Col. Todaro takes command at AEDC

By Raquel March

Col. Rodney Todaro assumed command of AEDC as the 29th commander during a change of command ceremony July 8.

The ceremony was attended by local dignitaries and AEDC personnel in front of the Administration and Engineering Building.

Todaro comes to AEDC from Edwards Air Force Base, Calif., where he was the 412th Operations Group commander.

As the AEDC commander, Todaro leads the largest and most advanced complex of flight-simulation test facilities in the world. The Complex employs more than 2,000 people and comprises 28 aeroacoustic test facilities located at Arnold Air Force Base, as well as two geographically separated units— the Hypervelocity Tunnel 9 in White Oak, Md., and the National Full-Scale Aerodynamics Complex at Moffett Field, Calif.

The facilities simulate flight from subsonic to hypersonic speeds at altitudes from sea level to space. All NASA manned spacecraft, every high performance aircraft and missile, as well as most space launch systems and many military satellites in use by the Department of Defense today, have been tested in the Complex’s facilities.

Todaro replaces Col. Raymond Toth who retired from the Air Force in the Complex’s facilities.

Major savings occur as part of AEDC wind tunnel improvement program

By Deidre Ortiz

Replacing the test article control system (TACS) and Data Acquisition System (DAS) feedthrough assemblies used at the 16-foot transonic (16T) wind tunnel is saving AEDC more than $1 million this year.

This effort is part of the improved Transonic Test Capability (IMTTC) program, meant to improve equipment and processes for 16T.

Located on the Propulsion Wind Tunnel (PWT) test carts, the 16T TACS and DAS reside in 10 environmental enclosures that protect them from the harsh environment of the 16T tunnel conditions.

Elijah Minter, Air Force acquisition program manager for the Flight Systems Branch at AEDC, explained the electrical feedthrough assemblies are an integral component of the systems.

“They transport low-level signals from instrumentation located in the high temperature and low pressure areas of the tunnel to sensitive equipment protected inside the environmentally controlled enclosures,” he said. “There are approximately 130 feedthrough assemblies needed for the TACS and DAS.”

The feedthrough assemblies that have been employed by the TACS and DAS require extensive labor and time to fabricate. Each cost on average $13,000 to assemble.

“The IMTTC program launched this year for the 16T TACS,” Minter explained. “We were able to replace the old TACS and DAS in less than one year. The IMTTC effort is saving us more than $1 million this year.”

GPS 20th anniversary recognized

By Deidre Ortiz

A full-scale GPS was tested in the Mark I Space Chamber at AEDC in 1977. The tests checked reliability of the satellite’s systems prior to its launch in 1978. AEDC personnel reflected back on this testing on July 17 the 20th anniversary of when GPS reached full-operational capability.

Revolutionary Change: Col. Krajewski announces updates to BCITS contract award

By Deidre Ortiz

Toth made you aware on June 19, the Base Communications and Information Technology Services (BCITS) contract was awarded to OBXtek, Inc. with transition expected to begin on July 1 with performance beginning on Oct. 1.

However, I was informed today that two unsuccessful offerors to the BCITS contract protested the award to OBXtek.

We are currently assessing options regarding start of contract transition. If transition is further delayed, our plan remains to extend the ATA contract past Oct. 1 to ensure mission continuity. As these processes are resolved, we will then remove the additional requirements from the ATA CTF.

Hypervelocity Tunnel 9 in White Oak, Md., and the National Full-Scale Aerodynamics Complex at Moffett Field, Calif.

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General courts-martial for sexual assault: How do they work?

By Maj. Derek Rowe

How often have you walked up behind someone because you thought you could see you walk up? In this case, simply “excuse me” or “look out” is the obvious thing to say. In the military, operating heavy machinery can be both exciting and daunting.

On June 24, at an employe in a forklift at a Firm in no way connected with the Tullahoma News, Arnold AFB, Ala., died in a forklift accident. According to the old employee was killed when he walked in front of a machine to clear an empty barrel. A new employee was approached in the fork lift, and an employee of Federal-Mogul approached the operator, who had stopped the fork lift, proceeded to open the back of the machine and knock the victim down and a man, who was walking from the receiving area and was pronounced dead at the scene.

