorp and General Physics, operated the contract.

The Aerospace Testing Alliance (ATA) was awarded the contract in 2003 to present.



1978 – ARO, Inc. Contract

F-15 PYLON LOADS – Aerodynamic loads on the store-attachment pylons beneath the left and right wing of this scale model F-15 jet fighter were measured during tests in the four-foot transonic wind tunnel at the Arnold Engineering Development Complex. Loads induced by single stores, rack loads and by adjacent stores were measured at conditions simulating flight at speeds from Mach No. 0.8 to 1.20 at various angles of attack and sideslip. The tests were conducted for the Air Force Armament Laboratory, Eglin AFB, Fla., by personnel of ARO, Inc. Test data were applied in designing pylons which can withstand severe aerodynamics loadings during critical flight maneuvers. Shown in photo is Don Pugh, test facility craftsman-electrician for ARO, Inc. (File Photo)



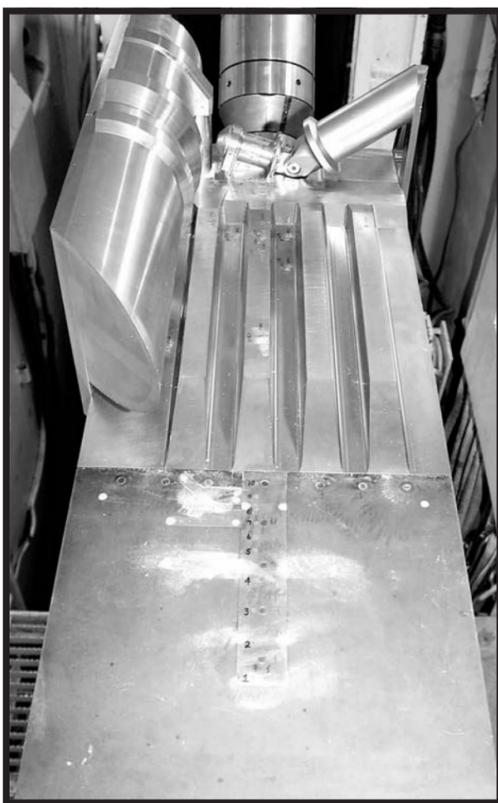
1995 – Sverdrup Technology, Inc. Contract

GETTING MINUTEMAN MOTOR READY FOR TESTING IN J-6 – Workers prepare a Minuteman missile motor for testing in AEDC's J-6 Large Rocket Test Facility in support of the Minuteman Propulsion Replacement Program. The motor, which operates at a thrust load of 44,000 pounds, was tested at simulated altitude conditions, according to Darrell Gibson, project manager. Testing was to verify changes being made in the motor, which serves as the second propulsion stage for the Minuteman III Intercontinental Ballistic Missile. (File Photo)



1981 – Calspan Corporation Contract

EMERGENCY EJECTION SIMULATED – A wind tunnel test conducted at the Air Force's Arnold Engineering Development Complex simulated the high dynamic pressures acting on a crewman in and near the cockpit during an emergency ejection from an F-16 aircraft. The test, sponsored by the Air Force Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, simulated flight speeds of up to 900 mph. Examining the model in the center's 16-foot cross-section transonic wind tunnel are engineers C.L. Smith and Captain Walter West. (File Photo)



2003 – ATA (Aerospace Testing Alliance)

AEDC assists NASA's mission for safe return to flight – AEDC assisted NASA with space shuttle component redesign efforts, critical to the safe return to flight mission. The circle in the photo indicates an area identified as the bipod ramp area of the shuttle redesign to return the space shuttle for flight. The inset photo is a .30-scale metal model of the redesigned bipod closeout area for testing in AEDC's Tunnel C. It is an imitation of a section of the liquid oxygen feedline, the redesigned spindle housing and a section of the bipod arm. (File Photo)

AEDC personnel warned about hand safety

AEDC Safety and Health

About 30,000 people – children and adults – are rushed to US emergency rooms each year because they've amputated a finger. Nearly 70 percent of finger amputations were completely severed. That's according to the National Center for Injury Preven-

tion and Control (NCIPC) where researchers reported that the most likely cause of injury was being struck by or against something, or cut or pierced by an object.

Amputations are considered a permanent partial disability and fall into the Air Force classification of a "Class B" incident.

Other AF bases are see-

ing a recent increase in the number of finger amputations. In fact, nine were recorded during the first half of this fiscal year. This number includes Air Force military and civilian personnel on and off duty; all involved fingers.

What do we have in common with these incidents? Four involved table

saws; two involved pintle hooks and tow bars; and three involved other pinch points.

