

DECEMBER 5, 2013

A Space & Missile Defense NewsWire

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SMDC helps WASP fly



Courtesy photo

Bravo Company, Special Troops Battalion, 2nd Brigade Combat Team, 1st Armored Division Soldiers help prepare the Winch Aerostat Small Platform, or WASP, for launch. The WASP is a mobile, tactical-sized aerostat capable of carrying a variety of payloads in support of military operations. See full story on Page 4.



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U.S. Army Space and Missile Defense Command/Army Forces Strategic Command publishes the Eagle bi-weekly as a digital newswire. The newswire is an authorized publication of the USASMDC/ARSTRAT in accordance with AR 360-1. The SMDC commanding general has directed that the publication of this periodical is necessary in the transaction of the public business as required by law. The views and opinions expressed in the Eagle are not necessarily those of the Department of the Army or SMDC. The Eagle is intended to inform members of the command on happenings within the Army space and missile defense community. Distribution is made to the service members, civilians and contractors, and to the general public.

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DIRECTOR, PUBLIC AFFAIRS

Marco A. Morales

EDITOR-IN-CHIEF

Jason B. Cutshaw

COMMAND INFORMATION

Carrie E. David

CONTRIBUTORS

Staff Sgt. Benjamin Crane

John H. Cummings III

DJ Montoya

Capt. Ryan Richard

Dottie White

Command team serves those who serve



Courtesy photo

Company A, 53rd Signal Battalion's 1st Sgt. Lawrence Kidd, left, and Capt. Mark Anderson, commander, serve lunch to Sgt. Benjamin Jurisch, also with Co. A, as well as all service members on Fort Detrick, Md., during an early Thanksgiving meal Nov. 21. Kidd and Anderson joined the other command teams on the installation in serving for the special event.

Signal Soldiers help 'Army beat Navy'



Courtesy photo

Two Company A, 53rd Signal Battalion Soldiers, Spc. Kenneth Allen and Staff Sgt. Ruben Martell, receive the trophy with the rest of the Army team for winning the Army versus Navy flag football game Nov. 22 at Fort Detrick, Md. The final score for the game, which takes place annually, was 32 to 19.

Fox News spotlights Alaska's devoted 300

Deborah Coble
Fort Greely Public Affairs

FORT GREELY, Alaska – Soldiers from the 49th Missile Defense Battalion got their moment in the spotlight this November.

After months of preparation, coordination and training, the Fox Files news coverage of the 49th MDB and their vital strategic homeland defense mission was documented.

In July, Cyd Upson, a Fox Files news representative contacted the U.S. Army Pacific Command Public Affairs Office requesting an interview and tour of the Fort Greely Missile Defense Complex. The combined interview and tour is scheduled to run multiple times in the future on the Fox News Channel to give their viewers a chance to experience the preparation that goes into protecting the nation against a ballistic missile attack.

The story will showcase Soldiers, and introduce the command's mission, capabilities, and the many responsibilities that fall within homeland defense.

"The planning was extensive but necessary to give the crew documented footage that will focus on how our Soldiers serve in and around the missile defense complex 24/7/365 to remain vigilant and ready to defend our country from a ballistic missile attack," said Lt. Col. Michael Hatfield, 49th MDB commander. "The visit covered a period of about two days and involved support from the Fort Greely Installation Public Affairs Office and Missile Defense Agency among a few.



Photo by Deborah Coble

Griff Jenkins, left, Fox News correspondent, braves the sub zero temperatures in remote Fort Greely, Alaska, to interview Lt. Col. Michael Hatfield, 49th Missile Defense Battalion commander on the Missile Defense Complex. Hatfield expressed his confidence in his Soldiers and the Ground-based Midcourse Defense System, and his pride in his command's mission, capabilities and the responsibilities that fall within homeland defense.

"Their support was an integral part of making this visit a great success," he added. "With planning complete, the news team was presented with concepts that supported their intended theme, 'Three-hundred Soldiers protecting 300 million.'"

Fox News/Fox Files producer, Greg Johnson, along with Griff Jenkins, Fox correspondent, and their freelance news crew arrived early Nov. 14, despite icy fall season driving conditions, anxious to begin videorecording. Over the next two days, Soldiers from the 49th MDB and their mission were showcased in numerous interviews, briefings and presentations.

