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A Space & Missile Defense NewsWire

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Army vice chief of staff visits SMDC



Photo by Jason B. Cutshaw

Gen. John F. Campbell, vice chief of staff of the Army, emphasizes the importance of science, technology, engineering and mathematics, or STEM, programs with Annalisa Fowler, a University of Alabama at Huntsville member of the Students Working at the Army in Parallel, or SWAP, program, at the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Concepts Analysis Laboratory, during his visit to the command's Redstone Arsenal, Ala., headquarters Jan. 23. Campbell asked members of the CAL what the Army can do to get more high school and college students interested in engineering and other scientific fields for the Army.



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SMDC Soldier is distinguished graduate



Courtesy photo

Spc. Richard Thomas, satellite network controller, Company B, 53rd Signal Battalion, right, receives his certificate upon completing the Warrior Leader Course at Fort Indiantown Gap, Penn., Jan. 25. Thomas, who is the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's 2013 Soldier of the Year, was named the Distinguished Honor Graduate of his class.

STRATCOM Chaplain learns SMDC mission



Photo by Jason B. Cutshaw

Chaplain (Col.) Keith Darlington, command chaplain, U.S. Strategic Command, learns about satellites from Ryan Wolff, general engineer, USASMDC/ARSTRAT Concepts Analysis Laboratory, during a visit to the command as Chaplain (Col.) John W. Shedd, SMDC command chaplain, looks on.

Army's solid-state laser testbed undergoes trials

Jason B. Cutshaw
SMDC Public Affairs

WHITE SANDS MISSILE RANGE, N.M. – The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's Emerging Technology Directorate used a solid-state high energy laser testbed to engage and destroy threat representative targets in tactical scenarios.

The Solid-State Laser Testbed, or SSLT, is part of an Army test designed to investigate military applications and validate the operational utility of high energy lasers. Results from testing in April have confirmed that solid-state lasers can negate unmanned aircraft vehicles and rocket, artillery and mortar threats in flight.

“The Army – Northrop Grumman team put in a lot of work to complete these impressive demonstrations,” said Richard P. De Fatta, director of the USASMDC/ARSTRAT Emerging Technology Directorate.

“We still have a lot of lethality and performance data to collect for model refinement, but the success of these demonstrations represent extremely important technical milestones. These demonstration results reduce overall program and technical risk while increasing confidence in the community that we can deliver this revolutionary capability to our Soldiers.”

SSLT will be used to evaluate the capability of a high energy solid-state laser to accomplish a variety of missions. Those results will be the basis for directing future development of solid-state lasers for use on the battlefield.



U.S. Army photo

This beam director was used for the Mobile Tactical High Energy Laser and has been reformed to support the Solid State Laser Testbed Experiment at High Energy Laser Systems Test Facility at White Sands Missile Range, N.M.

The SSLT is a high energy laser, or HEL, system located at the High Energy Laser Systems Test Facility at White Sands Missile Range, N.M. The SSLT uses the technology from the Joint High Power Solid-State Laser, or JHPSSL, and the Pointer Tracker Subsystem Tactical High Energy Laser.

JHPSSL was built as a joint venture between SMDC and the Department of Defense High Energy Laser-Joint Technology Office, with support from the U.S. Air Force Research Laboratory. The laser was designed and built by Northrop Grumman Corporation at their Space Park facility in Redondo Beach, Calif., on an Army contract.

“The primary function of the SSLT is to collect lethality and beam

propagation data needed by military planners to validate directed energy models to help determine the next steps for developing laser systems for the battlefield and, eventually, provide this revolutionary capability for our Soldiers,” said Charles R. Lamar, SMDC Technical Center.

Lamar said high energy lasers offer the potential to defeat a number of targets of military interest including rockets, artillery, mortars, unmanned aerial vehicles, UAV-mounted sensors and cruise missiles.

“HELs were modeled and performed well in a recent Army Analysis of Alternatives,” said Lamar. “This AoA was the Integrated Force Protection Capability’s

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SMDC inspires future science leaders

Jason B. Cutshaw
SMDC Public Affairs

REDSTONE ARSENAL, Ala. – Approximately 70 local high school students visited the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Jan. 15 for the 13th annual Adventures in Engineering Day.

Aimed at high school juniors, the purpose of this event was to promote science and engineering disciplines as a career choice. It offered the students an opportunity to observe what engineers do on a daily basis, provided them with hands-on knowledge and encouraged their pursuit of a science.

