AEDC team implements significant software changes

Improvements speed up data retrieval, analysis process

By Deidre Ortiz
AEDC Public Affairs

Members of the AEDC Instrumentation, Data and Controls team have implemented software changes that will benefit aeropropulsion test cells at the Complex by increasing the speed in which the Air Force and AEDC test customers receive dynamic data.

Mike Pepple, an ID&C supervisor, credits the team of software engineers for improving the Computer Assisted Dynamic Data Monitoring and Analysis System (CADDMAS) and Propulsion Data Processing and Analysis System (PDPAS) to assist AEDC analysts in their support of these test cells. Those leading the effort were Rusty Zarecor, Stephen Powell and Michael Walker.

“They made software changes to enable the transmittal of CADDMAS data to PDPAS and then obtained additional disk storage,” Pepple said.

This capability enables test teams to access dynamic data for analysis in near real time. The new transmission process only takes minutes, whereas it had previously taken up to a week for data availability.

“During a turbine engine test, you have high volumes of data,” Steve Arnold, structural test analyst, stated. “A lot of time was spent moving this data over external hard drives, which can slow down the test and analysis process.”

Every smoke alarm has an expiration date: What’s yours?

By Arnold AFB Fire & Emergency Services

Does your home have a smoke alarm?

According to the National Fire Protection Association, the answer is likely “yes.” NFPA research shows that most American homes have at least one. But do you know how old your smoke alarms are? If you’re like most people, you’re probably not so sure.

A recent survey conducted by NFPA revealed that only a small percentage of people know how old their smoke alarms are, or how often they need to be replaced. That lack of awareness is a concern for Arnold Air Force Base Fire and Emergency Services and NFPA, along with fire departments throughout the country, because smoke alarms don’t last forever.

“Time and again, I’ve seen the life-saving impact smoke alarms can have in a home fire, but I’ve also seen the tragedy that can result when smoke alarms aren’t working properly,” said Jim Evans, assistant chief with the Arnold AFB Fire and Emergency Services. “That’s why we’re making a concerted effort to educate all personnel about the overall importance of smoke alarms, and that they do have a life limit.”

NFPA 72, National Fire Alarm Code®, requires smoke alarms be replaced at least every 10 years, but because the public is generally unaware of this requirement, many homes have smoke alarms past their expiration date, putting people at increased risk.

As the official sponsor of Fire Prevention Week for more than 90 years, NFPA is promoting this year’s Fire Prevention Week campaign, “Don’t Wait – Check the Date!”

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Team AEDC Spotlight: Kovacs helping to maintain cybersecurity at AEDC

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In this Issue…

Testing remembered, Oct. 4-10 World Space Week

An AEDC test team prepare to hoist the Geostationary Operational Environmental Satellite-4 (GOES-4) weather satellite into the clean room at the Mark I Space Chamber at the Complex in 2000. The testing at AEDC helped confirm satellite operation under simulated space conditions before it was placed in orbit. (AEDC file photo)

See AEDC world space contributions on page 6
Quality. We are passionate about accomplishment, and mission success.

Excellence. We thrive on challenge, we provide a safe and healthy work environment. We are proud of what we do and how we do it.

Sustainability. We plan and act for the long term benefit of our communities, while applying the highest standards of ethics, innovation, and flexibility. We actively seek technology, and partnerships to continually improve.

Relationships. We build positive, long-term business relationships through trust, respect, and collaboration.

Culture. Our team is proud of our diversity, inclusiveness, and collaborative environment. We actively seek diversity, inclusiveness, and collaborative values.

People. We have a mission-focused, diverse, inclusive, and collaborative workforce.

Facilities. We are a premier aerospace testing center, equipped with state-of-the-art facilities, while applying the highest standards of ethics, innovation, and flexibility.