We have similar equipment and tools here and at home. We also have much in common with the primary causes of finger amputations nationwide. Researchers have combined these into generic

groupings, listed below in no particular order:

- Clearing debris from a lawnmower or snow blower
- Closing windows and doors carelessly
- Working with machinery or tools
- Cutting flowers or shrubbery

- Using paper shredders
- Chopping food

The bottom line is the best way to avoid finger amputation is to be careful where you put your fingers. Maintain situational awareness and stay attuned to "line of fire" situations. Use the job safety analysis.

Distracted driving: 'I never thought it could happen to me'

By Senior Airman Alexis Siekert

52nd Fighter Wing Public Affairs

SPANGDAHLEM AIR BASE, Germany (AFNS) – We all think, "That'll never happen to me."

We've all read the statistics and heard the slogan, "Distracted driving is deadly driving" on the American Forces Network.

But be honest, are you always as attentive as you should be?

I'll admit it here, now, that I'm not.

Yes, I've taken my eyes off the road to change the radio station, check my hair in the mirror or rummage around my purse for my lip balm. And one of those very same everyday actions in the wrong moment changed my perspective on how I operate my vehicle.

On this particular morning, it all started with the simple act of locating my ID card.

Twenty seconds later, my car was on an entirely different road after flipping twice over a barrier.

The fact that I can type these words now is a miracle that is not lost on me. My car was totaled. The caved in roof was only part of the damage, yet I was able to walk away.

On the morning of my crash, I had plenty of time to get to work. I wasn't speeding, and my mind wasn't on anything other than the drive. As I got closer to the gate, I grabbed my wallet out of my pocket to get my ID. In the moment it took me to look down to make sure I had the right card, I veered off the road.



The wreckage of one Airman's vehicle rests on the access road near the Spangdahlem Main Gate after a distracted driving accident Feb. 19. Leadership from the 52nd Fighter Wing are working to eliminate the large number of distracted driving incidents here. (U.S. Air Force photo/Senior Airman Alexis Siekert)

My tires screeched as I slammed on the breaks trying to correct my direction. I was traveling more than 40 mph when I narrowly missed oncoming traffic, took out a deer-crossing sign and two road markers before falling into the ditch. I don't remember the first turn, but I knew I was upside down the second time when I could feel my weight being fully supported by my seatbelt. You could hear the shattering of my windows and metal on concrete just before I finally came

to a stop.

I was very fortunate to walk away without a scratch, bump or bruise. I attribute most of this to German engineering, my seatbelt and a lot of luck. But I'm very aware that those three factors didn't cancel out the fact that what I did was wrong. I could have killed myself or someone else.

Now a week later, I am still trying to wrap my head around those few seconds before my crash. But beyond the shattered glass and the sirens of the police and ambula-

tory services, I knew that I had to change the way I measured risks because I can't count on being this lucky a second time.

I owed it to myself after the crash to write this story - not as a public affairs Airman merely meeting a weekly quota or as a recent survivor of an accident such as this doing community service awareness - but as a simple word of advice to my fellow Airmen.

This isn't a preachy "Don't do this" message - just a hope that no one reading this ever has to go through what I went through.

So, to help arm as many people as I can with a few tips so they don't repeat my mistake, here is a list of suggestions to make your car ride a safer

experience.

1. Have your needed ID card or relevant papers out of your pocket and easily accessible before you start your vehicle. I've seen people struggle to fish out items from their back pocket while still operating a vehicle at top speeds. Some may even have to unbuckle their seatbelt to get something, whereas mine saved my life.

2. Have a passenger change the radio or get the IDs from other passengers in the car. In my car, the guy riding shotgun is the navigator and copilot who deals with the GPS and changes the songs -- so long as they agree to the stations I want to listen to.

3. I may not have been on the phone, but I

think of how it only took one second of my eyes off the road to cause all this damage; accepting a phone call or reading a text could be just as dangerous.

4. If you forgot to do all of these things, at least wait until you are stopped before performing anything distracting. If you do get an important phone call or have to find something, just pull over.

Whatever it is, it is not worth your life. These tips seem very basic, but still I took a risk in skipping one or two, and part of my morning routine included a visit to a hospital.

Perhaps you're like me and hadn't fully thought about these potential risks, but I hope none of you repeat my mistake.

Missile delivery marks milestone for Armament Directorate

EGLIN AIR FORCE BASE, Fla. (AFNS) – The Armament Directorate celebrated a milestone with the delivery of the first production lot of Joint Air-to-Surface Standoff Missile Extended Range, or JASSM-ER, missiles to Dyess Air Force Base, Texas, recently.

The JASSM and JASSM-ER variants are autonomous, long-range, highly-survivable, conventional air-to ground, precision-guided missiles. The weapons provide focused lethality to strike highly-defended, high-value targets.

"JASSM can neutralize (targets) while keeping our nation's combat aircrews safely outside the range of threats," said Kenneth Bandy, the JASSM director for test and integration.