Before the visit, Soldiers and key leaders underwent media training. The training was provided by Maj. Mike Odgers, 49th MDB, and the installation public affairs office.

The main point of media training is to get the participant, in this case the Soldiers, comfortable interacting with the media. It can be a nerve-wracking experience and the more time the participant has in front of the camera doing "on camera" interviews the easier the process becomes.

Odgers said rehearsals or dry runs were also performed and judging on the success of the visit...well worth the extra effort.

"The interview practice portion of the media training gave the prospective interview subjects a chance to experience the pressure of being put on the spot as well as provide them an opportunity to practice and get more comfortable, or more accurately, less uncomfortable

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WASP takes flight towards future operations

Jason B. Cutshaw
SMDC Public Affairs

REDSTONE ARSENAL, Ala. – The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command is working to develop a new platform to help troops in the field have a tactical edge while communicating.

The Winch Aerostat Small Platform, or WASP, is a mobile, tactical-sized aerostat capable of carrying a variety of payloads in support of military operations.

An aerostat is a tethered craft that remains aloft primarily through the use of buoyant lighter-than-air gases, which impart lift to a vehicle with nearly the same overall density as air.

Aerostats are so named because they use “aerostatic” lift, which is a buoyant force that does not require movement through the surrounding air mass.

Common applications include network communications and intelligence, surveillance and reconnaissance.

WASP leverages well-understood aerostat technology to elevate network payloads to an advantaged height to enable persistent network connectivity while reducing risk to units conducting retransmission missions.

It is controlled via a launcher operated by Soldiers possessing common Soldier skills.

“The system was chosen to participate in the Network Integration Evaluation 14.1 as a ‘System Under Evaluation,’” said Jeff Faunce, deputy, Experiments Division, US-ASMDC/ARSTRAT Battle Lab.



Courtesy photo

The Winch Aerostat Small Platform, or WASP, prepares for launch. The WASP is a mobile, tactical-sized aerostat capable of carrying a variety of payloads in support of military operations.

“WASP was employed in NIE 14.1 by four signal Soldiers supporting live maneuver elements. The primary mission of WASP was to enable network extension by elevating radio payloads to altitudes up to 1,000 feet. WASP operated from fixed sites, executed jump operations, and participated as a live operational asset that could be taken out by opposing forces, or OPFOR, engagement.”

WASP was designed and built by Lighter Than Air Systems, Jacksonville, Fla., and is designed to be operated from fixed sites and remote locations.

“SMDC has done initial coordination with the product manager – Meteorological and Target Identification Capabilities, or PM-MaTIC,” Faunce said. “We have also coordinated with both the Signal Center of

Excellence and Aviation Center of Excellence regarding participation in the NIE – particularly related to extending the network from elevated and aerial platforms.”

Faunce said the organizations leading the NIE are known as the Triad. The Triad consists of U.S. Army Training and Doctrine Command – Brigade Modernization Command; assistant secretary of the Army (Acquisition, Logistics, and Technology) – System of Systems Integration Directorate; and the Army Test and Evaluation Command.

“WASP has been a product of the U.S. Army Space and Missile Defense Battle Lab,” Faunce said. “Personnel from the SMDC Technical Center also assisted in preparing, training, and supporting the system at NIE 14.1.

“SMDC personnel conducted New Equipment Training for two weeks in August followed by support to the field communications exercise and pilot tests for two additional weeks in October,” he added. “The NIE execution phases were conducted Nov. 4-15.

Faunce talked about WASP and SMDC’s role in its development, and why it is important to the command and ultimately Soldiers in the field.

“WASP was developed in cooperation with Lighter Than Air Systems who took design input from SMDC to fabricate a system conducive to supporting Army ground maneuver at the tactical level,” Faunce said. “WASP’s importance rests in its ability to extend the range of Army radios by elevating them to heights

'Space Kits' developed to transform training

John Abbatiello and
George Stamper
SMDC G-3 TREX Division

COLORADO SPRINGS, Colo. – Modern Army operations require space capabilities across all warfighting functions – mission command, movement and maneuver, intelligence, protection, fires, and sustainment – in all operational environments – normal, enhanced, and contested – down to the lowest echelons.