High Mach

By AEDC Safety, Health, and Environment

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A more efficient alternative used to maintain AEDC turbine engine test operations

By Deidre Ortiz
ATA Public Affairs

The Global Positioning System (GPS) has achieved full-operational capability July 17, 1995, and as the U.S. Air Force celebrated this anniversary, AEDC engineers also reflected on the Complex’s role in the testing and development of the system.

The final acceptance and qualification tests for the Navstar GPS were completed in the Mark I space chamber at AEDC in 1977. Testing for GPS continued at AEDC into the mid-to-late 1980s, when thermal qualification and engineering design tests on a prototype of the Block I Navstar GPS satellite. Since that time, life extension review and certification of systems has taken place at the Complex.

During its initial launch in 1978, officials had already envisioned the GPS as a 24-satellite radio navigational network that would permit military aircraft, ships and ground units to determine their positions within approximately 10 meters in three dimensions and offer continuous global coverage for all-weather use.

Primary program objectives of the tests conducted at AEDC were certification of the satellite’s thermal control and verification of the vehicle’s operational systems and identification of any potential defects. Every operating system aboard the satellite was tested under simulated normal conditions with the exception of the rocket motor that positioned it in its final orbit.

Due to a change in the operating system aboard the satellite, the original fuel (PAG) chemical fluid, is being used to flush and fill the process air valve hydraulic systems at the ASTF C-Plant. This is what the insides of the valve looked like after one of the recent flushing and filtration operations. (Photo provided)

EcoSafe32 hydraulic fluid is being used to flush and fill the process air valve hydraulic systems at the ASTF C-Plant. This is what the insides of the valve looked like after one of the recent flushing and filtration operations. (Photo provided)
Sons and daughters of AEDC employees were invited to participate in Job Shadow Day July 10. ATA General Manager Steve Pearson welcomes the group by encouraging them to “ask questions throughout the day.” After watching an introductory video the group toured the Propulsion Wind Tunnel, Mark I Space Chamber and the Aeropropulsion System Test Facility E2 test cell. (Photos by Rick Goodfriend)
WRIGHT-PATTERSON AIR FORCE BASE, Ohio – Across Air Force Materiel Command, the Airman continues to embody a culture of respect and resilience. This is especially evident in their behavior as wingmen.

"A wingman is at the core of the culture we emphasize, and it’s at the heart of the wingman concept," said Jennifer Trut, AFMC Community Support Coordinator. "A good wingman stays alert for signs of danger from whatever source—whether suicide, safety mishaps, alcohol abuse, sexual assault, bullying, medical issues or other difficulties, gets involved by knowing their fellow Airman; and takes action when necessary to protect their wingman, on and off duty. We’re proud to have so many true wingmen in our command who look out for the welfare of their colleagues and community." Some recent examples of successful wingman interventions include:

- Wingman found the driver of a crashed car pulseless and apnic. They provided initial care, CPR, and defibrillation until first responders arrived. The driver regained a pulse and was taken to the hospital.
- Another wingman was notified by an Airman’s spouse that the Airman had threatened suicide. The wingman found the Airman en-gaged in a preparatory act but intervened and immediately escorted the Airman to the mental health clinic. The wingman continued to provide support until the Airman returned to duty.
- One wingman noticed an overturned, burning vehicle and worked to remove the passengers. The wingman flagged down assistance and made contact with emergency responders, staying on the scene until they arrived.
- At a club during spring break, a wingman witnes-sew several drunk drivers near a group of underage females. The wingman found the underaged male shouting about "hat little me," so she asked the females if they were okay and stayed close by to intervene again if necessary. Later, the same wingman helped a drunk, underage female into a cab when she felt drunk.
- Wingman was notified by an On-Deputy Breakdown of the squadron— in concert with our Lockheed Martin and off-duty, the wingman continued to coordinate a get-well plan and escorted the Airman to various ap-pointments, allowing the Airman to remain productive until he was medically retired.
- By staying engaged, showing concern and being alert for signs of dis-ease, these wingmen helped others avoid danger and even saved lives.