Values

Integrity First

Excellence in All We Do

Core Values

• Integrity First
• Service before self
• Excellence in all we do

AEDC team members celebrate Air Force birthday
Second Lt. Thomas Julian and the AEDC Commanding Officer, Rodney Todaro cut the birthday cake during the AEDC Air Force Birthday Fair Sept. 16 at the Arnold Lakeside Club. The Air Force 65th birthday was Sept. 18. (U.S. Air Force photo/Emily Howell)

Right: The Clan Destiny Circus perform acrobatics at the Arnold Lakeside Club for the Air Force’s 65th birthday celebration. (U.S. Air Force photos/Holly Peterson)

Bottom: AEDC team members cruise around Woods Reservoir on water tricycles during Air Force birthday fair. (U.S. Air Force photos/ Holly Peterson)

Air Force birthday cake (U.S. Air Force photo/Emily Howell)

Smoking Policy

1. The following revised Arnold AFB smoking policy is effective immediately and applies to all individuals connected with AEDC, including government employees.

2. Traditional Tobacco products (e.g., cigarettes and other tobacco products) are defined as tobacco products, whether classified by designation or type, that contains tobacco waste product, including sealed containers, must not be left unattended or disposed of in waste receptacles, landfills, or other tobacco waste must be kept inside a designated smoking area.

3. Electronic Cigarettes (also known as "ecigs"). Pursuant to Air Force Instruction 435-8000, Tobacco Free Living, e-cigs are considered to be equivalent to tobacco products, however, e-cigs are not restricted to DTAs and are allowed to be used outdoors at a minimum distance of 25 feet from building entry/egress points. (This policy is dated July 7, 2016).

Action Line

Team AEDC values 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 via the AEDC Intranet home page and by calling 454-6000. Although the Action Line is always available, the best and fastest way to get things resolved is by using your channel of command or by contacting the organization directly. I encourage everyone to go that route first, then if the situation isn’t made right, give us a chance.

Col. Rodney Todaro
AEDC Commander

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NAS Executive Editor
Kathy Gatti
NAS Executive Editor
Riaya March, NAS Editor

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**2016 VA Picnic**

**AEDC releases 2016 Interim Arnold AFB Water Quality Report**

**By AEDC Civil Engineering Branch**

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**What does this chart mean?**

- **MCLG**: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL**: Maximum Contaminant Level, or the level of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. MCLs are enforceable, and water systems are required to comply with this regulation.
- **AL**: Action Level. The water on Arnold’s Main Base area comes from Woods Reservoir and is filtered through cartridge filters and disinfected with liquid chlorine hypochlorite. Arnold Village is served by the Estill Springs water system. They have conducted numerous tests for over 80 contaminants that may be in drinking water and only detected 12 of these contaminants. All of these contaminants are at safe levels.

### Detailed Information on Contaminants

**Cinereous Residual Disinfectant** is maintained throughout the distribution system. Chlorine is added to the drinking water supply at well sites to provide assurance that water delivered to customers will remain free of microbiological contamination. This also ensures that the water meets microbiological drinking water standards from the time it is pumped from the ground until it reaches the customer’s tap.

**Disinfection Byproducts** are the unintended reactions of disinfectants with naturally occurring materials in the water (e.g., natural organic matter, bromide, or disinfectant by-product precursors).

**Nitrate** is a form of nitrogen and an important plant nutrient. Nitrate in drinking water at levels greater than 10 ppm is a health risk for infants less than 2 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quality for short periods of time because of natural agricultural activity. If you are caring for an infant, seek advice from your health care provider.

**Lead and Copper** are naturally occurring metals which are generally found at very low levels in water. If levels are present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primary from materials and components associated with service lines and home plumbing.

**Nitrite** is a naturally occurring substance commonly found in groundwater in the southern United States. While your drinking water meets USEPA’s standard for arsenic, it does contain low levels of arsenic. USEPA’s standard balances the current understanding of arsenic’s possible health effects against the cost of removing arsenic from drinking water. USEPA continues to research the health effect of low levels of arsenic which is a naturally occurring metal known to cause cancer in humans at high concentrations and is linked to other health problems such as skin damage and circulatory problems.