Recognizing that the Army has transitioned from a space-enabled force to a highly space-dependent force, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's G-33 Training, Readiness, and Exercises Division and the Future Warfare Center Battle Lab are working together to improve space training across the force. Together they are developing and operationalizing a series of three space training kits.

The first kit addresses the normal operational environment. It includes a set of five Android tablets loaded with unclassified space applications and other space knowledge resources. These "iSpace" applications, developed in collaboration with Air Force Space Command, provide current and relevant space information such as GPS-accuracy and optimum look angles to satellites.

Space professionals and enablers at operational headquarters will be able to use the tablets for Warfighter education and training, and can employ them for operational planning and mission execution purposes. Kit 1, though, will be



Courtesy photo

Col. Eric Handy, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command G-3 Training, Readiness and Exercises Division, briefs Maj. Gen. Patrick Donahue, U.S. Army Africa commanding general, and key leaders on the Army Space Training Strategy and supporting space kits.

beneficial for improving space awareness and understanding at all echelons, especially at the brigade and below, where space training is less available.

Kit 2 is the "enhanced capability" package containing the kinds of equipment SMDC can provide to Warfighters that is not standard issue. Currently, Kit 2 includes three experimental sets of gear for enhanced situational awareness and force protection, ideally suited to small units operating in remote locations:

(1) **The Global Visualization Information System** – provides an encrypted, IP-based, commercial satellite communication-enabled personnel situational awareness system that allows a central hub to track individual users

with map overlays, and permits individual users to text message and send picture uploads between components. The Simply Aware application created at the Battle Lab fuses GVIS-networked information into a common operational picture;

(2) **The Weather Rock** – is a ground-based weather sensor that provides wind, humidity, temperature, and lightning detection data through commercial satellite communications to GVIS and the Simply Aware application; and

(3) **The Self Powered Ad-Hoc Network** – is a web of self-powered sensors (seismic and acoustic detectors) that distinguishes between humans, vehicles and animals. Its data are transmitted via wireless

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Space Soldier serves as hero while off duty

Jason B. Cutshaw
SMDC Public Affairs

FORT DETRICK, Md. – Even though a Soldier's work day may end, his heroism is always on duty.

After completing a 12-hour duty day, Spc. Jesse R. Collins, a satellite controller for A Company, 53rd Signal Battalion (SATCON), became a first responder for a traffic accident he encountered near his home in late September.

The accident was a head-on collision on Maryland Route 26 near Libertytown, Md. Collins quickly assessed the danger that existed for traffic being unable to stop, due to the wreck being around the bend, and used his own vehicle as a visual to stop cars.

"In regards to my involvement in the accident that happened in front of my home, I would say this... If one of my family members was involved in an accident I would hope someone would care enough to stop and attempt to help out," Collins said. "We as Soldiers serve the people of the United States and live the Army values. I will always place the mission first. I will never accept defeat. I will never quit. I will never leave a fallen comrade."

Collins checked on the wellbeing of both vehicles' occupants and rendered aid. Additionally, he updated emergency services via cell phone as they were en route to the crash, ensuring emergency personnel were able to prepare and respond appropriately to the accident.

Once Collins completed surveying all personnel and determined no critical injuries were sustained, he



Courtesy photo

Spc. Jesse R. Collins, a satellite controller for A Company, 53rd Signal Battalion (SATCON), working on one of his unit's modernized enterprise terminal. After completing a 12-hour duty day, Collins became a first responder for a traffic accident he encountered near his home in late September.

moved into securing travel lanes around the crash site to keep traffic moving safely.

"Here you have people that were in a traumatic circumstance and no one was there to help. I would not leave those fallen individuals," Collins said. "I assessed the individuals involved and after determining that there were not life-threatening injuries, I moved to traffic control as this could have resulted in further injuries due to the road on which the accident occurred. I did not leave this post until accident was cleared and all individuals were removed from the scene."

Even after the police and rescue personnel arrived, Collins stayed at his post so they could attend to the crash victims, conduct the accident investigation and clear the road of the vehicles.

One of the drivers, Amy Weed, shared her thoughts on the Soldier's leadership following the accident.

