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The Eagle

U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command

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SMDC/ARSTRAT headquarters transfers to Redstone Arsenal

By Dottie White, Editor, *The Eagle*, and Giselle Bodin, SMDC/ARSTRAT Public Affairs

REDSTONE ARSENAL, Ala. — A significant event in the history of the U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command took place June 26 with the official transfer of its headquarters from Arlington, Va., to Redstone Arsenal, Ala., in a ceremony held at the Bob Jones Auditorium here.

This move was mandated by the 2005 Base Realignment and Closure (BRAC) for reshaping the Defense Department's infrastructure and force structure.

"Today, BRAC becomes a reality as we start a new chapter in the life of the Space and Missile Defense

Command," said Lt. Gen. Kevin T. Campbell, commanding general. "Today, we continue to build on the bonds formed after almost 50 years of service to our nation."

SMDC/ARSTRAT will move 180 positions to Huntsville with this transfer. Thirty-three employees are moving, while the remaining 147 positions will be left to fill.

"Today's ceremony marks two important events in the life of an Army unit: the assumption of duties by our new command sergeant major and the uncasing of our colors," said Campbell. "Both events are rich in tradition."

Campbell welcomed Command Sgt. Maj. Ralph C. Borja and his wife Nguyet to the command.

Campbell spoke highly of

See *Uncasing* on page 12



Photo by Dottie White

SMDC/ARSTRAT Command Sgt. Maj. Ralph C. Borja, left, and Lt. Gen. Kevin T. Campbell uncasing and unfurl the unit colors during a ceremony on Redstone Arsenal, Ala., June 26.

Charlie Company creates safety campaign



Photo by Sharon L. Hartman

Staff Sgt. Mark Shane of the G6 takes safety seriously as he commutes to and from work on his bicycle.

By Capt. Andre Reed
Commander, Charlie Company,
53rd Signal Battalion

LANDSTUHL, Germany — Everyone has different lifestyles. Some lifestyles involve mountain climbing, skiing, scuba diving and a myriad of things that would give Evel Knievel a run for his money.

One lifestyle that Soldiers have become very familiar with in the Army is the safety lifestyle. Yes, that's right, safety is a lifestyle. We as individuals can do so much to ensure our own safety. Safety becomes a lifestyle when it becomes second nature to fasten your seatbelt or to grab a reflective vest and a helmet when you go bike riding.

We at Charlie Company, 53rd Signal Battalion (SATCON), started our own safety campaign called "I Can Save My Own Life!" This campaign is very basic and simplistic in that it gets Soldiers to take initial responsibility for their own safety.

Most of the time Soldiers cannot determine when an accident will occur, otherwise it wouldn't be called an accident. Accidents are unplanned mishaps that, although they cannot be prevented, can be mitigated. "I Can Save My Own Life" gets

Soldiers to think about those steps to mitigate accidents.

For example if a Soldier is riding his bicycle without a helmet and gets a flat tire, he may lose control and flip over the handle bars. Without a helmet, he could suffer a massive debilitating head injury. If he can save his own life by wearing a helmet, he has just mitigated that injury from a possible massive head injury to perhaps a less severe concussion. Although he sustained an injury, it was not as severe as it could have been.

Safety is something leaders and Soldiers should pay attention to at all times. Completion of the mission relies on safety. Every activity, training exercise and trip should go through the composite risk management process. The first factor in risk management is the individual. Each person can do more to save his own life than can anyone else.

Safety is one of our highest priorities at Charlie Company. It is unacceptable to lose life or limb because risks were not mitigated properly. Safety is one area we will not compromise. Always do the right thing, and remember that whenever you compromise safety you create a new standard that jeopardizes lives.

The Command Corner

With the celebration of the Army's birthday on June 14, it is appropriate for us to pause and reflect on the reasons for its creation 232 years ago. It is especially important to do so when we have more than 256,000 Soldiers deployed or forward stationed in nearly 80 countries overseas in support of our nation's security interests.

Our nation's founding fathers understood the importance of national security provided by a professional military representing the people and accountable to civilian leadership. In fact, establishment of the U.S. Army was followed by another milestone event only 13 months later when the second Continental Congress drafted and signed the Declaration of Independence. Both of these important events define the character of this great country.

Since 1775, the U.S. Army has responded resolutely to our nation's calling. Those first brave American Soldiers answered the call to fight the most powerful Army in the world, sometimes without food, without uniforms, and even without weapons. They did not look for glory; they wanted only to be free of subjugation. They answered the call to be part of something bigger and greater than themselves. Since then, generations of American Soldiers, imbued with the character of their predecessors, have volunteered and answered this "Call to Duty."

Our Soldiers serving currently in the all-volunteer force are among the best trained, best led, and most capable Soldiers we have had in our nation's history. They display great skill and dedication as they continue to take on the challenges our nation faces today. They put their "boots on the ground" where and when it counts, fighting for the freedoms we enjoy as American citizens. They also fight in support of our nation's interest to extend these same blessings to oppressed people and other nations. Soldiers know they are members of a team dedicated to a purpose with meaning and value. You can be justifiably proud of their performance in the ongoing "long war" — the war on terrorism — and in support of our nation's other security interests. It is appropriate "Call to Duty — Boots on the Ground — Army Strong" has been chosen as this year's Army theme. This command's recent deployment of Soldiers and civilians from the 4th Space Company, 1st Space Battalion, is a further indication of our own relevance to supporting our nation's warfighters during a time of uncertainty and great challenge.

Throughout its entire 232-year history, the Army has evolved to support our nation's security requirements. However, what is different with the current transformation is the magnitude of the changes, which also include significant force restructuring and restationing. The movement of the SMDC/ARSTRAT headquarters from Arlington, Va., to Redstone Arsenal, Ala., and

consolidation of staff activities under the Base Realignment and Closure process is a significant event for this command.

Several events are scheduled this month and throughout the remainder of the year to welcome the headquarters to Huntsville and recognize our 50-year legacy of service to the nation.

Although challenging, our realignment enables us to increase operational readiness, facilitate new ways of doing business, and better match facilities to forces. There has been much good work done to make these relocations possible, but the real testament of our success is on the road ahead as we work to ensure our efforts are seamless in execution. This will take our continued concerted efforts.

In another area, earlier this month, retired Col. Pat Forrester, a former Army astronaut, launched on board the space shuttle Atlantis as part of mission flight STS-117 to participate in a 13-day mission in space. The Atlantis delivered a new segment and a pair of energy-producing solar panels to the International Space Station. The crew then installed the new truss segment and unfurled the new solar arrays. This was Forrester's second Space Shuttle mission, having flown on STS-105 (Discovery) in August 2001. Five Army astronauts currently support the National Aeronautics and Space Administration Johnson Space Center in Houston, Texas.

Finally, summer has arrived at all locations where we have SMDC/ARSTRAT personnel serving. I encourage you to consider safety in everything you do. It is especially important to be mindful of the particular hazards when riding motorcycles, boating, swimming and traveling long distances. If you are traveling this summer, particularly on vacation, ensure you allocate adequate time to make your travels safe, and always avoid alcohol and excessive speed while driving. Let's also take the time necessary to stress the importance of safety with our coworkers, friends and families.

SECURE THE HIGH GROUND!



Lt. Gen. Kevin T. Campbell
Commanding General



Photos courtesy of NASA

After suiting up, the STS-117 crewmembers exit the Operations and Checkout Building to board the Astrovan, which will take them to launch pad 39A at Kennedy Space Center. On the right (front to back) are astronauts Rick Sturckow, commander; Steven Swanson, Clayton Anderson and Jim Reilly, all mission specialists. On the left (front to back) are astronauts Lee Archambault, pilot; retired Army Col. Patrick Forrester (SMDC/ARSTRAT) and John "Danny" Olivas, both mission specialists.



Liftoff

The Space Shuttle Atlantis and its seven-member STS-117 crew head toward Earth-orbit and a scheduled link-up with the International Space Station. Liftoff from Kennedy Space Center's launch pad 39A occurred at 7:38 p.m. (EDT) on June 8. Atlantis docked with the orbital outpost on June 10 to begin a joint mission that will increase the complex's power generation capability. Using the shuttle and station robotic arms and conducting three scheduled spacewalks, the astronauts installed another set of giant solar array wings on the station and retracted another array, preparing it for a future move.

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Missile defense operators graduate – top grad takes first ever perfect score

By Maj. Laura Kenney
100th MDB (GMD) Public Affairs Officer

COLORADO SPRINGS, Colo. — Soldiers from the 100th Missile Defense Brigade (Ground-based Midcourse Defense) and the 49th Missile Defense Battalion (GMD) graduated from their eight-week Operator Course May 18.

The standard for the intellectually demanding course which begins the training to turn Soldiers into missile defense operators is 90 percent, higher than for most Army classes. A first occurred with this class when honor graduate Capt. Jesse Schexnayder achieved the only to-date 100 percent for the entire course.

Instructors used a combination of lecture and hands-on training techniques to teach students. Evaluations consisted of both written- and performance-oriented

tests. Successful completion of this training signifies mastery of the GMD operator tasks and qualifies Soldiers to operate the Ground-based Midcourse Defense Fire Control System.

The course is conducted at the GMD Training and Exercise Center here.

At the graduation ceremony, brigade commander Col. Michael Yowell called the new graduates “more arrows in the quiver [for] defending our nation.”

The next phase of training will consist of positional crew training and certification.

Graduates are: Maj. John Guerrini, Capt. Marc Reyher, Capt. Shawn Geib, Capt. Chad Neibert, Capt. Jesse Schexnayder, 1st Lt. Manuel Ramos, CW3 Tammy Kostoff, 1st Lt. Ryan Richard, 1st Lt. David Moss, 1st Lt. Peter Browning, 1st Lt. Mark Sommer and Sgt. 1st Class Luru Berry.



Photo by Maj. Laura Kenney

Capt. Shawn Geib receives his certification from the GMD Training and Exercise Operators Course from Col. Michael Yowell, commander of the 100th Missile Defense Brigade.

What We Think

The Eagle asks:

If you were given a free summer vacation (all costs paid), where would you go and why?



Tamara N. Ward
Command Secretary
U.S. Army Kwajalein Atoll

I would love to tour the Holy Land and see some of the places I have read and studied about in the Bible: Capernaum where the first disciples were called, Tiberias, the site of the feeding of the 5,000, and Mount Zion which houses the traditional tomb of David and the site of the Last Supper.



Juanita Sales Lee
Attorney Advisor
Redstone Arsenal, Ala.

I would visit Africa. I want to step into the bodies of water that surround Africa. I want to roam with the wild animals and feel the music of the lands. I want to find my kinfolk. Come with me, and bring money!



1st Sgt. Kenneth L. Mackey Jr.
Senior Enlisted Advisor
U.S. Army Kwajalein Atoll

I would head ‘down under’ to Sydney, Australia because I’ve never been there. I could test out my boxing skills on a kangaroo or two, and maybe get an autograph from Nicole Kidman.



Mark Hubbs
Senior Historian
Redstone Arsenal, Ala.

With my son deploying to Iraq in September, I’d go anywhere that I could get all my kids, their spouses and grandkids at the same place at the same time!