**Barium** occurs naturally at very low concentrations in our groundwater.

**TFHAs** (Total Trihalomethanes) are a group of four chemicals that are formed along with other disinfection by-products when chlorine or other disinfectants are used to control residual contaminants in drinking water read with naturally occurring organic and inorganic matter in water.

**RAAs** (Haloacetic Acids) are chemicals that form from results from water treatment. When water acidity and temperature are slightly high and treatment chemicals react with organic particles or bromide.

**WHAT IS THE SOURCE OF THE WATER?**

The water on Arnold’s Main Base area comes from Woods Reservoir and is treated at the Base Water Treatment Plant (Building 183). The golf course is served by a well located at the golf course. The water is filtered through cartridge filters and disinfected with liquid chlorine hypochlorite.

**WHAT IS THE SOURCE OF THE WATER?**

Arsenic in drinking water may be hazardous to health. According to the U.S. Environmental Protection Agency (EPA) health standards, there are currently no MCLGs or MCLs for arsenic in drinking water. Even at low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

AEDC performs analysis of drinking water for contaminants. For more information about the drinking water on Arnold AFB and the AEDC Golf Course, call the Base Water Quality office (931) 649-5010.

For more information about the drinking water at Arnold Village, call Estill Springs City Hall at (931) 649-5188.

### Water Quality Data

**Chlorine ppm**

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**Chlorine (ppm)**

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**Chlorine Residual Disinfection**

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**Barium (ppm)**

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**Nitrate**

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**Summary of Water Quality Data**

- **Chlorine ppm**: 4/12/2014 - 8/12/2014
- **Chlorine Residual Disinfection**: 4/12/2014 - 8/12/2014
- **Barium (ppm)**: 8/12/2014
- **Copper (ppm)**: 8/12/2014
- **Nitrate**: 8/12/2014
- **Nitrogen (ppm)**: 8/12/2014
- **Seawater**: 8/12/2014

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**October 3, 2016 • 3**
For the past year, Amanda Kovacs has been assigned as the AEDC TEMPEST manager. As TEMPEST manager, she oversees the TEMPEST program, which identifies vulnerabilities in information system processing classified information that could result in compromising emanations and the possible interception of these emanations.

Kovacs is the first government civilian to serve as AEDC TEMPEST manager, and Clark Brandon, deputy director of the AEDC Test Support Division, said though she’s only been in her position about a year so far, she’s already contributed a great deal.

“Her attention to detail, persistence and hard work have helped her to make a positive and immediate impact to the AEDC cybersecurity program,” he said. Brandon added he has three major inspections down to the smallest details.

Brandon further commended Kovacs for consistently monitoring and updating changes that occur in the AEDC test facilities. Her assessments and documentation are critical to maintaining a proper cybersecurity posture and protecting critical information,” he said. “She carries a mission first attitude and has been a critical member of the AEDC and Force cybersecurity team.”

According to Kovacs, some of the skills and experience gained through her past careers prepared her for her new position. “I was active duty Air Force for around nine years, then I was a contractor at Creech Air Force Base, Nev., working unmanned aerial vehicle system administration for four years,” she said. “After that I was the site supervisor for Lockhead Martin, supporting Army Corp of Engineers in Seattle, Wash. Once that contract was over, I had the chance to take a position on the Microsoft Campus in Redmond, Wash., supporting Windows Azure.”

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Kovacs helping to maintain cybersecurity at AEDC

By Deidre Ortiz
AEDC Public Affairs

Amanda Kovacs, pictured, is TEMPEST, or Emissions Security, manager at AEDC. In her position she oversees the TEMPEST program, which identifies vulnerabilities in information systems processing classified information. Kovacs is the first government civilian to serve as AEDC TEMPEST manager. (U.S. Air Force photo/Jacqueline Cowan)

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Another benefit is that data packages can be provided to test customers within hours of a test rather than days or weeks. In addition, once a test program is completed AEDC analysts still have access to the dynamic data points. “In simple terms, you’re able to get data and see how you’re going to react to the dynamic data points,” he said.