"We live in a world where too often we wonder why people do not do the right thing," Weed said. "Judging from the limited time I spent observing Spc. Collins, I doubt anyone has ever wondered that about him. I thank Spc. Collins and all members of the 53rd Signal Battalion for their service."

Collins, a native of Mt. Airy, N.C., enlisted in the Army in September 2008 and became a satellite controller. He is certified as a combat life saver, and is qualified to operate the Mine-Resistant Ambush Protected Vehicle. In August 2012, he joined A Company, 53rd Signal Battalion (SATCON) at Fort Detrick, where he is currently stationed.

History: The Missile Defense Act of 1991

Sharon Watkins Lang
SMDC command historian

In 1992, the then U.S. Army Strategic Defense Command was going through significant re-organization. While several factors played into this situation, a key event took place on Dec. 5, 1991, when President George H.W. Bush signed into law H.R. 2100 the National Defense Authorization Act, for fiscal years 1992 and 1993. The section that specifically addressed missile defense was known as the Missile Defense Act of 1991.

In keeping with Bush's State of the Union address in January 1991, the new act addressed the "limited ballistic missile threats, including accidental or unauthorized launches or Third World attacks" rather than a threat posed by the Soviet Union.

The Missile Defense Act of 1991 tasked the Department of Defense to "aggressively pursue the development of advanced theater missile defense systems."

These "deployable and rapidly relocatable" systems would provide a defense for forward-deployed and expeditionary American forces. The goal was to select and deploy these systems by the mid-1990s. To achieve this end, the theater and tactical missile defense program elements were merged. At the same time, the act encouraged cooperation with friendly and allied nations.

Specific requirements were also provided for national missile defense, or NMD. The DoD was to "develop for deployment by the earliest date allowed by the availability of appropriate technology or by fiscal year 1996 a cost effective,



Department of Defense photo

A Payload Launch Vehicle carrying a prototype exoatmospheric kill vehicle is launched from the Kwajalein Missile Range for an intercept of a ballistic missile target over the central Pacific Ocean.

operationally effective, and ABM Treaty-compliant antiballistic missile system at a single site as the initial step toward deployment of an antiballistic missile system."

This initial deployment of an NMD system would incorporate 100 ground-based interceptors, the design to be determined by competition and down select, a fixed, ground-based anti-ballistic missile battle management radar. It would also make optimum use of space-based sensors, to include sensors capable of cueing ground based interceptors and providing initial targeting vectors and "other sensor systems that also are not prohibited by the ABM Treaty."

The act further specified that "not more than \$40 million may be used to conduct studies, site surveys, technical assessments, analysis and refurbishment to remove the Grand Forks, N.D., ABM site

from its deactivated status." This feature was particularly significant to the command as it would again assume responsibility for the former Stanley R. Mickelsen Safeguard site in North Dakota.

Follow-on technologies and research and development were required, with particular attention given to the "promising" space-based Brilliant Pebbles program and a potential for global defenses against ballistic missile attacks. Other program elements focused on the limited defense system; theater missile defenses; space-based interceptors; and research and support activities.

To develop the envisioned missile defense system, Congress urged the president to initiate negotiations on the ABM Treaty. Among the topics for discussion were increasing the number of ABM sites and interceptors allowed and providing for "increased flexibility" for technology development in advanced ballistic missile defenses.

Finally, as increased emphasis was placed on the potential threat to the theater and Congress advised that ABM negotiations clarify the distinction between TMD and NMD systems and their components.

To accomplish the initiatives under the five program elements incorporating research, development, test and evaluation, Congress authorized for fiscal year 1992 funds not to exceed \$4.6 billion for the revised Strategic Defense Initiative to develop a new SDI that could protect the nation, American forces overseas and friends and allies from the threat of ballistic missiles regardless of their source.