The delivery of the first JASSM-ERs brings to fru-

ition a greater capability to the warfighter, according to Bandy. The JASSM Program Office here, working in close coordination with contractor partner Lockheed Martin Missile Fire and Control, in Orlando, Fla., jointly spearheaded the development, testing and fielding of this newest JASSM variant. After nine years of testing, fielding began in April.

With little change in design, the JASSM's newest accomplishment provides a weapon that can reach targets more than two and half times farther than its predecessor, while still hitting its target with accuracy. Seventy percent of the hardware and 90 percent of software are common between the two variants.

"The initial delivery of the extended range variant of JASSM gives the

combatant commander the ability to reach far deeper into contested areas with lethal precision," said Maj. Gen. Scott Jansson, the Air Force program executive officer for Weapons and Armament director.

Although the B1-B Lancer is the only current Air Force aircraft employing the JASSM-ER, there are ongoing efforts to bring it to other aircraft, including the F-15E Strike Eagle, F-16 Fighting Falcon and B-52 Stratofortress.

"JASSM-ER delivers a revolutionary capability to the warfighter," Bandy said. "A capability resulting from close collaboration between the end item user, acquisition community and our contractor team." (Courtesy of the Joint Air-to-Surface Standoff Missile Program Office)



Blood Assurance announces gift card winners

Blood Assurance donor recruiter Vickie Shelton, left, and Comprehensive Occupational Resources medical technician for ATA Emily Fair, right, present gift cards to blood donors Jackie Wiseman, ATA instrument technician, and David Brackett, Jacobs Industrial Services (JIS) boilermaker. Wiseman and Brackett are two of the four randomly selected donors to receive the cards. ATA instrument technician Mark Floyd and ATA Technology and Engineering Analysis manager Dr. Ralph Jones, not shown, are the other winners. (Photo by Rick Goodfriend)

Readiness key to Air Force responsiveness

By Claudette Roulo
American Forces Press Service

WASHINGTON (AFNS) – Air Force readiness is critical, especially as the time or place of the next crisis is never certain and is rarely what was expected, the Air Force vice chief of staff told a House panel April 10.

The range, speed and agility of the Air Force enables it to respond in hours, not days, when called upon, Gen. Larry O. Spencer told members of the readiness subcommittee of the House Armed Services Committee.

“The cornerstone of our success depends on Airmen who are exploiting and mastering emerging technologies, not only in warfare, but also in space and cyberspace,” he said.

But decades of sustained combat operations have stressed the force and decreased Air Force readiness to unacceptable levels, Spencer said.

“We are finding it increasingly difficult to maintain our advantage when it comes to effectively operating in contested environments and against adversaries with access to increasing levels of advanced warfighting technology,” Spencer said.

The Air Force will maintain its ability to respond to today’s requirements, but it must also regain and further maintain the ability to operate in the most demanding threat environments, he said.

Readiness is having the right number of Airmen, with the right equipment, trained to the right skill level, and with the right support to accomplish what the nation asks, Spencer said.

“A good readiness plan depends on an optimum level of health in all of these areas,” he said, “but sequestration has slashed our budget by billions of dollars, forcing us to make the difficult decision to cut force structure in order to help preserve our near-term readiness.”

To maintain readiness, the Air Force had to look beyond cutting flying hours and exercises, Spencer told the committee.

“We took a close look

at the preservation of modernization efforts to help us maintain our technological edge,” he said. “This includes preferred munitions; live, virtual constructive environments that can replicate the threats we may face; and installation support that allows us to literally fight and power project from our bases.”

Weapon sustainment health is also critical to the Air Force’s readiness plan, Spencer added. Logistic centers and depots contribute to the sustainment and readiness of all aircraft and equipment.

“While adequate flying hour funding ensures the aircraft on our ramps are ready to fly, weapon system sustainment readiness funding ensures we have the adequate numbers of aircraft on our ramps to fly in our missions and to complete our flying goals,” he explained.

The impact of sequestration is still being felt on Air Force readiness, Spencer said.

“The loss of time and experience flying, maintaining, supporting and

integrating ... aircraft equated to a loss of critical readiness for our Airmen across the entire force,” he said. “Our highly sophisticated and capable force cannot be reconstituted overnight if our readiness is allowed to atrophy.”

The Bipartisan Budget Act provided only temporary relief, he said, noting that it puts the force on a gradual path to recovery but will not fix readiness in the long-term.

“Because our readiness is heavily influenced by ongoing operations, we need to ensure we can meet these requirements while also training for the full spectrum of potential conflict,” Spencer said.

Demand for Air Force capabilities has remained high following the conclusion of every major combat operation in recent history, he said.