Test flight completed after F-35B modifications

Wright-Patterson Air Force Base

JUNE 18, 2015

The flight marked the completion of the first depot-level modifications on the F-35B Lightning II. The aircraft underwent a functional check flight following modifications at the Ogden Air Logistics Complex. (U.S. Air Force photo/Alex R. Lloyd)
A B-52H Stratofortress is marshalled to a stop at Barksdale Air Force Base, La., after a 44-hour sortie July 2. Aircrew members and two B-52s from Barksdale AFB’s 9th Bomb Squadron flew a round-trip mission to Australia where they integrated with Royal Australian Air Force ground forces in the region to conduct an exercise with inert conventional weapons and perform a low approach at RAAF Base Tindal, Australia. (U.S. Air Force photo/Senior Airman Benjamin Raughton)

By U.S. Strategic Command Public Affairs

OFFUTT AIR FORCE BASE, Neb. (AFNS) — Two B-52 Stratofortresses assigned to the 2nd Bomb Wing at Barksdale Air Force Base, La., returned July 2 from a 44-hour, nonstop mission to Australia.

The mission, which was closely coordinated with the Australian Department of Defence, demonstrated the United States’ ability to project its flexible, long-range global strike capability and provided unique opportunities to synchronize strategic activities and capabilities with a key ally in the U.S. Pacific Command area of operations.

“Their flight provides one of the many ways the U.S. demonstrates its commitment to a stable and peaceful Indo-Asia Pacific region,” said Adm. Cecil D. Haney, the U.S. Strategic Command commander. “In addition to strengthening aircrew skills and enhancing their familiarity with operating worldwide; combined training and theater security cooperation engagements with our regional allies serve to improve our interoperability and capability to respond to any potential threats in the region.”

During the mission, the B-52s integrated with Royal Australian Air Force ground forces in the region, conducted an inert conventional weapons drop on the Delamere Air Weapons Range and performed a low approach at RAAF Base Tindal. USSTRATCOM’s bomber force regularly conducts such training and engagements around the globe.

In June, three B-52s deployed to Royal Air Force Fairford, England, where they conducted training flights with ground and naval forces around the region and participated in multinational exercises Baltic Operations 2015 and Saber Strike 2015 over international waters in the Baltic Sea and the territory of the Baltic states and Poland.

In May, two B-52s participated alongside Jordanian forces in U.S. Central Command’s exercise Eager Lion 2015.

This mission consisted of a nonstop, 30-plus-hour sortie from the continental U.S. to the USCENTCOM area of operations. Previously, in April, four B-52s flew round-trip flights to both the Arctic and North Sea regions.

The training mission, Polestar Grewel, enabled bomber crews to conduct air intercept training with fighter aircraft from the U.K., Canada and the Netherlands.

B-52s also participated in NATO exercise Noble J ustification in October 2014, during which the bombers assisted in the exercise’s focus of validating the Spanish Maritime Forces as the 2015 Maritime NATO Response Force. USSTRATCOM is one of nine Defense Department unified combat commands and is charged with strategic deterrence; space operations; cyberspace operations; joint electronic warfare; global strike; missile defense; intelligence; surveillance and reconnaissance; combating weapons of mass destruction and analysis and targeting.

By AEDC Industrial Security

Jul 28, 1989 — Housewife Yildirim sentenced to life in prison for espionage

July 30, 1916 — Black Tom Railroad Yard Bombing — Two million tons of war materials packed into train cars blew up in the Black Tom Railroad Yard on what is now a part of Liberty State Park

The culprits were German agents who were determined to prevent American munitions ships from supplying its English enemy during the First World War.

Ultimately led Congress to pass the Espionage Act of 1917 which outlawed a variety of crimes associated with German agents.

Indicators of Security Risks:

- Alcohol Abuse
- Drug Abuse
- Spending inconsistent with known income level
- Foreign interests
and became a yellow rope, earning two letters of acknowledgement. “I just had to realize that I wasn’t the first to fail training for pararescue and I will not be the last,” Sheek said. “It’s the moments after that I feel are the most important. I grew up once and it was a wake-up call.”