Team tracks recently launched ORSES satellite



Photo by Carrie E. David

Part of the Operationally Responsive Space Enabler Satellite, or ORSES, team track their satellite on Nov. 20 that was launched the day before from NASA's Wallops Flight Facility in Virginia. The team members shown are from front to back: Ryan Wolff, general engineer; Yashar Marashi, electrical engineer with Vulcan Wireless; Chris Allison, radio frequency technician with Vulcan Wireless; Tammy Cottam, general engineer; and Mark Ray, general engineer. Wolff and Ray work for the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Technical Center's Space Division, and Cottam works for USASMDC/ARSTRAT's Concepts Analysis Laboratory. ORSES is a 3U CubeSat designed to provide communications and data capabilities for underserved tactical users. It is physically based on the SMDC-ONE satellite that flew in December 2010 and on the OUTSat mission with an upgrade communication radio and encryption. The ORS office independently developed the Vulcan Wireless Software Defined Radio, or SDR, and the Raytheon Gryphon Type-I NSA certified encryption for first flight demonstration on this mission. The SDR and Type-I encryption will provide significant performance and security upgrades to any future CubeSat mission.

Naval School lauds Army Space Soldier

Courtesy photo



Maj. Brian D. Slosman, an Army FA40 officer currently assigned to Joint Functional Component Command for Space as the Space Control Branch chief in the Unified Space Vault of the Joint Space Operations Center, receives a Master of Science in space systems operations (with distinction) and electrical engineering from the Naval Postgraduate School in Monterey, Calif. He is the winner of the Admiral William Adger Moffett Space Systems Award, which is presented annually to an outstanding graduate of the space systems curricula based on contributions to the application of emerging space technologies, overall academic excellence, applicable extracurricular activities and career potential.

1st Space Brigade Soldiers earn Joint Service Achievement Medals



Col. James R. Meisinger, left, 1st Space Brigade commander, and Command Sgt. Maj. Thomas L. Eagan, right, brigade command sergeant major, present Staff Sgt. Jason P. Miller his Joint Service Achievement Medal for his work during the 2012 Republican National Convention in Tampa Bay, Fla., from July 9, 2012, to Sept. 7, 2012. Miller helped coordinate the programming, installation, and maintenance of a radio network consisting of more than 125 radios, antennas, and associated equipment within the Multi-Agency Command Center consisting of more than 100 federal, state and local law enforcement and emergency response teams.



Photos by DJ Montoya

Sgt. 1st Class Gabriel A. Cardenas displays his Joint Service Achievement Medal for his work during the 2012 Republican National Convention in Tampa Bay, Fla., from July 9, 2012, to Sept. 7, 2012. Cardenas helped coordinate the programming, installation, and maintenance of a radio network consisting of more than 125 radios, antennas, and associated equipment within the Multi-Agency Command Center consisting of more than 100 federal, state and local law enforcement and emergency response teams.

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with a camera focused on them,” said Odgers. “Few people get the opportunity to do on-camera interviews. And, even for those that do so regularly, it can be very intimidating.”

Never having been to Alaska, Jenkins and Johnson witnessed the rugged environment and all that the Soldiers go through to maintain unit readiness despite the challenges that exist.

The news crew received an off-camera overview of key components of the Missile Defense Agency’s role in support to the Warfighter as well as an on-camera interview provided by both Col. Edward

Hildreth, 100th Missile Defense Brigade commander, and Hatfield, on their mission and Ground-based Midcourse Defense architecture.

Once the crew had a general concept of ground-based interceptors and the exo-atmosphere kill vehicle, they proceeded out to the missile defense complex. The tour of the MDC gave the news crew a first-hand look at a typical day-in-the-life of a 49th MDB Soldier to include one-on-one interviews with a military police unit. They covered aspects of job duties, training requirements, and the difficulties they faced living in an area so remote with extreme weather conditions.

Fox News was presented with opportunities to see a guard mount change, an unclassified GMD systems trainer demonstration, a ride along with a military police patrol and a great look at what it is like for Soldiers living in Alaska while highlighting their strategic mission.

“This is a fantastic opportunity for all of us,” said Sgt. 1st Class Jeremy Christensen, 49th MDB. “We work so hard for so long it’s nice to be recognized. It’s been great. We have a tremendous amount of pride and camaraderie. ‘Three hundred protecting 300 million’...it really is something to be extremely proud of.”

Deadline for comments and submissions for the Dec. 19 issue is Dec. 13.

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

State recognizes SMDC for inventions, patents

Jason B. Cutshaw
SMDC Public Affairs

REDSTONE ARSENAL, Ala. – U.S. Army Space and Missile Defense Command/Army Forces Strategic Command was recently recognized by the Economic Development Partnership of Alabama for its role in moving the state forward as a leader in research and development.