“We brought our students last year and they loved it,” said Sherry Truitt, a Lexington High School teacher. “Because we are in a small city, the students are not exposed to something like this, and they don’t know what is out there. This is a great opportunity for them to see what the science and technology fields hold.

“The seniors, this year, really encouraged the students here today to come out and participate,” she added. “I think this is a wonderful opportunity for our children and I hope they continue this program.”

Participating in Adventures in Engineering were students and teachers from Westminster Christian Academy, Whitesburg Christian Academy, Grissom High School, Russellville High School and Lexington High School.



Photo by Jason B. Cutshaw

William Hankins, right, a junior at Lexington High School, fires at targets using programs designed by members of the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's Concepts Analysis Laboratory during Redstone Arsenal's Adventures in Engineering Jan. 15. Many organizations on the installation open their doors to local high school students to promote the study of science, technology, engineering and math.

“This is a great program; I love it! It’s a lot of fun to see what the Army is doing and also see the engineering opportunities I didn’t know existed,” said William Hankins, a Lexington High School junior. “It’s a lot of fun to be here. I am making a lot of career choices now for the future, and I would recommend

coming here to see this to anybody who wants to go into the engineering field.”

Students visited the USASMDC/ARSTRAT Technical Center Concepts Analysis Laboratory, where they witnessed several ongoing test

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Deadline for comments and submissions for the Feb. 13 issue is Feb. 7.

Please submit to Jason B. Cutshaw at Jason.B.Cutshaw.civ@mail.mil.

SMDC hosts Town Halls for command workforce

Carrie E. David
SMDC Public Affairs

REDSTONE ARSENAL, Ala. – The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's top leader addressed the workforce in dual town halls.

Lt. Gen. David L. Mann, USASMD/ARSTRAT commanding general, hosted the town halls for the command's workforce consecutively at headquarters on Redstone Arsenal and Peterson Air Force Base, Colo., Jan. 14 and 15.

During the town halls, the command's newest inductees into the Sergeant Audie Murphy Club were announced.

They are: Staff Sgt. Kyle Behrens, 53rd Signal Battalion; Staff Sgt. Patricia Young, 100th Missile Defense Brigade; Sgt. Kyler Colgrove, 53rd Signal Battalion; and Sgt. Jason Schlagel, 49th Missile Defense Battalion.

Also presented during the town



Photo by Carrie E. David

Ed Garcia, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Future Warfare Center, asks Lt. Gen. David L. Mann, SMDC commanding general, a question during the command's Redstone Arsenal, Ala., headquarters workforce town hall at the Von Braun III auditorium Jan. 14. An identical town hall was hosted for the command's Peterson Air Force Base, Colo., workforce Jan. 15.

halls were the command's 2013 Civilians of the Year. They are: Sharon Bobst, Technical Center, Support Staff; Gisele Wilson, Technical Center, Management; and post-

humously to Dr. Larry Altgilbers, Technical Center, Professional/Technical.

A number of other awards were presented. They are: Shanmukhan V. Chiyarath, 30 years of service; Raymond Steele, 30 years of service; Daniel Hannan, 30 years of service; Joyce Lenoir, Superior Civilian Service Award; Donna Kleefisch, Commander's Award for Civilian Service; Kelly Dimitri, Achievement Medal for Civilian Service; Valerie Calhoun, Achievement Medal for Civilian Service; Sgt. 1st Class William Rounds, Military Outstanding Volunteer Service Medal; Chaplain (Col.) Jack Shedd, Military Outstanding Volunteer Service Medal; Gordon Keene Jr., Certificate of Achievement for Patriotic Civilian Service; Diane Barker, three-star note; Dorothy Fitzpatrick, three-star note; Dennis Shirah, three-star note; Charles Cagle, three-star note; Jack Miller, three-star note; Matthew Eckert, three-star note; and Thomas Potter, three-star note.

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second increment. AoA which had, as its goal, the development of a capability to defeat RAM and UAVs. Not only were HEL weapons effective at engaging enemy threats but they were also projected to be cost effective.

"SSLT provides important weapon effectiveness information in support of HEL weapon system development with the ability to conduct HEL lethality and propagation experiments at weapons scale power level," he added. "These experiments include both static lethality experiments and

dynamic tests where flying targets are engaged and defeated by the laser system."

For more than 30 years, the Army and other DOD organizations have developed and tested a variety of directed energy devices, including both chemical and solid state lasers. High-power chemical lasers, such as THEL, proved to be successful in testing against RAM, but the use of chemical fuels would cause a large logistical burden for the Warfighter.