Brandon noted that in the past, this type of software was used only for structural testing, but more recently it is used during ev- ery engine test.

Peppe also added that for certain tests, dynamic data points could only be viewed if you took down the real-time displays. “The improvement above provides another stream so that analysts, located remotely, can view the dynamic data points,” he said. “This is especially important for the projects that focus on data from strain gauges.”

These software improvements have been uti- lized during F135 engine testing in C1 and J2, and they will benefit operations for many future turb- ojet test projects.

Amanda Kovacs helped to maintain cybersecurity at AEDC. (U.S. Air Force photo/Jacqueline Cowan)

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Kovacs helping to maintain cybersecurity at AEDC

By Deidre Ortiz
AEDC Public Affairs

Amanda Kovacs has been assigned as the AEDC TEMPEST, or Emissions Security, manager. In her position she oversees the TEMPEST program, which identifies vulnerabilities in information systems processing classified information. Kovacs is the first government civilian to serve as AEDC TEMPEST manager.

Another benefit is that data packages can be provided to test customers within hours of a test rather than days or weeks. In addition, once a test program is completed AEDC analysts still have access to the dynamic data points. “In simple terms, you’re able to get data and see how you’re going to react to the dynamic data points,” he said.

Brandon noted that in the past, this type of software was used only for structural testing, but more recently it is used during every engine test.

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Amanda Kovacs, pictured, is TEMPEST, or Emissions Security, manager at AEDC. In her position she over-
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NEEDED!
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Life: B-21: Modernizing the bomber fleet
B-21 capabilities dis-
As America’s adversar
the range Raider connects
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What happened on April 1
more than what happened
B-21: Modernizing the bomber fleet
We set priorities on some
Lt. Gen. Mike Holmes, the
Air Force Association (U.S. Air Force photos/Staff Sgt. Stamfied)
AEDC tests contribute to world space advancement

By Raquel March
AEDC Public Affairs

During World Space Week, Oct. 4-10, AEDC testing of the Global Positioning System satellite and the Geostationary Operational Environmental Satellite-M (GOES-M) weather satellite can be remembered as an essential contributor to advancing the observation of earth from space.

The 2016 theme of the WSW is “Remote sensing: Enabling Our Future,” and concentrates on celebrating earth observation from space for the betterment of the human race. Some applications that are recognized in theme emphasize environmental and agriculture monitoring, land use mapping and location-based services.

For more information on WSW, visit www.worldspaceweek.org.

The Global Positioning System Block II satellite pictured here in 1985 underwent a four-month series of qualification tests in the AEDC Mark I Space Chamber to determine whether the satellite could withstand extreme heat and cold in space. The first GPS Block I satellite was also tested at AEDC in 1977 the same year of the first operational launch. The GPS is a U.S.-owned utility that provides users with positioning, navigation and timing services. The system consists of three segments: the space segment, the control segment and the user segment. The U.S. Air Force develops, maintains and operates the space and control segments. There are currently 31 GPS satellites in operation and the latest version in use are 12 GPS Block IIF. (AEDC file photo)

In 1977, an AEDC test engineer and a test director take a close look at the stowed solar array panels that provide electricity for the Global Positioning System NAVSTAR satellite before testing in the Complex Mark I Space Chamber. (AEDC file photo)

The Geostationary Operational Environmental Satellite-M (GOES-M) weather satellite pictured here in 2000 after testing in the AEDC Mark I Space Chamber. (AEDC file photo)

Global Positioning System Block IIF satellite (United States Government photo)

In 2016, the GOES-M weather satellite was also tested at AEDC in 2017. The GOES is a U.S.-owned utility that provides users with 24-hour real-time weather data. The GOES-M satellite is in operation and provides critical weather data for the Department of Defense and the Department of Commerce. (NASA image)