USASMDC/ARSTRAT was recognized Sept. 27 during the third annual Alabama Launchpad Innovation and Entrepreneurship Conference in Hoover, Ala.

“The U.S. Army was recognized by the Economic Development Partnership of Alabama at the conference as one of the top 10 patent producers in the state of Alabama for the time period, contributing to the state’s innovation economy,” said Susan D. McRae, SMDC Office of Research and Technology Applications. “SMDC/ARSTRAT patent producers noted were: Jeff Craver, Pete Kirkland, Dimitrios Lianos, Dr. Bob McMillan, Kevin Nash, and Dr. Mark Rader.

“I am very proud of all of our past inventors over the past 40 years, not just this particular group,” she added. “Because not only have most of them created their inventions and associated patent documentation on their own personal time, but they have also selflessly assigned all the invention rights to our command and the government as a whole. Technology development is really the lifeblood of our command; it’s what makes a difference and gives our Soldiers the edge, and we should never forget that.”

Angela Wier, an EDPA vice president, said the awards were created to recognize the state’s start-ups, investors, researchers, incubators and entities that patent their inventions because they collectively create thousands of high-wage jobs. During the ceremony, the EDPA presented 82 awards.

“In Alabama, we do a very good job celebrating the recruitment of industry into the state and the expansion of existing businesses,” Wier said. “We recognize that we have a diverse base of technology-rich small companies that collectively create quality jobs for Alabamians. Often, they are off the radar. We want to put the contributors to Alabama’s innovation economy on everyone’s radar.

“The conference is about learning to celebrate the small



Courtesy photo

The 2013 Economic Development Partnership of Alabama statewide patent award recipients include, from left, in the front row: Steve Cornelius, The U. S. Army Aviation and Missile Research Development and Engineering Center, or AMRDEC; Art Tipton, patent presenter from Southern Research Institute; Cindy Wallace, AMRDEC; John Weete, Auburn University Research and Technology Foundation; and Glyn Agnew, AT&T. In the back row are Kevin Schneider, ADTRAN; James McGroary, NASA; Dave Winwood, University of Alabama at Birmingham Research Foundation; Susan McRae, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command; and Mark Roberts and Larry Fullerton, Correlated Magnetics Research.

successes that collectively drive an innovation economy,” she added. “There are many players who are important to the innovation economy, and we are trying to make sure we highlight their good work and draw attention to it,”

After the ceremony McRae spoke about SMDC leadership’s support as the command moves into the future.

“I’m also extremely proud of our patent attorney, Joan Gilsdorf, who works tirelessly with our inventors to advise, assist with the completion of documentation, and create meaningful additions to our intellectual property available for licensing,” McRae said. “We are lucky to have such a dedicated and intelligent person in our workforce.

“Mr. (Ronald E.) Chronister, (SMDC deputy to the commanding general) has signature authority for all of SMDC/ARSTRAT’s technology transfer activities, which includes oversight of the command’s intellectual property portfolio,” she added. “He fully recognizes the importance and contributions of these inventors to our command process, and applauds their individual success.”

Space Soldier earns degrees, award for academic excellence

Courtesy photo



Maj. Steven R. Crews, far right, an Army FA40 officer, was awarded Master of Science in astronautical engineering (with distinction) and mechanical engineering (with distinction) degrees from the Naval Postgraduate School in Monterey, Calif. He was the winner of the Space Systems Engineering Award for Academic Excellence, presented annually to an outstanding student in space systems engineering based on grade point average, thesis, and curricular and extracurricular activities. Crews received an Outstanding Thesis Award for his master's thesis, "Techniques for Increasing Slow Performance of Reaction Wheel Systems."

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network and commercial satellite communications providing critical force protection alerts to users on the GVIS network.

All of the Kit 2 is commercial off-the-shelf and unclassified equipment, and can be left behind with coalition partners, foreign nationals, and non-governmental organizations. The 10th Special Forces Group worked with the Battle Lab to define the requirements and test the prototype.

One Special Forces Soldier said that the "sub-components supplied with the GVIS system proved to be extremely high in quality and methodically tailored to meet mission requirements. Durability and functionality exceeded common program of record quality."