In 2005, the Army decided to focus on all-electric SSLs to the lower-cost high energy lasers as a path to

the future, with the only consumable being diesel fuel for electric generators to power the lasers.

"UAVs are widely proliferated on the modern battlefield. Enemy UAVs, whether armed or equipped with sensors, represent a significant new threat to our deployed forces," Lamar said. "HELs offer the potential to be a cost effective means of providing our armed forces with a revolutionary capability to engage the enemy and save Soldiers' lives. The data developed by the SSLT will help determine if HELs are ready to achieve this potential."

Prospect Hill rocks Marshall Islands

Carrie E. David
SMDC Public Affairs

KWAJALEIN ATOLL, Republic of the Marshall Islands. – The Quality of Life committee coordinated for the band Prospect Hill to rock the islands.

The band, expecting its fourth album to be released Aug. 28, performed three shows on Kwajalein and Roi-Namur from Jan. 17-20.

On Jan. 17, Prospect Hill performed on Roi-Namur for 40 people. Back on Kwajalein, the band performed Jan. 19 for about 200 people at the Veterans Hall American Legion Post #44 and Jan. 21 for seventh through 12th grade students at Kwajalein Junior/Senior High School.

“Performing tonight for all the kids at the high school on Kwajalein Island was amazing! You guys were great! Thanks for making our time out here amazing!” the band posted to their Facebook page following the high school show.

While on the island, the band also conducted a music writing workshop for about 30 students at the teen center.

On their final day on the island, the band met with U.S. Army Garrison-Kwajalein Atoll commander, Col. Nestor Sadler.

“The band was well received by all residents of Kwajalein especially the high school students, who were really excited about having the opportunity to personally meet with the members of the band,” Sadler said. “They are extremely humble young men; the



Photo by Timothy Roberge

The rock band Prospect Hill relaxes with high school students from Kwajalein Junior/Senior High School, Republic of the Marshall Islands, during a music writing workshop Jan. 21. During the band’s visit to RMI, they performed three shows including a special performance just for the students.

community was truly thankful to have them perform here on Kwajalein and Roi-Namur.”

Prospect Hill’s discography consists of “Prospect Hill,” “Out of the Ashes,” and “For the Lovers, the Haters and the Dead.” Their new album is titled “Impact.”

The band was sponsored by the Quality of Life committee. In March, the committee is hosting the Josh Logan Trio. Logan was one of the 12 finalists on the last season of NBC’s *The Voice*.

Reinforcing Soldier skills



Photo by Staff Sgt. Jason Pitre

Spc. John Capin, Engagement Control team leader, Detachment C, 1st Space Company, trains the detachment Soldiers on the evaluation and treatment of casualties at Osan Air Base, Korea, Jan. 16. 1st Space Company is part of 1st Space Battalion, 1st Space Brigade, which is one of two brigades that comprise the U.S. Army Space and Missile Defense Command/Armed Forces Strategic Command.

History: Operation Flintlock and Kwajalein history

Sharon Watkins Lang
SMDC command historian

D-Day for Operation Flintlock was 70 years ago tomorrow – Jan. 31, 1944. In the early hours of that winter morning, the 7th Infantry began its assault on Kwajalein while the 4th Marine Division came ashore on Roi-Namur, divided into two operational areas.

Within five days, the battle on these islands had concluded. While periodic conflicts on other islands in the atoll continued for three weeks, Operation Flintlock concluded Feb. 22 when Parry Island (Eniwetok) was declared secure.

Following World War I, the Japanese had assumed control of former German protectorates in the Pacific. These included what is now the Republic of the Marshall Islands. During this period, Kwajalein and Roi-Namur became important communications and logistical links connecting remote outposts to the homeland.

Commanded by Japanese Rear Adm. Michiyuki Yamada, Kwajalein Atoll in the Marshall Islands was the headquarters of the Japanese 6th Base Force. Described as “the hub of Japanese military activity in the Marshall Islands,” Kwajalein Atoll included an air base, which commanded all Japanese air forces in the Marshall and Gilbert islands, equipped to support 110 aircraft, a submarine base and four gun batteries and guard forces.

As the closest base to Truk and the supply line to the homeland, reinforcements and supplies regularly transited Kwajalein. Branches of the 4th Fleet were stationed there to supervise supply, transportation and technical construction. Kwajalein also served as a communications center. Distributed at posts across the area there were approximately 8,000 Japanese soldiers.