Spc. David L. Knox
HHC, 1st Space Brigade
Peterson Air Force Base, Colo.

I would go to Jamaica for the beaches and the ocean. I come from California. I love the ocean, and the Atlantic Ocean is different. It is a tropical destination that is far away from Colorado Springs.



Robert C. Hallam
Measurement and Signal
Intelligence Node
Peterson Air Force Base, Colo.

I would go to Ireland. My mother is Irish; she is a Kennedy. There is just something about the country and its history. It is absolutely gorgeous and, being Irish, I would love to go pub crawling there too.

Warrior spirit comes out during SMDC/ARSTRAT competition

By Sharon L. Hartman
SMDC/ARSTRAT Public Affairs

PETERSON AIR FORCE BASE, Colo. — Not all members of the United States Army will find themselves on the front lines of a battlefield. Many Soldiers have non-combat military occupational specialties, but that does not suggest they are completely different from the Soldiers on the front lines. All members of the United States Army are warriors, and all members of the United States Army must train as warriors. U.S. Army Space and Missile Defense Command/Army Forces Strategic Command held the ultimate warrior event, as six members of the command competed for the titles of SMDC/ARSTRAT Noncommissioned Officer and Soldier of the Year.

Based on their performance throughout the weeklong competition, Sgt. Patrick J. Mann and Sgt. Martin A. Jensen, both from 1st Space Brigade, Charlie Company, 53rd Signal Battalion, out of Landstuhl, Germany, were selected as the 2007 SMDC/ARSTRAT NCO and Soldier of the Year, respectively.

Candidates traveled from locations around the globe to include Korea, Germany, California and Maryland to participate in the weeklong, annual competition. The event was conducted June 11-15 at Peterson Air Force Base and Fort Carson, Colo., and put two NCO and four Soldier candidates through a grueling mix of physical and mental challenges.

"I think this competition went exceptionally well," said Command Sgt. Maj. Ralph Borja, the new command sergeant major for SMDC/ARSTRAT. "The Noncommissioned officers and Soldiers in the competition were highly motivated and determined. The drive to excel was there and they maintained the Warrior Ethos. They are truly upholding the Soldier's Creed and living the Army values."

A Physical Fitness Test started the competition off with push-ups, sit-ups and a two-mile run at an elevation of more than a mile above sea level. Spc. James E. Cox, Headquarters and Headquarters Company, 53rd Signal Battalion, from Schriever Air Force Base, Colo., was the first to run across the finish line with an impressive time of 11 minutes and 59 seconds. After the physical challenge, the



Sgt. Patrick Mann treats one of his Soldiers for a "heat injury." Mann was the 2006 SMDC/ARSTRAT Soldier of the Year and was selected as the 2007 SMDC/ARSTRAT NCO of the Year.

candidates tested their mental toughness during a written exam and were then assessed on their navigational skills as part of the Urban Warfare Orienteering portion of the competition.

Day two was a less intensive day as the candidates zeroed and qualified with an M16, but day three made up for the relative calm of the previous day. An STX (Situational Training Exercise) lane awaited each candidate, with a seemingly endless number of simulated scenarios that came one right on top of the other. The candidates were put through a rigorous challenge as they dealt with the made up situations of medical injuries such as heat stroke and open abdominal wounds, Improvised Explosive Devices, Nuclear, Biological and Chemical attacks, a downed chopper, fire from opposition forces, and building clearing as they searched for a "kidnapped journalist." The STX lanes were physically and mentally demanding, but for some of the competitors the most nerve-racking portion of the competition was the actual board of sergeants major that concluded the competition.

Mann, SMDC/ARSTRAT's 2006 Soldier of the Year, did not initially plan to compete this year for the NCO title, but encouragement from his company leadership put him in the mix of things once again. And, although he was at an advantage for having competed in the competition the previous year (as well as the Department of the Army Warrior Competition), Mann felt that the event was still quite a challenge.

"The whole purpose of these events is to induce stress and to introduce different obstacles that you are not used to, but no matter how much you have prepared, when you get to those situations you just have to do the best that you can," said Mann.

"I think it was a really great challenge. I just hope that I can inspire my Soldiers to get motivated about competitions like this," Mann said.

Although Jensen is not one of Mann's Soldiers, the fact that Mann returned to compete at the NCO level with Jensen, a Soldier from his own company, was inspiring in itself.

"I was really surprised to hear my name called out," said Jensen. "My expectations coming into this weren't really to win at all. I just wanted to place well and do the best that I could. I originally got into boards to work toward getting promoted. I've accomplished that goal so now everything else is just an added bonus for me."

Mann and Jensen will now compete in the Department of the Army Warrior Competition in September at Fort Lee, Va.



Photos by Sharon Hartman

Sgt. Martin Jensen, center, digs deep as sponsor, Staff Sgt. Donald Amos, left, and Soldier candidate, Spc. Joseph Knece, do their best to keep up. Jensen and Knece were competing for the title of SMDC/ARSTRAT Soldier of the Year. Jensen won the title.



Spc. Ericka A.W. Melius, right, and one of her Soldiers search for a reporter who is being held "hostage" by "enemy combatants." Melius was competing for the title of SMDC/ARSTRAT Soldier of the Year.



Sponsor, Sgt. Stephen Bahn, gives the ready signal for candidate, Spc. James Cox, at the M16 qualification range, during the 2007 U.S. Army Space and Missile Defense Command/Army Forces Strategic Command NCO and Soldier of the Year competition. Both serve with Headquarters and Headquarters Company, 53rd Signal Battalion.

"We could only send two people forward to the Department of the Army competition, but everyone who took part in this event is a winner," added Borja.

The other candidates for Soldier of the Year were: Cox; Soldier of the Year runner up, Spc. Joseph B. Knece, Charlie Detachment, 1st Space Company, 1st Space Battalion, Osan Air Base, Korea; and Spc. Ericka A.W. Melius, Alpha Company, 53rd Signal Battalion Fort Detrick, Md. The other candidate competing for NCO of the year was Staff Sgt. David A. Engelhardt, Delta Company, 53rd Signal Battalion, from Camp Roberts, Calif., who was the NCO runner up. Two other NCOs were scheduled to compete, but were unable to attend due to unforeseen circumstances.

Army Civilian Fire Officer of the Year named

By JJ Klein
Kwajalein Hourglass, Reporter

KWAJALEIN ATOLL, Republic of the Marshall Islands — Two hands are needed to tic off Fire Lieutenant Michelle Barnett's long list of certifications and volunteer positions, so it's no surprise Barnett was recently named Department of the Army Civilian Fire Officer of the Year for the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command. Perhaps the only person astonished at her award was Barnett herself.

"I was really quite surprised," said Barnett.

The DA civilian fire officer award recognizes outstanding performance and service of civilians on Army bases worldwide. Barnett won this honor first within the Pacific region category after being nominated by Fire Chief Stephen Scruton and former Fire Chief Ragnar Opiniano.

Both fire chiefs nominated Barnett for the award because she has the characteristics, attitude and professionalism that

"every fire officer candidate should strive for," Scruton said.

Barnett's name was then submitted for competition throughout the Army, which she won. The winner of the Army category is then forwarded to the Department of Defense selection committee. Barnett will be eligible to compete for recognition as DOD Armed Forces Fire Officer of the Year against the best Air Force, Marine, Navy and Coast Guard candidates worldwide.

The selection committee considers leadership, motivation, enthusiasm, high moral character and ethics as criteria for nomination of this award. According to Scruton, Barnett meets every criterion, and then some.

Barnett also is a Hazardous Materials technician, a Confined Space Rescue technician and instructor, a High Angle Rope Rescue technician and instructor, and an American Red Cross Instructor trainer. Admittedly, she will take whatever training she can get her hands on.

"She exemplifies qualities of an exceptional leader and an outstanding citizen. She is a credit to the Army, Chugach, and our fire department,"

Scruton said. "She excels in everything she does. She is a hard worker and a competent, caring, compassionate fire officer.

"We are very proud of Michelle. She motivates us to continue to be the outstanding team we are, committed to our community and the people we serve," continued Scruton.

Barnett will be honored by her civilian and military peers at the IAFC banquet in Atlanta in August where she will receive a plaque for her outstanding performance as a fire officer.

Barnett's career as a fire fighter began only after a little nudging from a firefighter friend. Her literal trial by fire came as a volunteer firefighter in 1998.

"After running a few calls, I was hooked," Barnett recalled. "It dawned on me one day that someone would actually pay me to do this job that I loved, so I went to school for my professional firefighter and Emergency



Photo by Mig Owens

Michelle Barnett assists a 'victim' at a mass casualty exercise on Kwajalein.

Medical Technician certification and started applying."

Barnett worked as a dispatcher for the Osceola County Fire and Rescue in Florida and then as a firefighter for the city of Tallahassee before coming to Kwajalein.

The road to Kwajalein started with a dare. While surfing on the Internet, Barnett came across a firefighting position in Kwajalein. Curious, she told a friend about what she had found. Her friend dared her to send in her resume.

"So I had to! I sent in my resume and about six weeks later I was flying in on Continental, laughing to myself, looking at this little, tiny piece of coral, wondering what I had gotten myself into," Barnett said. "I had a one year contract. That was three years ago. Oops!"

Barnett attributed her recognition as DA Civilian Fire Fighter of the Year and her entire career to "the confidence of my superiors and the hard work of the people I am fortunate to supervise.

"They have all made it possible for me to achieve my goals and hopefully, they know that they can count on me to help them achieve theirs," Barnett said. "I've had some really great role models and mentors in my career, starting with Lt. Jerry Coe in Tallahassee and continuing with the gentlemen I am fortunate enough to work for now.

"It is still difficult for me to believe that I was chosen for this honor. I just don't really see what I do as being extraordinary," said Barnett. "I just love what I do and try to do the best I can in whatever it is I happen to be tasked with at that moment. It sounds hokey, but I'm just trying to do my job well and make my mom and dad proud."

This award, according to Scruton, will provide Barnett the opportunity for recognition and advancement within the DOD fire service field.



Courtesy photo

Michelle Barnett puts out a car fire in Tallahassee, Fla.

Strategic mobility and deployment planning

By 2nd Lt. Donald Thomas
Unit reporter

The Army has the U.S. military's largest requirement for common-user airlift. Army forces rely heavily on airlift for deployment, sustainment, employment and redeployment. Recently, the U.S. Air Force, Air Mobility Command from Travis Air Force Base offered the Equipment Planners Course to 20 Army Soldiers, including three from Echo Company, 53rd Signal Battalion.

The vital two-week course held at Kadena Air Base, Okinawa, Japan, was designed to introduce the Unit Movement Officer to an important part of strategic deployment: air deployment.

The unit level is the basic and most critical level in the deployment process. In the current War on Terror, all Army units must be trained in deployment skills and prepared to deploy. Before anyone can mobilize and deploy successfully by air, the unit deployment planners must understand the

requirements and procedures for properly planning and executing such a move. A qualified UMO is able to explain the concept of strategic deployment, air deployment, and types of movement plans, categories of movement, key players in strategic deployment by air, and the service responsibilities for movement.