The third kit is designed to simulate contested space operational environments for improved training at home station and at combat training centers. The first phase provides short range, low power GPS jamming and jamming emulation ideal for small unit training sessions. Kit 3 can create the actual effects of jamming on individual Defense Advanced GPS receivers, for example, and other space-enabled equipment used by Soldiers in the field on a daily basis.

Trainers can review mitigation tactics and techniques with Soldiers and demonstrate the effectiveness of their combat procedures. Phase two will incorporate interference of satellite communications. These training tools and techniques are critical to keeping combat units prepared for modern warfare in contested space operational environments.

Leaders at the 4th Infantry Division at Fort Carson, Colo., and at the National Training Center at Fort Irwin, Calif., are taking steps to integrate space training and the space kits into their programs. Also, in early September, representatives from G-3 TREX, the Battle Lab, and the Army Space Personnel Development Office visited U.S. Army Africa headquarters in Vicenza, Italy, to brief the commanding general and his staff on the space capabilities available to them, particularly for the security assistance mission.

USARAF's leadership decided to employ Kit 2's situational awareness capabilities, finding them ideally suited to the needs of units down range.

"The GVIS server will be tremendous value added for the mission command of small teams in Africa and, just as importantly, for their force protection," said Col. Marcus F. De Oliveira, USARAF's assistant chief of staff, G-3/5/7.

According to Col. Eric Handy, G-3 TREX division chief, the space kits are beginning to make their mark across the Army.

"The kits and the improved space training they support will provide our Army's Soldiers with critical knowledge of what space does for them and how to mitigate the challenges of a contested space environment, down to the last tactical mile," Handy said.

Through a collaborative effort across many commands and mission areas, the integration and improvement of space training, aided by resources like the space kits, will help ensure Soldiers maintain warfighting excellence for the 21st century.

LTG Mann views USS Cole capabilities

By *USS Cole Public Affairs*

NORFOLK, Va. (NNS) – USS Cole (DDG 67) hosted Lt. Gen. David L. Mann, commanding general, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command and Joint Functional Component Command for Integrated Missile Defense, Nov. 21.

Mann was aboard the ship for a ballistic missile defense demonstration and tour.

“I’m so excited for my sailors to show off their ship,” said Cmdr. Dennis Farrell, Cole’s commanding officer. “It is important to show the capabilities of an AEGIS BMD ship and how we fit into the Ballistic Missile Defense System.”

The BMDS defends against all ranges of ballistic missile threats. The command’s location, in Schriever Air Force Base, Colo., allows JFCC IMD to leverage the existing infrastructure and its strong partnerships to execute IMD planning and operational support responsibilities.

This modern defense network is expanding to include radars and other sensors that feed information from the air, land, sea, and space environments to battle management centers that can direct interceptors to targets.

While touring the ship, Mann commented on the level of responsibility throughout the crew, evident in even the most junior sailors, and how proud they were of their equipment. As he observed Cole’s sailors exhibit



Photo by USS Cole Public Affairs

Lt. Gen. David L. Mann, commanding general, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, left, is briefed on the torpedo tubes aboard the USS Cole by Petty Officer 3rd Class Ricky Henson, fire controlman, and Petty Officer 2nd Class Robert Briscoe, fire controlman, Nov. 21.

their BMD skills, he remarked on their training and techniques.

“It’s absolutely amazing what a great capability Cole brings to the fight,” Mann said.

Cole is an Arleigh Burke-class guided-missile destroyer homeported out of Norfolk, Va., and is the second ship to hold the name. The current ship is named after Marine Sgt. Darrell S. Cole, who was posthumously awarded the Medal of Honor for his “conspicuous gallantry and intrepidity” and “stouthearted leadership in the face of almost certain death” during World War II.

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eight to 10 times that of the existing Army tower capability. This enables increased operational dispersion and supports ‘connected maneuver’ – the flexibility to operate at extended distances yet remain connected to the network.

“Unlike other aerostats, WASP was operated by Soldiers directly in support of tactical maneuver,” he added. “Existing capabilities are not only much larger but are also much less mobile and operated by civilian contractors. Adding a tactical-sized

aerostat to the Army inventory potentially represents an inexpensive solution to extend the Army network to the tactical edge without the need for additional Soldiers or the expense and logistics associated with contractors on the battlefield.”

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