“If we are not able to train for scenarios across the full range of military operations against a backdrop of increasingly contested air, space and sovereign environments around the world, we face unac-



The Air Force Vice Chief of Staff Gen. Larry O. Spencer and Adm. Mark E. Ferguson III, the vice chief of naval operations, are greeted by Rep. Steven Palazzo (R-Miss) before Spencer testified on the Air Force Readiness Posture April 10 before the House Armed Services Committee in Washington, D.C. “Readiness is critical for your Air Force,” Spencer said. “The Air Force’s range, speed, and agility enable us to quickly respond to national missions and gives our nation an indispensable advantage that we must retain as we plan for an uncertain future.” (U.S. Air Force photo/Scott M. Ash)

ceptable risk to mission accomplishment and to our joint forces,” Spencer said.

Today’s Air Force is an indispensable hedge

against the challenges of an uncertain future, he said.

“Properly trained and equipped, your Air Force

can set the conditions for success in any conflict, in any region of the world, whenever we’re called upon,” Spencer said.



AFROTC cadets participate in orientation flight

Master Sgt. Marshall N. Rice Jr. refuels a B-2 Spirit over New Jersey April 2. Air Force ROTC cadets observed the mission as part of the 108th Wing's orientation flight program. The orientation flight offers the cadets an opportunity to observe the pilots and aircrew perform their jobs in a real-world environment. Rice is a boom operator with the 108th Wing, New Jersey Air National Guard assigned to Joint Base McGuire Dix-Lakehurst, N.J. The B-2 is assigned to the 509th Bomb Wing, Whiteman Air Force Base, Mo. (U.S. Air National Guard photo/Master Sgt. Mark C. Olsen)

F-35 on time to replace previous tactical aircraft



Lt. Gen. Charles R. Davis, second from left, testifies April 8 before the Senate Subcommittee on Air and Land in Washington, D.C. Witnesses from other services at the hearing included Lt. Gen. Christopher C. Bogden, U.S. Air Force Program Executive officer, F-35 Lightning II Joint Program Office; Vice Adm. Paul A. Grosklags, Principal Military Deputy to the Assistant Secretary of the Navy for Research, Development and Acquisition; and Lt. Gen. Robert E. Schmidle Jr., Deputy Commandant of the Marine Corps for Aviation. Davis is the Military Deputy to the Assistant Secretary of the Air Force for Acquisition. (U.S. Air Force photo/Scott M. Ash)

By Staff Sgt. Torri Ingalsbe
AF Public Affairs Agency

WASHINGTON (AFNS) – The F-35 Lightning II will enhance combat capabilities, project U.S. power and deter potential adversaries, Air Force officials told members of the Senate Armed Services Committee’s subcommittee on tactical air and land forces in a hearing on tactical aircraft programs there, April 8.

“The F-35 will form the backbone of U.S. air combat superiority for generations to come,” said

Lt. Gen. Christopher Bogdan, the F-35 Lightning II Joint Program Office executive officer. “It will replace the legacy tactical fighter fleets of the Air Force, Navy and Marine Corps with a dominant, multirole, fifth-generation aircraft.”

The fighter jet is scheduled to be at Marine bases in the summer of 2015, with the Air Force receiving aircraft the following summer, officials said.

“It takes the combined efforts of all of our military services and the whole of the government

to deny, deter and defeat and enemy,” said Lt. Gen. Charles Davis, the military deputy to the assistant secretary of the Air Force for acquisition. “The Air Force is an active partner in Department of Defense planning that will shift our emphasis from today’s wars to a broader range of challenges and opportunities.”

The hearing also included testimonies from Vice Adm. Paul Grosklags, the principal military deputy to the assistant secretary of the Navy for research, development

and acquisition; and Lt. Gen. Robert Schmidle, Jr., the Marine Corps deputy commandant for aviation.

All men agreed the way of the future is the F-35, especially with its technological advances and enhanced operating capabilities.

“My team is focused and committed to doing the very best we can for the warfighters, taxpayers and our partners, to ensure that the F-35 meets the needs of all our nation’s defenses,” Bogdan said. “To that end, my team is rising to the challenge

of managing this very large, complex program with integrity, transparency, accountability and discipline, to ensure that we develop and deliver the warfighting capability this country needs and expects.”

Bogdan noted budget constraints, and told the committee affordability remains his top priority for this aircraft.

Davis added maintaining balance between force structure, readiness and modernization has been a guiding principle in future planning.

“Our chief (of Staff) and our Secretary (of the Air Force) have been very clear that there are some enduring capabilities your United States Air Force provides, and these are missions they are expected to perform at any time, on any given day,” Davis said. “We have a very challenging situation as we go forward. There are no easy choices; there are some choices that are easier than others that will provide the enduring capabilities the United States expects the United States Air Force to provide.”

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