Officers and/or senior noncommissioned officers are appointed as UMOs to help commanders prepare the unit for movement. The UMO must know and execute the commander's intent when developing and updating movement plans, make sure that the movement plan is current and reflects changes in personnel and equipment as they occur, maintain liaison with higher headquarters and support activities on matters concerning unit movement, and may represent the unit commander on deployment matters.

A greater appreciation for Joint-Service operations and the solidarity of the Armed Services is learned in the course — a fine example of the Army and Air Force partnership in the War on Terror!

MDA project managers recognized for special skills

Missile Defense Agency Public Affairs Office

HUNTSVILLE, Ala. — Two local Missile Defense Agency project managers have been honored for their leadership and management skills during the performance of their duties in their respective positions.

Col. Charles Driessnack, who recently changed charter as the Terminal High Altitude Area Defense (THAAD) project manager, received the U.S. Missile Defense Agency (MDA) Leadership Award, intended to recognize the individual who has made the most significant leadership contributions that further the agency's mission. Driessnack was selected for his "inspirational leadership and performance as the project manager for the THAAD program. In this demanding position, he spearheaded the development and implementation of an innovative continuous test plan and fielding strategy as well as an inaugural international partnership strategy," according to the award's wording.

Col. David Cook, Ground-Based Interceptor project manager, Ground-Based Midcourse Defense (GMD) joint program

office (JPO), received the Program Management Award for leadership in providing management oversight of a total system performance requirement contract.

As the ground-based interceptor project manager, he addressed schedule and cost overruns, facilitated improved communication processes, and streamlined resources that ultimately enabled the ground based midcourse defense to procure four additional interceptors.

The awards were presented during the fourth annual MDA Employee Awards ceremony, recognizing exceptional team and individual efforts through the past year. The ceremony originated from Arlington, Va., with several video teleconference locations scheduled to be fielded to the warfighter in FY 2009.

The Rising Star Award went to John Warden, THAAD project office, for management and leadership skills as the director, missiles directorate, THAAD program. He consistently demonstrated a talent for developing and executing successful flight



Photo by Henry Norton

Air Force Maj. Gen. Chris Anzalone (left) presents the Program Management Award to Col. David Cook, the Ground Based Interceptor project manager, Ground Based Midcourse Defense joint program office.

and ground tests fundamental to delivering the world's first producible and reliable endo- and exo-atmospheric interceptors.

Recognized as members of the MDA Contractor Honor Roll were: Michael Durham, THAAD; Darrell Herriges, Kinetic Energy Interceptors; David Morin, THAAD; Don Ramsey, THAAD; James Angus, Combined Test Force; and Joe Burns, GMD.



Photo by Lisa Ward, The ServiceSource Network

Phan receives second award

Evelyne Villines Award recipient Hein Phan with awards presenter, Bob Sullivan, executive director of the NISH East Region. Phan was the facility specialist for SMDC/ARSTRAT headquarters when it was located in Arlington, Va. The award recognizes an individual with a disability who has taken his AbilityOne (formerly the JWOD) job and used his skills to gain greater independence by either being promoted into a management position with the non-profit agency (i.e. ServiceSource) or being hired by the federal government or in the commercial sector. Phan received the award May 30.

2007 Space Camp winners announced

Sixteen children are preparing to travel to Huntsville, Ala., to attend Space Camp July 1-6 courtesy of the Air, Space and Missile Defense Association. The ASMDA Space Camp Scholarship committee reviewed the applications and selected winners based on numerous factors including the applicant's handwritten essay and school grades.

Alabama:

Brandon K. Stiene, 11, SMDC/ARSTRAT
Hang T. Vu, 10, PEO-MS
Brody DeSilva, 11, MSIC

Alaska:

Thomas Lyon, 11, ADAK
Benjamin Mock, 10, Fort Greely
Melissa Arnold, 11, Kodiak

Colorado:

Mariam A. Sears, 9, MDA
Quinn C. Stevenson, 11, MDA

Kwajalein Atoll:

Alexander M. Weatherford, 9, Airscan Pacific
Logan J. Everts, 10, USAKA/RTS
Angela Kendrick, 10, KRS

Nebraska:

Sean M. Alumbaugh, 9, USSTRATCOM
Ashlee G. Gibson, 10, USSTRATCOM
Emma J. Leone, 11, USSTRATCOM

Virginia:

Crystal J. Alexander, 11, SMDC/ARSTRAT
Wyatt E. Bodmer, 11, MDA



Each year, ASMDA announces the availability of scholarships that include one week of Space Camp at the U.S. Space and Rocket Center, round-trip airfare from the parent's work location, a Space Camp flight suit and clothing package, a phone card, spending cash, and any unaccompanied minor travel fees.

Chamber recognizes SMDC/ARSTRAT Soldiers

Staff Sgt. Antonio M. Cady (left), platoon sergeant with the 1st Space Battalion, receives congratulations from Sgt. 1st Class Steven M. Adams, from the 1st Space Company, 1st Space Battalion, during the May 18 Armed Forces Luncheon and Awards Ceremony at The Broadmoor Hall in Colorado Springs, Colo. The luncheon was an event sponsored by the Greater Colorado Springs Chamber of Commerce to recognize outstanding military members of the community. Cady was one of three U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Soldiers from the 1st Space Battalion who made it to this year's finals and was one of four finalists in Category Two: E-5 and E-6. The other 1st Space Battalion Soldiers (not pictured) in their respective categories are: Spc Douglas J. Riggi, Category One: E-1 through E-4; and Sgt. 1st Class Micah P. Fate, Category Three: E-7 and E-8. This year, 11 military personnel competed for the Outstanding Enlisted Representative of the Year. The finalists were selected from almost 30,000 active duty Army, Air Force, Navy, Marine Corps, Coast Guard, Canadian, U.S. Reserve Component and Air National Guard enlisted personnel stationed in the Colorado Springs area.



Photo by DJ Montoya

Safety

The basics of composite risk management

SMDC/ARSTRAT Safety Office

5 steps of risk management

1 — Identify hazards.

Identify hazards to people, property and mission. Consider all aspects of current and future situations, as well as historical problem areas. Remember that conditions can change quickly, requiring constant vigilance.

2 — Assess hazards to determine risks.

Determine the potential loss and cost that could result from the identified hazards, based on their probability and severity. Probability determines the likelihood that the hazard may cause a problem. Severity asks: "How bad could it be?" Hazards are measured by risk categories: extremely high, high, moderate and low.

3 — Develop controls and make risk decisions.

Develop courses of action that eliminate hazards or reduce risks. Controls may range from hazard alerts and physical warning signs to issuing protective clothing or avoiding the hazard area altogether. After establishing controls, leaders should re-evaluate the hazards to check for residual risk and to ensure risks are reduced to the level at which benefits outweigh potential costs. Leaders should include their chains of command if the level of risk exceeds their commanders' guidance or if necessary controls significantly reduce the chance of mission success. This step demands analysis and judgment.

4 — Implement controls.

Put into place controls that eliminate hazards or reduce their risks. This may be done through verbal or written orders, standard operating procedures, performance standards, safety briefings and rehearsals. Ensure unit members clearly understand the controls.

5 — Supervise and evaluate.

Enforce the controls and evaluate the understanding of the standards. Adjust and update as necessary.

Risk management terms

Hazard:

Any existing or potential condition that can cause injury, illness or death; damage to, or loss of equipment and property; or degradation of the mission.

Risk:

Probability and severity of loss linked to hazards.

Probability: The likelihood that an event will occur.

- Frequent – Occurs very often; known to happen regularly.
- Likely – Occurs several times, a common occurrence
- Occasional – Occurs sporadically, but not uncommon.
- Seldom – Remotely possible, could occur at some time.
- Unlikely – Probably won't occur, but not impossible.

Severity: The expected consequence of an event (hazardous incident) in the terms of degree of injury, property damage or other mission-impairing factors that could occur.

Catastrophic:

- Complete mission failure or the loss of ability to accomplish a mission.
- Death or permanent total disability.
- Loss of major mission-critical systems or equipment.
- Major property or facility damage.
- Severe environmental damage.
- Mission-critical security failure.
- Unacceptable collateral damage.

Critical:

- Severely degraded mission capability or unit readiness.
- Permanent partial disability or temporary total disability exceeding three months time.
- Extensive major damage to equipment or systems.
- Significant damage to property or the environment.
- Security failure.
- Significant collateral damage.

Marginal:

- Degraded mission capability or unit readiness.
- Minor damage to property or the environment.
- Lost days due to injury or illness not exceeding three months.
- Minor damage to property or the environment.



Negligible:

- Little or no adverse impact on mission capability.
- First aid or minor medical treatment.
- Slight equipment or system damage, but functional or serviceable.
- Little or no property or environmental damage.

Exposure:

The frequency and length of time personnel, equipment and missions are subjected to a hazard.

Controls:

Actions taken to eliminate or reduce their risks.

Risk assessment:

The identification and assessment of hazards (the first two steps of the composite risk management process).

Residual Risk:

The level of risk remaining after controls have been implemented. Controls are altered until the residual risk is at an acceptable level or until it cannot practically be reduced further.



Fireworks safety tips

Fireworks and celebrations go together, especially during the Fourth of July. But fireworks can be dangerous, causing serious burn and eye injuries. If fireworks are legal where you live and you decide to set them off on your own, be sure to follow these important safety tips:

- Buy from reliable sellers.
- Read and follow all warnings and instructions.
- Only light fireworks on a smooth, flat surface away from the house, dry leaves, and flammable materials.
- Light only one firework at a time.
- Never try to re-light fireworks that have not fully functioned.
- Never allow children to play with or ignite fireworks.
- Be sure other people are out of range before lighting fireworks.
- Keep a bucket of water or garden hose handy in case of a malfunction or fire.
- Dispose of fireworks properly by soaking them in water and then disposing of them in your trashcan.

Probably the most important safety tip is to just leave setting off fireworks to the professionals. That way you can SAFELY sit back, relax and enjoy the show.

CRM training mandatory

The secretary of the Army and chief of staff of the Army Safety and Occupational Health Objectives for FY 07 (fiscal year 2007), dated Oct. 13, 2006, requires all Soldiers and civilian employees to complete the Composite Risk Management (CRM) Basic Course by the end of FY 07. The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command commanders and supervisors are responsible for ensuring their Soldier and civilian employees complete this training no later than Sept. 30, 2007, and that individual training records/plans are properly documented. The CRM Basic Course is available online at (<https://safetylms.army.mil/librix/loginhtml2.asp?v=usasc>). Additional information on equivalent course and training where online access is not available can be found on the CommandNet Safety Web site at <https://commandnet.smdc.army.mil/SafetyOffice/CRM.html> and the public Web site at <http://www.smdc.army.mil/SAFETY/CRM.html>.

Precautions make motorcycling fun, not fatal

By Lori Yerdon
U.S. Army Combat Readiness Center

FORT RUCKER, Ala. — Although May's National Motorcycle Safety Awareness month ended, Soldiers, Family members and Department of Defense civilians need to keep in mind that safe motorcycle practices are a year-round responsibility.