Geostationary Operational Environmental Satellite-M (GOES-M) weather satellite. (NASA image)
For more information on visit www.worldspaceweek.org.
20th Air Force Marathon a huge success

Rachel Harley from Birmingham, Ala., crosses the finish line to become the winner of the 20th U.S. Air Force Marathon women’s full marathon division at Wright-Patterson Air Force Base, Ohio, with a time of 2:58:34. (U.S. Air Force courtesy photo)

By Stacey Geiger
Air Force News
Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio (AFNS) – After a 30-minute weather delay, over 15,000 runners, walkers and spectators from all 50 states and many foreign countries gathered Sept. 17 to take part in the 20th annual U.S. Air Force Marathon at the National Museum of the U.S. Air Force.

Wright-Patterson Air Force Base Col. Bradley McDonnell, 88th Air Base Wing, and installation commandant, said he was impressed by all the people responsible for organizing the marathon this such a phenomenal event.

McDonnell said, “It takes an enormous amount of planning, hard work and more than 2,400 volunteers to make this a world class event and I sincerely thank each and every one of them for a job well done.”

The three-day event kicked off Sept. 15 with a free sports and fitness expo. Along with participants’ bib pick up, the expo offered more than 100 exhibitors featuring the latest in sports, fitness, health and nutrition.

Pre-race activities included the Breakout of Champions on Sept. 16, featuring guest speaker, four-time Olympic Meb Keflezighi at the Fairborn follow by the annual Gourmet Pasta Dinner at the Air Force museum.

“We are always excited about the Air Force Marathon,” said Rob Aguiar, the Air Force Marathon race director. “But this year is super special because we’re celebrating our 20th anniversary and we’ve added a lot of new pieces that we think people will enjoy.”

New to the marathon this year was the introduction of the official Air Force Marathon mobile app, Tailwind. Also new was the Air Force Marathon mobile race app where participants and spectators could stay abreast of the latest marathon information including tracking runner location.

Runners had the option of competing in the full marathon, a half-marathon, and 10K, as well as a wheelchair division. The Air Force Marathon is sanctioned by the USA Track & Field Association and is a qualifier for the Boston Marathon.

In conjunction with the marathon, in its eighth year, the U.S. Air Force sanctioned deployed location races overseas. These races offer deployed military members the opportunity to share the marathon experience while deployed.

This year’s men’s full marathon winner was Zebulon Hanley, of San Antonio, Texas, with a time of 2:47:04. “This was the first Air Force Marathon I ran in so I was just trying to hit my paces and keep up with the leaders and the card was just fell right,” Hanley said. “Some of the leaders slowed down toward the end and I felt good enough to keep going and it worked out.”

Due to the weather, Hanley said he was not able to make his goal time but winning the marathon has given him a great sense of accomplishment. “I am also very grateful for the volunteers. They spent a lot of time to get ready for the marathon and then again on race day,” Hanley said.

This year’s women’s full marathon winner was Rachel Harley, of Birmingham, Alabama, with a time of 2:58:34. “I feel awesome, this was my first marathon so I didn’t know how I would do,” Harley said. “My dad and grandfather were both in the Air Force so this marathon was very special for me and I am thankful for everyone who serves their country.”

“This event was excellent right off the bat, it was well organized and everyone did an amazing job,” Harley said. “I am glad to have experienced this marathon and will definitely be back for next year.”

Winners are listed below.

**Men’s full marathon: Zebulon Hanley, San Antonio – 2:47:04
**Women’s full marathon: Rachel Harley, Birmingham, Alabama – 2:58:34

Men’s full marathon, handcranked wheelchair division: David Barger, Arondale, Arizona – 3:14:27


Men’s half-marathon: Sean O’Hollister, Joint Base Langley-Eustis, Virginia – 1:14:37

Women’s half-marathon: Emily Shertzer, Pennsylvania – 1:22:40

Men’s 10K: Steve Chu, Colorado Springs, Colorado – 35:51

Women’s 10K: Courtney Storms, Colorado Springs – 42:45


Women’s 5K: Anne Pennington, Kleine Breugel Air Base, Belgium – 2:36.