As the first planned attack on Japanese territory (lands held before the war) the Marshall Islands had symbolic meaning. The islands also had strategic value. For the United States and its allies, communications and logistics also made Kwajalein and the Marshall Islands an important stepping stone in the advance across the Pacific. Access to the Marshall Islands would improve communication and supply lines to Australia. In addition, an air base in the central Pacific would enable land-based aircraft to continue to provide support to an allied advance and to impede Japanese shipping.



Department of Defense photo

Kwajalein Naval Base constructed following the battle of 31 January -4 February. The U.S. Navy maintained an installation on Kwajalein until July 1964.

In December 1943, Adm. Chester Nimitz revised the invasion plan and focused all available forces on Kwajalein Atoll. Lessons learned from the fight to take the Gilbert Islands were implemented with Operation Flintlock with a number of innovations. For the first time in combat, an underwater demolition team composed of Army and Navy personnel, reconnoitered the beaches of Kwajalein Atoll. The attack would benefit from the maximum use of close air support and the early introduction of armor and artillery.

After an extended aerial campaign that saw hundreds of sorties and tons of bombs dropped on the islands, Operation Flintlock began with support from naval gunfire, the Marines attacked from the lagoon side of the islands.

Encountering only light resistance, Roi was secured by 5 p.m. The island of Namur, covered in heavy vegetation and home of the submarine base headquarters and more than 3,000 troops, was a different situation. The initial advance halted abruptly as a torpedo warhead storage area exploded showering the entire island with smoke and debris.

The delay caused by the explosion allowed the Japanese to organize a resistance that slowed the progression. As night fell, small groups launched attacks against the Americans dug in for the night. Supported with tanks and later half-tracks, the advance renewed the next

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SMDC remembers Dr. Martin Luther King Jr.

Carrie E. David
SMDC Public Affairs

REDSTONE ARSENAL, Ala. – Employees of the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's Redstone Arsenal headquarters hosted a ceremony to remember the legacy of one of America's most honored civil rights leader.

The event, which coincides with Dr. Martin Luther King Jr.'s birthday, took place at the Von Braun III auditorium Jan. 15.

"The observance of the legacy of Martin Luther King Jr. is very important in today's society because it focuses a part of this country's history that is a reminder of the struggles and then gains made to overcome issues our society faced with equality for everyone regardless of their race, color, gender, nationality or station in life," said Sgt. 1st Class Reginald White, USASMDC/ARSTRAT Equal Opportunity program manager. "It serves as a reminder that we all should continue to pursue 'The Dream' that Dr. King spoke about to live as brothers and sisters in our beloved communities."

During the ceremony, Dr. Horace Carney Jr., Alabama A&M University Choir director, led the choir as they performed a medley of songs.

The guest speaker, Herman "Buck" Watson Jr., practiced law for 52 years litigating civil, criminal and domestic relation matters. Watson grew up in Alabama during segregation and discussed with attendees some of his experiences with race matters



Photo by Carrie E. David

Dr. Horace Carney Jr., Alabama A&M University Choir director, leads them in a medley of songs during the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's Dr. Martin Luther King Jr. observance at the Von Braun III auditorium Jan. 15.

during that time. He continues to serve the community as an advocate for the expansion and promotion of effective and economical civil and criminal legal services for the poor and disadvantaged citizens of Alabama.

Juanita Sales Lee, chief, General and Administrative Law Division, SMDC, introduced Watson as the guest speaker.

"To move the country and Alabama forward, and to realize Dr. King's dream, conversations on crucial issues, such as race relations, the effects of slavery, etc., are needed," Sales Lee said. "Buck is comfortable having this conversation and hopes you will carry on the conversation and act on the philosophy of love."

King, both a civil rights activist and a Baptist minister, has had a lasting effect on race relations in the United States. In 1964, King received the Nobel Peace Prize at 35 years old. In 1968, King, while standing on

a balcony at a hotel in Memphis, Tenn., was shot and killed.

White talked about why it is important for the Army to observe King's birthday.

"Because of what Dr. King did and his philosophy, we should all be reminded that it takes self-involvement and sacrifice to be a change agent in race relations," White said. "It is important for the Army to observe Dr. King's birthday because it helps to reemphasize the diversity of the Army and how we operate as one unit in accomplishing our mission. We need to be an example to the rest of the country to show that racial inequality has no place in an efficient successful Army."

President Ronald Reagan signed the King Holiday Bill into law on Nov. 2, 1983, making the third Monday in January a legal federal holiday to honor King and his legacy.