Last month, in support of the national campaign, the Army increased awareness of motorcycle safety in an effort to help its riders prepare for peak riding months and increase safety awareness. However, three Soldiers were still injured and one killed in motorcycle accidents.

While more bikes than ever are registered on Army installations – about 35,000 – safety officials expect the number of accidents to increase proportionately. However, “accidents can be reduced, and many times prevented, by choosing the correct motorcycle and having the proper equipment and training,” stated Sgt. Maj. of the Army Kenneth O. Preston in his Leader's Book Notes for April 2007.

In fiscal 2006, 49 Soldiers were killed in motorcycle accidents. Two-thirds of those fatalities were sergeants or above and over the age of 25. This shows that no matter what a person's rank or riding experience level might be, they can be placed in a bad situation, Brig. Gen. Doyle D. “Don” Broome said.

Broome, deputy commanding general of U.S. Army Cadet Command, was involved in an accident while riding his motorcycle last year. The general credits his survival of the accident to training, while others credit the wear of PPE, or personal protective equipment.

“I slid down the highway at about 35 mph, but was wearing all of my PPE and survived the accident,” Broome said. “The same cannot be said for those who died in motorcycle accidents last year, many of whom were not wearing the proper PPE.”

Preston also pointed out that the Motorcycle Mentorship Program is another way

leaders can set the example for younger, less experienced Soldiers, Family members and DoD civilians. Though Broome has been riding motorcycles since he was a 14-year-old, he's taken the Motorcycle Safety Foundation Course twice.

The MMP is a focused effort where more experienced riders can mentor those that are new to motorcycling, creating a positive environment for conduct and behavior while riding, Preston said.

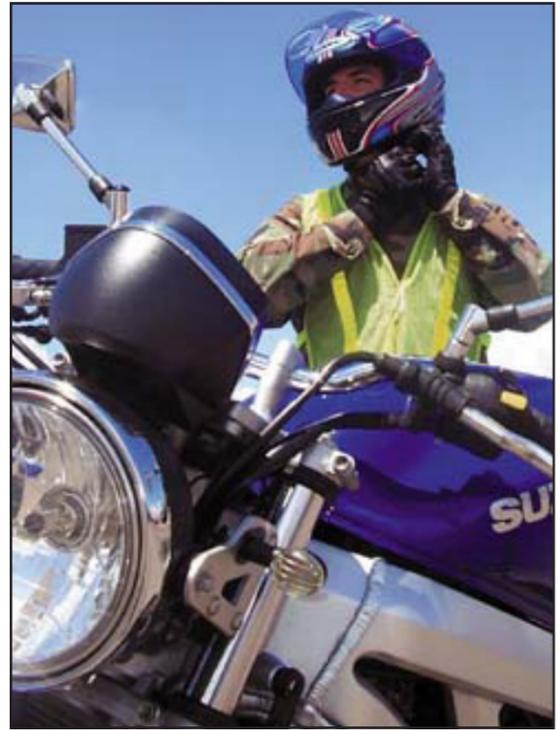
Many posts and units have established mentoring organizations which Soldier riders can get involved in. Additionally, all Soldiers are required to attend a Motorcycle Safety Foundation course prior to riding a motorcycle. MSF courses are free of charge and can be scheduled through installation safety offices.

Don't become a statistic – prepare to ride by following these simple guidelines:

- Make sure driver's licenses have motorcycle endorsements. Motorcycle safety foundation courses are required and provided by U.S. Army installations to Soldiers and DoD civilians free of charge. Consult the Installation Safety Office on local classes and policies.

- Wear a helmet and other protective gear to include proper eye protection, full fingered gloves, long trousers, long sleeved shirt or jacket, high visibility garments (bright color for day and retro-reflective for night) and leather boots or over-the-ankle shoes. These requirements for Personal Protective Equipment apply to Soldiers at all times, whether riding on or off post. PPE not only provides comfort and protection from the elements, but also prevents injuries and is a means for other motorists to see a rider that's wearing reflective material.

- Don't have a drink and then drive. Consuming alcohol and driving a motorcycle or any motorized vehicle greatly enhances your chances of having an accident. Alcohol affects those skills essential to operate a motorcycle – balance and coordination.



U.S. Army photo

- Preventive maintenance checks and services aren't just for military vehicles. T-CLOCS was developed by the Motorcycle Foundation to assist motorcycle drivers with the inspection of a motorcycle. The inspection covers the areas that should be checked before operating or purchasing a motorcycle such as tires and wheels, controls, lights, oil, chassis and lights. For the complete inspection list visit the USACRC Web site.

For more information on motorcycle safety, visit one of the following Web sites:

- U.S. Army Combat Readiness Center <https://crc.army.mil>
- U.S. Army Combat Readiness Center, Motorcycle Mentorship Program <https://crc.army.mil/mmp>
- National Highway Traffic Safety Administration www.nhtsa.dot.gov
- Motorcycle Safety Foundation www.msf-usa.org

Going on leave, pass, TDY?

Then chances are, you are required to use TRiPS.

SMDC/ARSTRAT Safety Office

TRiPS (Travel Risk Planning System) is an online tool that pairs Soldiers with their

supervisors to mitigate risks associated with long privately owned vehicle (POV) trips.

This program helps personnel to recognize hazards posed by weather, road condi-

tions and vehicle type to reduce the likelihood of an accident on the highway. The specific questions asked about an upcoming trip allows supervisors and Soldiers to engage and help identify potential faults in driving plans and help provide other

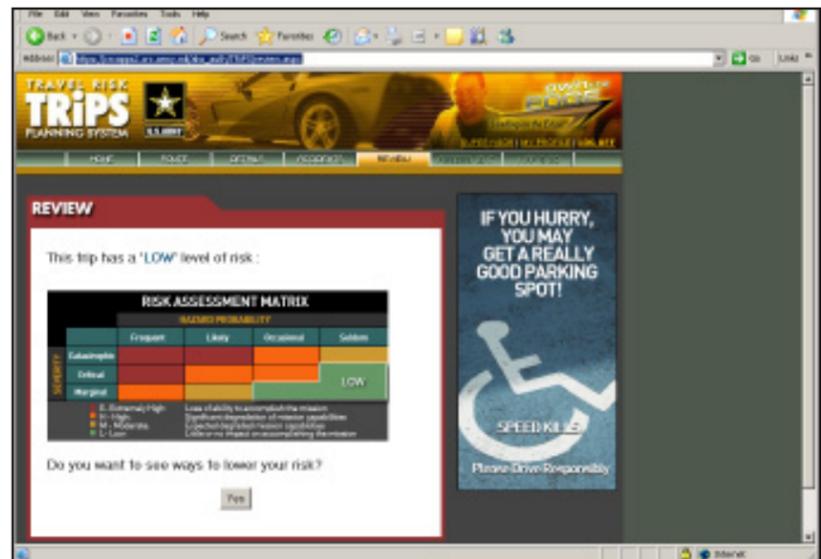
alternatives.

Civilians who are going TDY (temporary duty) and will be operating their POV or rental car are also required to complete TRiPS before departure. Of course, civilians are also encouraged to use TRiPS when they go on POV trips.



Photo by John Upp

Col. Kendal W. Cunningham, acting chief of staff, completes his TRiPS before driving from the National Capital Region to Huntsville, Ala.



Safety, Alaskan style

By Capt. Gary Rowe
49th Missile Defense
Battalion HHB Commander

FORT GREELY, Alaska — When it comes to safety, Soldiers stationed at this distant, somewhat extreme corner of the world must be on top of their game. Nearly all Soldier activities, both on duty or off, can push even the most safety conscious person to his limit. The unit pace, or operational tempo, driven by challenging mission, site and training requirements, remains the same everyday regardless of extreme weather, dangerous wildlife, or remoteness of the unit.

Field Manual 7-0, *Training Management*, provides a doctrinal training model for the Green/Yellow/Red training cycle, which assumes there is a difference between home station and deployed operational units. The 49th Missile Defense Battalion is both; deployed and conducting the dual missions of defending against strategic missile threats and local security threats since 2004, while simultaneously completing all home station individual and collective training requirements.

Military Police assigned to Alpha Company, 49th Missile Defense Battalion, work a 24-hours/365-days-a-year mission at the Missile Defense Complex. This work schedule along with the demanding environment provides challenges largely unique to the Alaskan interior.

The adverse weather provides the most challenges to safety. October through May, winds can exceed 50 miles per hour and the temperature can range from -10 to -50 degrees

Fahrenheit; eight months of winter. As Capt. Lyle Ward, Bravo Crew director said, "If you do not embrace Alaska's weather, it will intrude itself upon you."

Another of their Soldiers' favorite slogans is "It's not about bad weather, it's about bad gear." Every Soldier must understand the necessity of their training and composite risk management procedures.

One way the unit mitigates the risk due to the weather is by issuing each Soldier the Generation III Extended Cold Weather Clothing System (ECWCS), Danner Extreme Cold Weather boots, and Yak-tracks, which provide boots with traction over ice. Select Soldiers also attend Arctic Light Infantry Training (ALIT). The Battalion also employs a call-in procedure developed so that anyone traveling during the winter months must call before departing Fort Greely, when they arrive at their destination, and when they return back to post.

The most common winter destination and closest flavor of civilization is Fairbanks, more than 100 miles to the north, the same for the nearest Wal-Mart and McDonalds. Although Soldiers are required to call in, spouses are also encouraged to do so. And many take advantage of this system, so they are not stranded in a snow drift for hours before someone notices they are missing.

Weather is not the only safety issue we face. The Alaskan wilderness provides challenges. The rugged terrain that surrounds the post poses its own safety concerns.

Moose, bear and the occasional wolf are just several of the obstacles every Soldier faces while conducting physical



Photo courtesy of 49th Missile Defense Battalion

A grizzly bear outside Fort Greely's fence. Although not common, the last Grizzly bear sighting was June 12.

training or walking around post with his or her family. As Capt. Dale Titus, Charlie Crew deputy, can personally attest, bear attacks should be avoided at all costs. Thankfully, he walked away with only a few scratches.

All mandatory safety education and training is very specific and tailored to the Alaskan operational environment. Training is time-phased to ensure it is conducted before the appropriate season occurs.

For example, as soon as the snow melts, the unit schedules All Terrain Vehicle training. In addition, all Soldiers are instructed in a personal firearms safety class, an ATV/snow machine class, both instructional and hands-on, and outdoor safety courses taught by local experts, to include a hunters' safety program course. The combination of all courses,

composite risk management and leadership involvement at every echelon enables the Soldiers to actively manage the assumed risks they might face on and off duty.

Family members are invited and highly encouraged to participate in all safety training and actively take advantage of all battalion programs. Before the onslaught of winter, for example, families have the opportunity to benefit from a winter vehicle inspection program provided by our battalion mechanics volunteering their time.

This is a snap shot of the safety factors the Soldiers and families of the 49th face. All aspects of life in Alaska have some elements of risk. Safety awareness is the key to our success and ultimately mission accomplishment — it is in the forefront of everything we do.

Barbequing Safety

It is fun to grill burgers and hotdogs, but do so safely, cautions the National Fire Protection Association. Keep your grill far from anything that can burn — your home, car, dry vegetation, kids and pets.