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The B-21 has a name: Raider

By Mike Martin
Secretary of the Air Force Public Affairs

NATIONAL HARBOR, Md. (AFNS) – The Air Force’s long-range strike bomber has officially been named the B-21 Raider.

Air Force Secretary Deborah Lee James announced the results of the Air Force Global Strike Command led naming contest alongside selected members during her remarks at the Air Force Association’s Air, Space and Cyber Conference here Sept. 19, 2016.

“Today I want to recognize three Airmen who answered the call to be a part of a new Air Force legacy and name our new bomber,” James said. “The first two … submitted proposals that captured the essence of the bomber force and they are the winners of our contest.”

The third Airmen James recognized, calling him one of the greatest men of his generation, was Doolittle Raider retired Lt. Col. Richard E. Cole. The Doolittle Raiders are known for their surprise attack against Japan during World War II on April 18, 1942, which forced the Japanese to recall combat forces for home defense, and boosted morale among Americans and U.S. allies abroad.

The name was ultimately selected by James and Air Force Chief of Staff Gen. Dave Goldfein after a panel composed of staff from AFGSC and Headquarters Air Force determined the top-ranked selections from more than 2,100 unique naming submissions.

While there were multiple entries advocating for the B-21 to be dubbed Raider, Air Force officials said the members were selected based on the overall quality of their justification.

James has often highlighted the important role the B-21 Raider will play in allowing the Air Force to operate in tomorrow’s high-end threat environment, and in providing the Air Force the flexibility and capability to launch from the continental United States and deliver air strikes on any location in the world. She has also cautioned of the delays the program could face under a continuing resolution.

“A short-term (continuing resolution) is manageable … but, let me tell you, a long-term continuing resolution would be very damaging for the Air Force,” James said. “It would cap the production of the KC-46, prevent us from devoting more funds to developing the B-21 next year, and delay about 50 construction projects.”

The service’s ability to divert old capabilities and build new is paramount, and modernization remains a priority for the Air Force as it continues to play a major role defending against current and emerging threats.

“We have the oldest aircraft fleet we have ever had, 27 years old on average,” James said. “This absolutely needs to be a focus for us.”

The B-21 Raider, designed based on a set of requirements that allow the use of existing and mature technology, is currently in the Engineering and Manufacturing Development phase and the Air Force plans to field the initial capability of the aircraft in mid-2020s.

B-21 naming contest selected members:
- Tech. Sgt. Derek D. White, emergency management craftsman, 175th Civil Engineering Squadron, Maryland Air National Guard

AEDC Milestones

35 YEARS
Gina Bragg, FSS
Richard Franks, nLogic
David Harrison, NAS

30 YEARS
Joseph Burns, NAS

25 YEARS
Tracy McDonald, NAS

20 YEARS
John Lamb, FSS
Lewis McClinton, nLogic

15 YEARS
Jackie Hensley, FSS

10 YEARS
Richter Goodfriend, NAS
Tauran Gray, AF
Michael Magistro, NAS

NEW HIRES
Ryan Cunningham, FSS
Nicholas Dahl, NAS
Charli Dean, NAS
John Leonard, AF
Kelly Martin, NAS
Julie Mixor, NAS
Stevia Morawski, FSS
Wanda Niegant, NAS
Clayton Plenomon, NAS
LaDonnie Saltzman, AF
Kent Standley, NAS
Matthew Szendre, NAS
Whitlow Woodrow, NAS

PROMOTIONS
Rodney Clements promoted to master sergent

CERTIFICATES
Anthony Lomax received his bachelor’s degree in business management.
Standing vigilant from the top of the world

By Dave Smith
21st Space Wing Public Affairs

THULE AIR BASE, Greenland (AFNS) — Stretching from the confines of Thule Air Base, the northernmost U.S. military installation hundreds of miles above the Arctic Circle, a dirt road trails steadily upward and to the north-west.