Tech Center officer retires



Photo by Jason B. Cutshaw

Lt. Gen. David L. Mann, commanding general, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, pins the Legion of Merit on Lt. Col. Wilton Ransom, operations officer, SMDC's Technical Center, during Ransom's retirement Dec. 20 at the command's Redstone Arsenal, Ala., headquarters. Ransom retires with more than 27 years of service.

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morning. At 2:18 p.m., the island was declared secured.

The battle for Kwajalein began on the outer islands to create artillery fire support bases. On Feb. 1, six battleships and cruisers, supported by airstrikes from six aircraft carriers, began shelling the island as they moved to the lagoon side to prevent inter-island traffic.

On Kwajalein, American troops encountered fortified defensive positions, large underground shelters interconnected via trenches and underground tunnels. By the end of the first day, however, initial objectives had been met. Throughout the night the Japanese conducted counterattacks.

With the airfield as their next objective, the American advance renewed in the morning. Unexpectedly heavy resistance and delays in artillery and air support however stalled the advance. Despite heavy losses, the Japanese again conducted a series of counterattacks throughout the night. On the morning of Feb. 3, the Americans launched “a vigorous attack.”

As they approached the “Admiralty Area” interspersed among the wrecked buildings, they encountered a series of heavily fortified underground shelters, blockhouses, pillboxes and trenches that had survived the intensive shelling. Each would have to be inspected and neutralized before the unit could advance. This area was the scene of intense resistance as units were separated amidst the wreckage and dense jungle.

With the momentum lost, the units, dispersed in small groups, dug in for the night. During the night

the Japanese launched grenade and banzai attacks and a concentrated attack by infantry unit in the early morning. With only 1,000 yards remaining to capture the island, the American final assault began at sunrise. The disorganized American units were initially met by strong resistance.

As the day progressed, Korean laborers and Japanese soldiers, having survived without food and water for four days, surrendered in increasing numbers. The last vestiges of resistance however did not end until 7:20 p.m., on Feb. 4, 1944.

As one aerial observer noted, “the entire island [Kwajalein] looked as if it had been picked up to 20,000 feet and then dropped.” After the battle, the islands were bulldozed to eliminate craters, tunnels and debris and to prepare for construction of the new American naval base. It is said that one lone palm survived the battle and its aftermath on Kwajalein Island.

This year – 2014 – marks the 50th anniversary of the taking of Kwajalein. The Reagan Test Site, located on Kwajalein has been a part of this command since July 1964.

To celebrate the occasion, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Historical Office will develop a series of articles devoted to the history of the RTS, with each month devoted to a different aspect of the development and evolution of Kwajalein and its missions over the past half century.

SMDC program analyst retires



Photo by Dottie White

Marty Sergeant, director, Reagan Test Site Directorate, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, presents the Achievement Medal for Civilian Service to Alameida Green, RTS program analyst, during her retirement Jan. 23. Green retires with 31 years of federal service.

Program analyst retires



Photo by Carrie E. David

Richard P. De Fatta, director, Emerging Technology Directorate, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, pins the Achievement Medal for Civilian Service on Vernal "Bunnie" Scales, a program analyst with SMDC's Technical Center, during her retirement Jan. 28 at the command's Redstone Arsenal, Ala., headquarters. Scales retires with 30 years of federal service.

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programs and learned about various school and employment programs available.

"Adventures in Engineering has been successful because it gives high school students a chance to see some real work going on," said Kevin Nash, CAL supervisor. "We enjoy it. It allows us to reach out and one of our objectives is to try to get young people interested in engineering and science.

"We are trying to break some stereotypes and even celebrate some of the stereotypes that go along with engineering," he continued. "We are glad the teachers took the time to bring the students here and maybe one day those students will remember us and look us up."

Besides their tour of SMDC, they also visited the Missile Defense Agency, Missile and Space Intelligence Center, NASA, U.S. Army Aviation and Missile Research, Development and Engineering Center Prototype

Integration Facility, AMRDEC Software Engineering Directorate and University of Alabama in Huntsville Aerophysics Research Center.

The Junior Achievement of Northern Alabama coordinated students' participation, while the Air Space and Missile Defense Association, the National Defense Industrial Association and Calhoun Community College hosted the event.

"This is really interesting," said Abby Sims, a Lexington High School junior. "The Army is doing a lot of things I didn't know about. It is good to see there is a lot of different scientific and engineering research going on here.

"If a student is interested in physics and engineering I recommend they come check this out," she added. "It is very interesting, and it allows you to have more options when considering a career."