- **GAS GRILLS** — Read the owner's manual and operating instructions carefully. Use the exact type of tank and fuel specified. Check hoses and valve connections, and if you smell gas there may be a leak. **DO NOT START THE GRILL** until you have run a safety check (one way to do this is by pouring soapy water on the connection points. If bubbles appear retighten connections and test again). If your grill needs repair have a professional do the job. And transfer and store liquid propane cylinders in an upright position and never where temperatures can reach 125 degrees.

- **CHARCOAL GRILLS** — Read the owner's manual and operating instructions carefully. Make sure you allow enough time for your briquettes to

warm up. There are ways to speed up the process but there are no safe ways to speed up the process. Briquettes are often pre-soaked with quick start chemicals. Do not add your own "quick start" such as lighter fluid or gasoline. Many injuries have been caused by a sudden burst of flame from adding one of these. Flames can quickly get out of hand and cause a fire or you could receive serious burns.

- **CHILDREN AND GRILL SAFETY** — Any type of grill attracts children. You cannot leave a grill unattended even for a minute or some little one will decide to "help you." Children may knock the grill over or they may touch it and receive serious burns. There is also the chance of a sudden burst of wind coming up and fanning the flame, taking it out of the grill, and causing a fire.

- **FIRE SAFETY** — You should always have a fire extinguisher or a hose ready in case of an accident with your grill. Be careful where you set your grill up, setting your grill too close to the house can lead to a fire, also do not set your grill under trees. If a fire does happen, have your extinguisher ready. When cleaning up, never put ashes or briquettes in a



cardboard carton or other combustible container, they could ignite. Never try to store "dead" charcoal for they can re-ignite even a day later.

Never move outdoor grills into the garage or other closed area — within minutes, smoldering charcoal can build up lethal concentrations of carbon monoxide. Even with an open window, the fumes can kill you and your family.

1957-2007 — SMDC/ARSTRAT Celebrates

An Old Concept for a New Era in Missile Defense

SMDC/ARSTRAT Historical Office

The traditional interceptor was taken to new dimensions in the 1970s and 1980s. The first anti-ballistic missile interceptors were tipped with nuclear warheads. The nuclear warhead was needed because early technology could not guarantee that the kill vehicle would get close enough to the target to achieve an intercept with a conventional explosive warhead. When detonated these missiles would contaminate the atmosphere and generate an electromagnetic pulse which would disrupt electronic systems. A new awareness and appreciation of these hazards spurred concerns among the general public and prompted research by the scientific community.

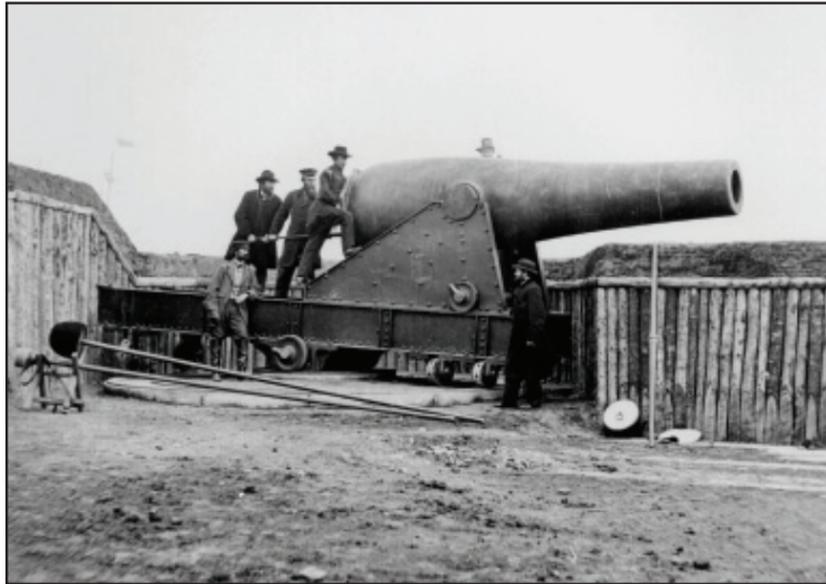
An old concept

One solution to nuclear warheads was kinetic energy technology. The idea was not new. Muzzle loading artillery projectiles up through the early 19th century relied solely on kinetic energy to destroy targets. Non-explosive iron cannon balls traveling at relatively slow speed (500 – 1,200 feet per second) were amazingly destructive when they bashed into enemy forts, ships or cannon. Even after the advent of exploding shells, solid iron kinetic energy projectiles remained the favored ammunition until late in the 19th century for Army strategic defenders in the seacoast artillery.

The first Hit-to-Kill Interceptor

The anti-missile version of the kinetic energy concept was based on the energy created from the momentum of a relatively small object striking an incoming ICBM at extremely high speed (20,000+ feet per second). The trick of kinetic energy technology, or “hit-to-kill” technology, was not the impact itself, but how to guide the high speed object to the target and make the interception.

The first program which actually tested a hit-to-kill missile was the Army's Homing Overlay Experiment. (See article on page 11.) The kill vehicle was equipped with an infrared seeker, guidance electronics and a propulsion system. After failures with the first three flight tests, the fourth and final test, on June 10, 1984, was successful, intercepting the Minuteman reentry vehicle with a closing speed of about 20,000 feet per second at an altitude of more than 100 miles.



Courtesy of Library of Congress

A 15-inch Rodman gun during the Civil War. The 15-inch gun was the largest muzzle loading gun adopted by the U.S. Army. It used 50 pounds of black powder to hurl a 450-pound solid iron ball.

Hit-to-Kill at low altitude

The next non-nuclear kill technology achievement came in the same year when the Small Radar Homing Intercept Technology (SRHIT) completed its first flight test. The SRHIT program sought to assess guidance and control technology to develop a missile capable of intercepting small high-velocity targets (tactical ballistic missiles) at low altitudes. Subsequently renamed the Flexible Lightweight Agile Experiment (FLAGE), the program's mission was to test the accuracy achievable with a highly maneuverable homing flight vehicle.

During flight, the FLAGE's on-board millimeter wave radar would lock onto a target. To maneuver the interceptor toward the target, 216 shotgun shell-sized motors, located in a band behind the radar, were fired selectively. Having demonstrated successful intercepts against a stationary sphere and an air-launched target in 1986, the FLAGE was tested against a Lance short-range surface-to-surface missile on May 21, 1987. After launch, the FLAGE received input from White Sands Missile Range radars and, for the last two seconds of flight, its on-board millimeter wave radar system acquired the target. Sixty of the FLAGE's 216 solid rocket motors fired to cause the FLAGE to intercept the Lance missile at an altitude of 16,000 feet. Budget restrictions forced the cancellation of further tests, but the technological achievements of the FLAGE would provide a basis for more advanced efforts. The command's attention now turned to the FLAGE follow-on experiment, the Extended Range Intercept Technology (ERINT).

To create ERINT, engineers upgraded the design of the FLAGE adding, for example, aerodynamic maneuvering fins and attitude control motors, thereby extending the range of the system and abandoning the cumbersome 216 tiny solid rocket motors. Early ERINT intercept tests were unsuccessful, but the problems were identified and several successful intercepts of theater ballistic missile targets and air-breathing drones were conducted in 1994. The success of ERINT led to its selection on May 19, 1994, as the new missile for the PAC-3 (Patriot Advanced Capability-3) system which began fielding in 2001.



U.S. Army photo

Guided by 216 attitude control motors, the Flexible Lightweight Agile Guided Experiment demonstrated the feasibility of kinetic energy intercepts at short ranges.

HOE Technology Evolves Into the Ground Based Interceptor

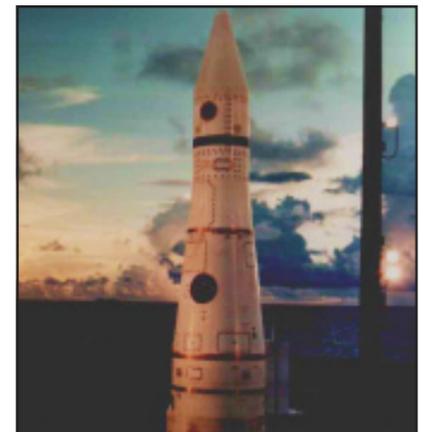
In 1985 the Exoatmospheric Reentry-vehicle Interceptor Subsystem (ERIS) project office opened with the mission to develop a kinetic energy kill vehicle that would intercept enemy missiles outside of the Earth's atmosphere. The ERIS was built on the technology developed and tested during the Homing Overlay Experiment.

Constructed of surplus Minuteman ICBM second and

third stages, the experimental ERIS missile would incorporate a kill vehicle with a long wavelength infrared scanning seeker, a data processor and flight divert attitude control propulsion motors on a two stage rocket booster. The 352 pound ERIS interceptor would receive information from external sensors and, based on this data, select the appropriate target by comparing flight signatures.

The first major milestone of the ERIS functional technology verification program was met in April 1989, when the integrated system test vehicle left the manufacturer's facility to begin the test phase. There were another two years of testing before the first flight test.

Nevertheless, only a decade after the HOE intercept, an ERIS launched on Jan. 28, 1991, from Meck Island and successfully detected the target. It also discriminated against decoys, and intercepted the mock ICBM warhead launched from Vandenberg Air Force Base. The test, “the first time an SDI experiment attempted an interception in a counter-measures environment,” exceeded expectations for this initial mission.



U.S. Army photo

An ERIS launch vehicle sits in its launch silo on Meck Island.

The second and final test, due to budget cuts, was conducted on May 13, 1992, against a Minuteman I ICBM. The primary focus of this effort was on data collection—guidance, acquisition, and track and divert functions. Although a direct intercept was not achieved, the mission met its objective demonstrating target handover, acquisition and resolution of threat and the collection of radiometric data on the target and decoys.

The technology developed as part of the ERIS program and the lessons learned during its testing were essential for the successful development and deployment of the next generation of exoatmospheric kill vehicle which is part of the Ground-based Midcourse Defense (GMD) system as deployed at Fort Greely, Alaska.

50 Years of Excellence in Space and Missile Defense

The Homing Overlay Experiment

The first 'hit-to-kill' kinetic energy interceptor missile

SMDC/ARSTRAT Historical Office

On its fourth attempt the Homing Overlay Experiment (HOE) intercepted a target vehicle over the Pacific Ocean — the first successful “hit-to-kill” intercept in ballistic missile defense history.

Until the 1980s all missile defense interceptors used a nuclear explosive warhead to compensate for the system's inability to achieve a precise intercept of incoming enemy ballistic missiles. In the 1970s the U.S. Army began studying the feasibility of hit-to-kill vehicles, where an interceptor missile would destroy an incoming ballistic missile just by colliding with it. These kinetic energy kill vehicles were possible with the advances made in infrared sensors and computer technology. The first such effort was the Homing Overlay Experiment Task Force, charted by the Ballistic Missile Defense System Command (later to become SMDC/ARSTRAT) in March 1977.