Following the road for about a dozen miles across sparse, barren tundra more than any earthly land, a form comes into view in stark contrast to the profligate of the hillsides. Dominating the scene, an 11-story tall, phased-array radar system and its attendant structures reveal themselves. The place is Ballistic Missile Early Warning Site - I.

BM�WS is operated by the 12th Space Warning Squadron, a geographically separated unit of the 21st Space Wing at Peterson Air Force Base, Colorado. The site is part of Thule AB.

The 12th SW’s mission is to provide missile warning and missile defense, both priority I missions, said Lt. Col. David Ransom, the 12th SW’s commander. A secondary mission is bringing space situational awareness to the fight, monitoring man-made objects in low-Earth and polar orbit.

“Day to day we stand on alert to detect any possible missile attacks,” Ransom said. “While we monitor for possible threatening missile attacks, we can also track space objects the size of a softball about 3,500 miles up from Earth’s surface. This critical information is up-channeled to Joint Space Operations Center ... (and) is important if the object is starting to decay back into the atmosphere and impact Earth or collide (with) another space object.”

The BM�WS radar operates around the clock, day and night every day of the year. A staff of about 70, consisting of officers, enlisted, and contract personnel operate the facility.

“There are times of extremely harsh weather, thunder, snowstorms, or very cold weather when crews may work extra shifts back to back,” Ransom said. “Shifting at BM�WS can be very busy at times because of the strategic importance of our mission and location.”

At Thule AB, storm season lasts from mid-September to mid-May. During that time of severe temperature and weather, it is not unusual for the road leading to the BM�WS site to be closed. Phone, internet and mail service are cut off at times too.

“With 91 knot winds and extreme weather, we have to shut down the road,” Ransom said. “If we get good enough forecasts we can augment the crews. Basically we ask the next crew to come up early. When the road is closed (crews) have to stay there.”

The remote location is home to many types of interesting wildlife around the Thule AB area, including musk oxen, arctic foxes and arctic hares. One type of local fauna can even change the security conditions at the base.

“One time we went into lockdown because of a polar bear sighting,” Ransom said. “It lasted for about three hours.”

Working in close proximity for long periods of time, whether at the BM�WS site or on Thule AB, can bring Airmen closer together.

“Our squadron is our family,” Ransom said. “We don’t get to go home at the end of the day to our families, friends and lives. It can be a challenge.”

One way the 12th SW tries to create a family atmosphere is eating lunch together. Ransom said even deployment doesn’t forge bonds as close as those formed at the top of the world. The group plays games, takes hikes and goes to the base gym together.

“One of the tightest units I have been part of is at Thule,” Ransom said. “You get that family feeling.”
By Space and Missile Systems Center
Public Affairs

LOS ANGELES AIR FORCE BASE, Calif. (AFNS) – The Space and Missile Systems Center awarded a contract option to Lockheed Martin Space Systems Company to procure two additional Global Positioning System III satellites today.

The contract option procures long lead and production hardware to produce space vehicles 9 and 10 for the next generation of GPS satellites being built by Lockheed Martin.

“The GPS III SV 9 and 10 satellites are expected to be ready for launch in 2022, thus sustaining the GPS constellation and the global utility the world has come to expect,” said Lt. Gen. Samuel Greaves, the Space and Missile Systems Center’s commander and Air Force program executive officer for space.

The government expects to compete future purchases of GPS III satellites, beginning with GPS III SV 11. This competition will maintain the current technical baseline of GPS III and will add additional hosted payloads to increase system accuracy, search and rescue capability, and universal S-band compatibility.

Operated by U.S. Air Force Space Command, the GPS constellation provides precise positioning, navigation and timing services worldwide seven days a week, 24-hours a day.