Upon completion of his technical training, Sheek went on to his first duty station at Atlas Air Force Base, Okla. Shortly after arriving, he rejoined the CAP as an active-duty service member, Sheek was immediately promoted into the adult officer ranks. “As an officer in the CAP, it was Sheek’s responsibility to guide the cadets. He is able to take from his past experience and life lessons to better teach them. While stationed at Altus, Sheek found a way to use the skills and ambition he learned from pararescue and said that passion to receive his emergency ground team leader certification. As part of his certification, Sheek had to perform multiple search and rescue tactics and battles first aid, such as wound dressing and splints. “I chose emergency services because it was fun,” Sheek said. “It’s a small unit, carrying some
Just a short year later, Sheek received orders to Kadena Air Base, Japan, as a vehicle operator. After arriving, he quickly discovered there was an overseas CAP unit and joined as soon as he could. Sheek uses those skills from pararescue training to lead cadets through search and rescue exercises and teaches the cadets skills like using compasses, land navigation, radio usage and basic medical skills. Since joining the CAP unit at Kadena AB, Sheek earned a Military Outstanding Volunteer Service Medal for his work with the CAP and as a life-guard at a local pool. "I believe a part of why he is doing so well in the Air Force (are) the skills and lessons he learned as a CAP cadet," McLain said. "He is a very good leader, loves to get involved and helps on, and he has a wealth of knowledge. It’s what makes him a hard worker.”

Sheek said his time in the CAP program is nowhere near its end; it has been a lifelong passion for him and he plans on continuing to give back to the program that has helped him out so much through his life and career as an Airman. “It’s really great getting to pass on your knowledge,” Sheek said. “You pass on that experience and you get to see a young quiet cadet who was too shy to even speak at first, start testing for rank, passing physical training tests, and taking (the) lead on programs, it’s extremely rewarding.”

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Capt. Kari Armstrong, an F-15E Strike Eagle weapon systems officer with the 389th Fighter Squadron, received more than a diploma from the U.S. Air Force Weapons School at Nellis Air Force Base, Nev., June 27. Armstrong also became the first female F-15E weapons school officer and the second female student in a fighter platform – after Col. Jeannie Leavitt in June 1998 – to complete the graduate-level school. (Courtesy photo/Susan Garcia)

By Susan Garcia

U.S. Air Force Weapons School

MOUNTAIN HOME AIR FORCE BASE, Idaho (AFNS) – Capt. Kari Armstrong, an F-15E Strike Eagle weapon systems officer with the 389th Fighter Squadron, received more than a diploma from the U.S. Air Force Weapons School at Nellis Air Force Base, Nev., June 27. Armstrong also became the first female F-15E weapons school officer and the second female student in a fighter platform – after Col. Jeannie Leavitt in June 1998 – to complete the graduate-level school.

While she appreciates the historical aspect of her experience, Armstrong said her vision for the future goes beyond her gender. Her ultimate goals are to be the best instructor she can be and to inspire others to excel in the same way her mentors did. Those goals motivated her to apply to the weapons school in the first place.

Armstrong did not have to put herself through weapons school – a rigorous school that selects only the top 3 percent of F-15E aircrew, with an elimination rate of 10 percent per class. However, Armstrong had observed and admired the graduates – also known as “Patches” – at her unit for some time.

“I realized that the people I wanted to emulate the most happened to be Patches,” Armstrong said. “They really summed up the ‘humble, approachable, credible’ motto of the weapons school. To me, a Patch means being very proficient at your job, but also being willing and available to help those around you.”

Her skills and teaching acumen resulted in her selection to the 17th Weapons Squadron’s F-15E Weapons Instructor Course on her first application to the weapons school. After arriving, Armstrong soon realized she might be the first female weapons school officer to graduate from the fighter weapons instructor course; however, she could not allow herself to think about that. She had to focus on the 260 academic hours, 28 flying missions and a course designed to contain the toughest operational conditions most students ever see.

“Going through the course, I didn’t feel singled out,” Armstrong said. “At the end of the day, (gender) doesn’t matter in the briefing rooms. All that matters is the quality of your brief, execution and debrief.”

The 17th WPS leadership echoed that sentiment. “Captain Armstrong’s accomplishments are notable simply because of her ability,” said Lt. Col. James Blanton, the 17th WPS commander. “She’s a very good aviator and instructor. Regardless of gender, all of our students will be excellent leaders for the (U.S. Air Force).”

As she returns to the 389th FS and Mountain Home Air Force Base, Armstrong said she hopes to encourage other weapon school officers to apply for the school. She wants them to know becoming a Patch is an attainable goal; however, “It is not a goal you can complete overnight; it is something you have to work hard at every single day.”

“(The weapons school) is challenging, but it’s also the best flying I’ve ever had the opportunity to participate in,” Armstrong continued. “Unless you go to a Red Flag, you won’t typically see how all the platforms work together. Getting outside your own little bubble helps you see the bigger picture of how we all play a role in the overall mission.”

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