The two-phased HOE effort began with technology verification, followed by the flight demonstration program scheduled for 1982-1983. Engineers designed the experiment to resolve specific development issues. These were Search, Acquisition, and Detection; Discrimination (including scan-to-scan correlation); Designation; Homing Guidance Accuracy; D3 and Track in the Natural and Induced Environments; and, Sensor to Sensor Handover/Correlation). The overall objective was to demonstrate the exo-atmospheric intercept of a mock ICBM reentry vehicle using infrared homing sensors and a non-nuclear kill vehicle. With these parameters, existing hardware was used wherever possible.



U.S. Army photo

The HOE team poses for a post-launch celebration photograph.

The basic program consisted of four flight tests that were intended to demonstrate interception within the exo-atmosphere as well as provide target acquisition, designation, and track capability. In all cases, the target vehicle was a reentry vehicle or missile launched from Vandenberg AFB on a trajectory so that intercept would occur more than 100 nautical miles above the Earth and would impact several degrees north of Kwajalein Atoll in the central Pacific.

Launched by a two-stage Minuteman booster, the HOE kill vehicle consisted of a computer, a long wavelength infrared optical sensor package for guidance and a unique kill device. The HOE measured 70.6 feet and weighed a total of 68,081 lbs. The kill vehicle alone weighed 2,600 lbs.

When the missile reached a point above the atmosphere, onboard computers projected the target's position ahead in time to provide pointing commands to the cryogenic infrared sensor mounted in the

kill vehicle. Once the target was detected by the kill vehicle, a sophisticated set of computer algorithms produced a highly refined trajectory estimate based on the sensor data acquired in real time.

During this time of observation and trajectory refinement, all objects appearing in the field of view were assessed automatically to determine which was the real target.

In the final stage before intercept, the kill vehicle would unfurl the spokes of a 13-foot radial net that would capture the reentry vehicle.



Courtesy of Lockheed Martin Missiles and Space

Artists concept of the HOE “radial net” which unfurled before intercept.

To make the test as realistic as possible, the launch was delayed until ground-based radars detected the target launch, 4,500 miles away at Vandenberg AFB. The ALCOR radar on Roi-Namur, in the Kwajalein Missile Range, acquired and tracked the target before the HOE was launched, about 20 minutes into the target flight. Three sources confirmed the destruction of the target, radar and optical sensors on Kwajalein and a specially instrumented aircraft. The three earlier test flights, although not completely successful, provided 90 percent of the required data and contributed to the successful intercept on the fourth try.

On June 10, 1984, in its fourth and final flight, the HOE successfully completed the first kinetic kill intercept. Launched from Meck Island, the HOE kill vehicle intercepted a mock ICBM reentry vehicle at more than 15,000 feet per second, and telemetry data shows that they smashed into each other nose to nose. This was an incredible feat when it is realized that the combined velocity of the HOE and the incoming missile was more than four miles per second (an M16 bullet travels at approximately 2/3 of a mile per second).

As principal deputy assistant secretary of the Army, Amoretta Hoerber explained, “We tried to hit a bullet with a bullet and it worked.” Ultimately, the evolution from nuclear to kinetic energy intercepts, represented by the HOE system, was the first major revolution in ballistic missile defenses since the United States began BMD research in the 1940s.

The technological significance of the Homing Overlay Experiment was considered so important that the government-industry team responsible for the success received the 1986 American Defense Technical Achievement Award.



U.S. Army photo

HOE lifts off at Kwajalein Missile Range.

Members of the team who shared the award included: U.S. Army Strategic Defense Command, Lockheed Missiles and Space Company, Honeywell International, Rockeddyne, Space Vector Corporation, McDonnell Douglas, Teledyne Brown Engineering, Nichols Research Corporation, Aeromet Incorporated, MIT Lincoln Laboratory, and the Sandia National Laboratory.

The success of the Homing Overlay Experiment was marred eight years later when missile defense pundits at *The New York Times* suggested that the intercept test had been rigged by placing a transponder or “radar beacon” in the target missile.

The Times stated that the rigged test was an effort to deceive Congress into providing more funding for missile defense testing. Les Aspin, the Secretary of Defense under President Bill Clinton, authorized a thorough investigation.

An investigation team, headed by Brad Hathaway of the General Accounting Office, provided their report to Congress on July 21, 1994. The principle finding of the investigation was straightforward: “Our conclusion then, was that the experiment was not rigged and, in fact, could not be rigged by the presence of the radar beacon.”

The report went on to explain: “There was a radar beacon aboard the target vehicle. We also found that there was no receiver on board the interceptor for this radar. The beacon had been placed to assist in range and safety tracking of the target from the ground. The beacon was of a type not capable of giving final guidance to an interceptor.”

Although *The Times* and other newspapers trumpeted the original accusations against the experiment, the conclusions of the General Accounting Office's investigation were widely unreported.

Despite the comments of naysayers, nothing can detract from the accomplishments of the Homing Overlay experiment and the first hit-to-kill intercept of an ICBM. The concept that was proven by the HOE became the foundation of hit-to-kill technology that was refined by later experiments and projects and was eventually deployed as part of the Ground Based Mid-Course Defense System.

The Army tradition of the unit colors and uncasing ceremony

Flags are almost as old as civilization itself. Imperial Egypt as well as the armies of Babylon, Chaldea, and Assyria followed the colors of their kings. The Old Testament frequently mentions banners and standards. From the earliest times, warriors used a banner or other symbol to identify specific units and to serve as a rallying point for troops. By the end of the Revolution, Americans followed the British practice of carrying two different flags during combat, the National flag and a battle or Army "Color".

Even before the War of 1812, in addition to the flag of the United States, each American regiment carried a silk flag or "Colors." The first Army Color was of blue incorporating the design of an eagle (somewhat similar to that in the coat of arms adopted for the United States) and the name of the regiment. Carrying the United States flag and the regimental Colors in combat and during unit formations was a place of high honor.

That National Color of the Army was carried until 1841 when it became known as the regimental color. From that blue flag evolved the eagle on regimental and battalion flags and, finally,

on Major Army Command flags. Battle honors were often painted directly on National and Regimental colors until the 20th century when battle streamers were adopted.

For major U.S. Army commands today, the flag is four feet four inches at the hoist by five feet six inches on the fly. The field of the flag is national flag blue with the U.S. Coat of Arms, minus its crest, centered. Above the USCOA is the shoulder sleeve insignia of the command in proper colors. Below it is a scroll inscribed with the title of the command. The fringe is yellow.

Today, the Colors, with battle streamers attached, join their units in formations during ceremonies to signify their history in past campaigns and the presence of the commander and his headquarters. When a unit or the headquarters of a unit undergoes a permanent change of station, the Colors are "cased", literally furled and placed inside a canvas case, to signify that the command has ceased operations at that location. The Colors are then "uncased" at the new location to signify that the command is operational at its new station.

Uncasing continued from page 1

Borja, saying he listens, is here to make a difference, and is a man of great leadership who has a lot to teach SMDC Soldiers.

Borja comes to the command after serving as the command sergeant major for the 10th Mountain Division, Fort Drum, N.Y. Borja thanked the Redstone community for welcoming him and for embracing the military community in general. "I recently heard the song 'Find Out Who Your Friends Are,' and it made me think of Huntsville ... this area really knows that the military is a friend."

Borja also reminded all employees and guests that the work of SMDC is "all about the warrior — no matter who you are, where you came from, or what your position is ... we're all working for the Soldier."

The two events were very appropriate to put together in a combined ceremony due to their significance and tradition.

"It's fitting that on the day we welcome our new command sergeant major to the command, that we also uncase our colors in Alabama," Campbell said. "Historically, the senior noncommissioned officer in an Army unit is entrusted with safeguarding the unit's colors. In a few moments, the CSM will take his rightful place by the colors, as we uncase them for the first time in Alabama."

Borja and Campbell uncased the colors together as the ceremony continued. The SMDC/ARSTRAT Color Guard from Colorado Springs, Colo., assisted. The symbolic uncasing and unfurling of the command flag signifies the command headquarters' relocation.

"When you look at our colors you can see a bit of our past and our future," said Campbell. "The crest's background of red, white and blue is our nation's colors, and the eagle is our nation's symbol. The sphere symbolizes the global reach of the command, and the flash represents strike capability and quick response."

"This year marks the command's 50th anniversary," said Campbell. "I can think of no better way to move ahead with the next 50 years than to have SMDC/ARSTRAT permanently stationed on Redstone Arsenal and associated with this community. Not just this community — OUR community."

Campbell continued by saying that while securing the high ground is

always an important mission for our command, his main goal was to be known as a values-based organization, bringing Army values to our Soldiers and into our everyday lives. This goal naturally comes back to the warfighter.

"Our mission continues to mature, but the priority remains the same — the warfighter is our number one customer," Campbell said.

After the ceremonies, attendees welcomed the commanding general and congratulated leadership at a reception with cake and punch in the Bob Jones Audi-

torium lobby. Campbell and Borja cut the cake, decorated with the SMDC/ARSTRAT 50th anniversary logo, along with the assistance of the SMDC/ARSTRAT Noncommissioned Officer of the Year Sgt. Patrick J. Mann and the SMDC/ARSTRAT Soldier of the Year Sgt. Martin A. Jensen.

Following the ceremony and reception, the Huntsville/Madison County Chamber of Commerce hosted a welcome luncheon for the command at the Von Braun Center. Campbell was the featured speaker.



Photos by Joe Ramirez

From left, SMDC/ARSTRAT Soldier of the Year Sgt. Martin A. Jensen, Command Sgt. Maj. Ralph C. Borja, Lt. Gen. Kevin T. Campbell and SMDC/ARSTRAT Noncommissioned Officer of the Year Sgt. Patrick J. Mann cut the cake, decorated with the SMDC/ARSTRAT 50th anniversary logo.



Huntsville Mayor Loretta Spencer welcomes Borja and his wife Nguyet to the community during a receiving line which followed the ceremony. More than 200 members of the community attended the ceremony.

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By Marco M

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Hail to SMDC' luncheon draws more than 1,000 from local communities

...orales, SMDC/ARSTRAT, Public Affairs

Huntsville, Ala. — More than 1,000 people, representing Madison and the Tennessee Valley, attended the "Hail to SMDC" luncheon June 26 at the Von Braun Center

...observed as part of the local community's...ment and official welcome to the U.S. Army...Missile Defense Command/Army Forces Strategic...headquarters relocation to Redstone Arsenal, Ala.,...on, Va., was hosted by the Huntsville/Madison...mber of Commerce.

...ight of the event featured keynote speaker, Lt. T. Campbell, commanding general, SMDC/

...st three-star flag officer assigned to Redstone...mpbell said that under actions related to Base...t and Closure (BRAC), other organizations — one...ed by a four-star flag officer, the Army Materiel...— would also be relocating to Redstone Arsenal. ...marks, Campbell thanked the VIPs in attendance...e Huntsville/Madison County Chamber of... He also introduced his new command sergeant

...o introduce a real warrior — a wounded warrior —...ars including [Just Cause] in Panama, Command...ajor Ralph Borja," Campbell said, as the audience...rongly.

...cknowledged the presence of the recently selected...TRAT Soldier and Noncommissioned Officer of the...Martin A. Jensen and Sgt. Patrick J. Mann,

...Both Soldiers are members of the 1st Space...igned to Charlie Company, 53rd Signal Battalion,...Germany.

...ant to know what is 'right' about the Army, talk to...ung men. This is why old guys with gray hair...serve — because of Soldiers like these,"...id, netting a new round of applause.

...spoke about the significance of relocating the...headquarters.

...legacy here in Huntsville for developing...hat dates back into the 1950s so it makes perfect...ce the command at Redstone Arsenal," Campbell...ville is on the rise in terms of government work...viously going to have a great impact on the...re," he said. "But beyond that, too, the technology...t will mature with all the various organizations...ther here including the Missile Defense Agency...y Materiel Command."

...ng to continue to mature our missions. We do...nder General James 'Hoss' Cartwright, who has...ominated to serve as the vice chairman of the...of Staff. I wear a hat under him. He keeps us...He [Gen. Cartwright] is pushing us in the right

...working on operational responsive space,...personic weapons, multiple kill vehicles, and...to need the industry here in Huntsville to help...this," he added.

...highlight of the event included attendance by...War II veterans who were seated next to selected...TRAT Soldiers during the luncheon. The Soldiers...opportunity to converse with the WWII veterans...eption before the luncheon.

...VII veterans are scheduled to fly aboard a...rplane as part of Honor Flight Tennessee Valley...07, to Washington D.C., to visit the memorial...or their service to our nation.

...on the Army of past and present, one veteran...parison.

...art of the war, we didn't have a large standing...e one today," said Lee Kilbourn, age 83. Kilbourn...rt Riley, Kansas, Camp Blanding, Fla., and in...Ala. Because of poor vision, he was classified...vice" and spent the first three years in training...company clerk. In September 1945, he was...Army recruiting duty. "What brought us into the...mber 1941 was an attack on our nation. A lot of...terans] today feel that patriotism is as strong now...ck then," he said.

...ve been so many advancements in technology...e we were there [in WWII] to today," said Jack...age 80. "But serving in uniform is still basically...Livingston enlisted at age 17 in the U.S. Navy —...er including Guam and Saipan. He worked as a...or while his ship was anchored at Saipan on V-J...4, 1945, on his 19th birthday. He also served...nitial occupation of Japan in September 1945.



World War II veterans from (left, front row) Lee Kilbourn, Norman Earley, Willie Wood, Charles Bradford, Jack Livingston and Thomas Stephens pose with SMDC/ARSTRAT Soldiers (from left, back row) Sgt. Martin Jensen, Sgt. Patrick J. Mann, Sgt. Jared English, Sgt. Joshua Osterkamp, Staff Sgt. Christopher Barber, Sgt. Nicholas Brown, Spc. David Knox, Sgt. Christopher Knoth and Sgt. Amber Starr during a reception held before the Hail to SMDC luncheon at the Von Braun Center in Huntsville, Ala., June 26.



Larry Capps, chair, Military Affairs Committee, Chamber of Commerce of Huntsville/Madison County, provides opening comments for the Hail to SMDC luncheon.



SMDC/ARSTRAT Soldiers are seated among the eight World War II veterans who attended the Hail to SMDC luncheon — from left, Sgt. Jared English, Norman Earley, Spc. David Knox and Thomas Stephens.



SMDC/ARSTRAT's NCO of the Year Sgt. Patrick J. Mann and Soldier of the Year Sgt. Martin A. Jensen greet the World War II veterans during the reception.



Sgt. Joshua Osterkamp speaks with World War II veteran Charles Bradford during a reception prior to the luncheon.



More than 1,000 members of the local community attended the Hail to SMDC luncheon.

'What brought us into the war in December 1941 was an attack on our nation. A lot of us [WWII veterans] today feel that patriotism is as strong now as it was back then.'

**— Lee Kilbourn
World War II veteran**

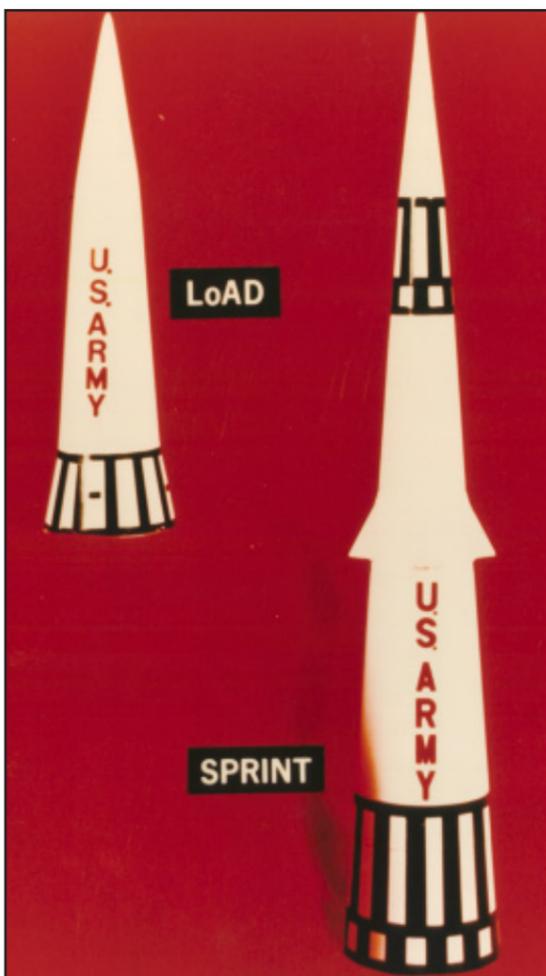
From LoAD to Sentry: Defense of the MX

SMDC/ARSTRAT Historical Office

In the 1970s, the Air Force developed a new ICBM — the Peacekeeper — known then as the MX.¹ In 1979, the Carter administration selected a unique horizontal multiple protective shelter basing mode and moved forward with full-scale development. The concept called for the deployment of 200 MX missiles in 4,600 hardened concrete shelters. The theory was that if the Soviets could not determine which silos held the 200 missiles, they would need to target all 4,600. To add to this the missiles and decoys would be mobile, periodically moving between shelters in the missile cluster.²

The Army proposed two alternatives to provide protection for the new deployment — the Low Altitude Defense or LoAD missile defense system and the Overlay. The Overlay designed for exoatmospheric intercepts could be deployed with an endoatmospheric or Underlay system to create a layered defense. The Overlay however was still in a technology exploration stage, with no detailed system design. The LoAD meanwhile was in a preprototype demonstration/technology development stage designed to determine the feasibility of low altitude BMD system concepts to provide point defense.

In contrast to earlier systems, i.e. NIKE-ZEUS and SAFEGUARD, the LoAD would track and engage the target below 50,000 feet.³ The proposed LoAD was composed of nuclear-armed interceptors designed to fit into the MX shelters and look like an MX or a decoy. One defensive unit (a missile, data processor and a phased array radar), would be hidden in each MX/decoy cluster. Strategists theorized that the enemy would need to target two warheads at each MX to counteract the potential intercept by the LoAD. Thus, the LoAD would require the attacker to target 46 reentry vehicles at each cluster of 23 shelters. To achieve these goals, the LoAD would need to be an integral part of the mobile MX system, indistinguishable from the MX itself, capable of operating in a nuclear effects environment.



Comparison of the LoAD to the SPRINT

In October 1981, the new Reagan administration revised the MX program to speed up deployment. President Reagan canceled the mobile basing plan and opted to limit the number of MX missiles and recommended using existing Titan II or Minuteman silos.

In the meantime, the LoAD progressed to the next phase and was redesignated the Sentry in 1982. The Sentry development program was developed to resolve key issues in system and subsystem design and verify the feasibility of the integrated system, assuring that the system could be developed and deployed rapidly if needed. The short term goal was to support all MX basing options. The long-term focus was to pursue endo-atmospheric non-nuclear kill capabilities. The BMD program was further defined by the Secretary of the Army John O. Marsh, in an action memo dated Aug. 2, 1982. In it he defined the two major elements of the BMD Program: (1) a steady research and development program and (2) to develop a defense for the MX missile system — the primary mission.

A significant change came on Nov. 22, 1982, in President Reagan's address to Congress and the Nation on the Deployment of the MX Missile. He specified a closely spaced basing system of 100 missiles in pre-existing silos at the F.E. Warren Air Force Base, Wyo. At the same time, the president stated "we do not wish to embark on any course of action that could endanger the current ABM treaty so long as it is observed by the Soviet Union." As a result, "we do not wish to build even the minimal ABM system allowed us by the treaty, even though the Soviets have done so."

As the debates continued in Congress and special commission reports, the first flight test for the MX came on June 17,



U.S. Army photo

Peacekeeper Reentry Vehicles descending over Kwajalein.

1983. During this test, the missile traveled 4,190 miles and delivered six unarmed re-entry vehicles on target sites in the Kwajalein Missile Range. Ultimately, 50 Peacekeepers were deployed at F.E. Warren Air Force Base with full operational capability in 1988.

In February 1983, however, the Sentry Interceptor Program, closely tied to the MX deployment, was terminated. Work on the data processing system and radar continued. The radar system, later renamed the Terminal Imaging Radar, was a predecessor to the current X-band radar. This was not the end for missile defense, however. One month later, President Reagan announced his concept for the Strategic Defense Initiative and ballistic missile defense entered a new chapter.

Footnotes:

1-The MX or Missile Experimental was a four-stage ICBM, measuring 70 feet long and 198,000 pounds, capable of carrying up to eleven independently-targetable reentry vehicles, but restricted by treaty to ten.

2-Each missile cluster would include 1 MX, 22 decoys, 23 shelters, a large transporter truck and 1 maintenance facility.

3-In comparison, the endoatmospheric interceptor operates between 100-300,000 feet altitude.

SMDC/ARSTRAT 50th Anniversary Reunion Picnic

SMDC/ARSTRAT Public Affairs

REDSTONE ARSENAL, Ala. — In honor of the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (SMDC/ARSTRAT)'s 50th Anniversary, the command is hosting a reunion picnic on July 11 at the NASA picnic Area here. The event will include games — such as softball, volleyball, horseshoes, and bingo — beginning at 9 a.m. A barbecue luncheon, catered by Gibson's, starts at 11 a.m.

The picnic is part of a yearlong celebration of 50 years of outstanding work in missile defense that SMDC/ARSTRAT has been coordinating through monthly events. Though the command's name has changed often, the dedication of its employees to the mission has not. The command wants to celebrate our 50th Anniversary with all of those who helped make it a success. Any employee who worked for the Redstone Anti-Missile System Office, NIKE-ZEUS, NIKE-X,

SENTINEL, SAFEGUARD, Strategic Defense Command, Space and Strategic Defense Command, or the current SMDC/ARSTRAT is invited to attend the July picnic.

The cost of the luncheon is \$6.50 for adults and \$4.50 for children. The adult menu includes pork or chicken, coleslaw, baked beans, potato salad, rolls, and beverages. The children's menu offers the option of chicken fingers.

To order tickets, contact SMDC/ARSTRAT at P.O. Box 1500, ATTN: SMDC-FW (Kimbrough), Huntsville, Ala., 35807-3801. Please make checks payable to SMDC Fund and include a self-addressed stamped envelope. Deadline for ordering tickets is June 29.

We hope you will join SMDC/ARSTRAT in celebrating 50 years of excellence in missile defense, and we look forward to seeing you at the picnic!

For additional information, please contact Phil Patterson at (256) 955-1746 or pattersonp@smdc.army.mil.

Reflecting on a half century: SMDC/ARSTRAT selects 50th anniversary logo contest winner

SMDC/ARSTRAT Historical Office

In April, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command celebrated its 50th anniversary with a competition to design the anniversary logo. Over the course of the month, the command received 26 entries from contestants across the globe. Employees — military and civilian — represented the workforce from Kwajalein Atoll, Camp Roberts, Calif., Colorado Springs, Colo., and Huntsville, Ala. Other entries were received from family members in Kwajalein and Ohio and SMDC/ARSTRAT's contractor community in Huntsville.

Each entry was quite unique, drawing upon the command's and the nation's heritage. It was a challenge for Lt. Gen.

Kevin T. Campbell, commanding general, SMDC/ARSTRAT, and the board of directors to select the top three candidates.

The winning design, submitted by Eric Gronquist of Defense Acquisition, Inc., incorporates SMDC/ARSTRAT's current logo and that of the NIKE program reflecting a long history of service to the nation. The five stars document the five decades of SMDC/ARSTRAT's history. In a recent conversation, Gronquist, a graduate of Auburn University and specialist in the technical publications field, commented that he enjoyed the challenge posed by the competition — tying together past and present in an easily identifiable format.

The second place entry was from Michael Bass and third place by Susan Gahagan. Our congratulations and thanks go out to all the entrants.



SMDC/ARSTRAT celebrates Golden Anniversary

By DJ Montoya
1st Space Brigade

COLORADO SPRINGS, Colo. — U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Operations helped kick off one of the major highlights during the yearlong celebration of SMDC/ARSTRAT's 50th Anniversary with a military ball on May 11 at the Antlers Hilton here.

Retired Army Lt. Gen. Edward Anderson, former commander of SMDC/ARSTRAT, was guest speaker for the evening's event. Speaking before an audience of 500 composed of Soldiers, civilians, contractors and spouses, Anderson stated, "Some of the challenges I would offer to you are old. These are challenges

that we have seen before."

"First and foremost is how to provide support to the warfighter, — the joint warfighters — using space-based capabilities. You don't own the space system. Somebody else does," Anderson said. "The answer to that is to get in early with the requirements for the warfighters so that they've built into the system the way you want them so then you can have a concept to employ them."

In the missile defense arena Anderson had nothing but praise when he said, "When you look at last Fourth of July and the incident that happened with the North Koreans and how well you all performed — you truly demonstrated that we could defend this nation. But there are still a lot of things that need to be done."

"Challenges are nothing new to SMDC. Look at what you have done in the last 50 years. You have overcome some incredible challenges. You've done it before, and you will do it again," he said.

The evening saw numerous accolades as Col. Timothy Coffin, commander of the 1st Space Brigade, used the evening's theme of honoring "Army Space Pioneers" to recognize those pioneers and the countless number of individuals who helped create



Revelers danced to the beat after the formal portion of the U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command Ball May 11 in Colorado Springs.

SMDC/ARSTRAT and the operation's two brigades — 100th Missile Defense Brigade and the 1st Space Brigade.

"These pioneers gave us a tremendous legacy that each generation has built upon," said Coffin. "And the seeds that were planted back in the 50s and 60s have grown beautiful trees that are bearing fruit for us today."

Pointing to the 1st Space Brigade's ceremony for its new distinctive unit insignia (DUI) which occurred a week prior to the evening's celebration, Coffin honored a number of individuals — past and present — for their contributions to the creation of the brigade, as well as that of the command, with 20 specially numbered and framed DUIs from the manufacturer.

"It was teamwork, a chain of teamwork that came through

two-and-one half decades that enabled this unit to be created."

Among those receiving the special DUIs was Col. Patrick Rayermann, chief of Space and Missile Defense Division, Headquarters Department of the Army.

"The Army has done a lot since the end of World War II to move this nation forward in terms of Space capabilities and Space exploration," said Rayermann, recounting those early days as a young captain on the Army Space Initiatives Study.

"It is amazing in hindsight, 22 years later, some of the things we recommended were extraordinarily prescient," Rayermann said. "I'm amazed at some of the things we got right. The fact that we came very close on some things I'm very proud of."



Photos by Sharon Hartman

Retired Army Lt. Gen. Edward Anderson makes comments to the audience at the SMDC/ARSTRAT Ball May 11 in Colorado Springs, Colo.

Civilian News

Airlines seek donations by frequent flyers

The Defense Department's Hero Miles program provides free airline tickets to servicemembers who are undergoing treatment at a military or VA medical center incident to their service in Iraq or Afghanistan, and their families. Ten airlines are asking their passengers to donate their frequent flyer miles to the program. AirTran, American Airlines, Alaska Airlines, Continental Airlines, Delta, Frontier, Midwest Airlines, Northwest Airlines, United, and U.S. Airways are participating. For more information, visit the Fisher House Foundation's "Hero Miles" Web page.

SMD Conference scheduled for August

The 10th Annual Space and Missile Defense Conference and Exhibition will take place Aug. 13-16 at the Von Braun Center in Huntsville, Ala. The theme is "Celebrating 50 Years in Space and Missile Defense." Conference highlights include presentations from internationally recognized experts in the areas of global ballistic missile defense systems development and operation, as well as integration, synchronization, and capability development to meet new threats. Sessions will also cover space support to the warfighter, homeland defense and the integration of cruise missile defense. Confirmed speakers include Gen. James E. Cartwright, commander, U.S. Strategic Command; Gen. Kevin P. Chilton, commander, Air Force Space Command; Lt. Gen. Henry A. "Trey" Obering III, director, Missile Defense Agency; Lt. Gen. Kevin T. Campbell, commanding general, SMDC/ARSTRAT; Lt. Gen. Michael A. Hamel, commander, Space and Missile Systems Center, Air Force Space Command; retired Lt. Gen. James A. Abrahamson, first director of the Strategic Defense Initiative Organization; retired Lt. Gen. Thomas Stafford, former astronaut; Sen. Jeff Sessions (R-AL); and many more. There will be exhibit displays throughout the entire VBC and daily attractions in each hall, including celebrity authors, the Liberty Bike, and the Liberty Guitar. The conference will also have a technology trek, a scavenger hunt and a theater projection of the Army's video game. All of these attractions, along with the viewing of all exhibits, are free and open to the general public. For additional information, please call Giselle Bodin, (256) 955-3889, or e-mail, giselle.bodin@smdc.army.mil.

Can you have too many credit cards?

If you choose to have more than one credit card then a few simple guidelines must be put in place, in order to avoid financial ruin. Anyone can be tempted to get a credit card at their favorite clothing store if it gives them 10 percent off their purchase. However, that's the best time to turn it down. Having these additional cards will only add to your credit card balance, unless you plan to pay them off immediately. If you find you can't pay off your Banana Republic, Gap, Express, and Home Depot cards all at the same time, whittle the amount of store credit cards down to one or two. Many people use multiple credit cards as a savings vehicle. Or, they keep them on hand to pay for emergencies. However, if a payment is missed on any of the cards, then the late fees might be insurmountable. If this sounds familiar, then its time to reconsider how many cards you need for emergencies. For more information, visit the web site: military.com/spouse.

TSP returns for G, F, C, S and I funds

Rates of return were updated on June 1.

May 2007		Last 12 months (6/1/06 -5/31/07)	
G Fund	0.34%	G Fund	4.92%
F Fund	(0.70)%	F Fund	6.71%
C Fund	3.52%	C Fund	22.81%
S Fund	4.40%	S Fund	21.89%
I Fund	2.54%	I Fund	26.92%

Percentages in () are negative.

Military News

Senate panel locks in 3.5 percent raise

The Senate Armed Services Committee practically assured military personnel a 3.5 percent pay raise next January by including that figure in the fiscal 2008 defense authorization bill it approved in late May. The House of Representatives already had voted to give the military a 3.5 pay raise next year. You can read the article at military.com

Command requests DNA samples

Since the mid 1990s, the Joint POW/MIA Accounting Command, which conducts recovery missions overseas, has used mitochondrial DNA to help identify remains of soldiers. The agency needs DNA samples from family members of servicemen who served but did not come home in order to identify discovered remains. The agency maintains a list of servicemen it needs DNA samples for on its Joint POW/MIA Accounting Command web site, and family members are encouraged to contact the casualty office of the branch of service to which their loved one belonged in order to submit a DNA sample. You may also call JPAC's public affairs office at Hickam Air Force Base at 808-448-1934.

Exchanges recall toy set

The U.S. Consumer Product Safety Commission, in cooperation with the Army & Air Force Exchange Service (AAFES), have announced a recall of the Soldier Bear brand Invincible Transport Converters, Style #88931 activity play toy. The model included in this recall is: 88931, UPC # 6 98567 88931 4 CRC #: 1419301. It was sold at AAFES stores worldwide from August 2006 through April 2007 for about \$19.95. Consumers should immediately take the toys away from children and return the product to the nearest AAFES store for full refund. For additional information, contact AAFES at (800) 866-3605 or visit aafes.com.

TRICARE issues letter to beneficiaries

TRICARE has issued a letter to its beneficiaries regarding the drug Avandia and its use in Type II diabetes patients. On May 21, 2007, the New England Journal of Medicine published an article highlighting a recent study that suggests that the drug Avandia increased the risk of heart attacks and heart-related deaths in patients taking the drug. The Food and Drug Administration has also issued a safety alert on the drug Avandia. For more information on the recent study on the drug Avandia, visit the healthfinder.gov web site. To learn more about TRICARE, visit military.com/benefits/tricare.

Grand Ole Opry salutes U.S. Military

The Grand Ole Opry presented by Cracker Barrel Old Country Store is set to honor members of the United States military this summer with an Opry Summer Salute now through September 3, 2007. The Salute will feature special shows, recognition of military personnel, and special offers. Special Opry values for military personnel with an Opry ticket order during the Summer Salute include: (1) free family photo, (2) free concession item, (3) bonus coupon from The Opry Shop, and (4) a chance to win a backstage tour on the night of visit. Opry shows are every Tuesday, Friday and Saturday night. Military personnel should mention code MIL10X when making reservations at 1-800-SEE-OPRY (733-6779).

Mortgage Bill Introduced to Benefit Troops

Home ownership is part of the American dream, but that dream can become a nightmare for families who do not have some form of mortgage insurance. U.S. Senator Larry Craig took action to address that reality by introducing legislation (S. 1265) that would expand eligibility for the Department of Veterans Affairs Veterans' Mortgage Life Insurance (VMLI). His bill would include members of the Armed Forces who have received housing modification grant assistance from VA for severely disabling conditions. To learn more, read the article at Military.com.

Master black belt joins SMDC/ARSTRAT

By Sandy McAnally
SMDC/ARSTRAT
Business Initiatives Office

Tom Ray has joined the Business Initiatives Office in Huntsville, Ala., as U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's Lean Six Sigma master black belt. In this role, Ray will support the Business Initiatives Office in Lean Six Sigma implementation and provide executive-level strategic direction and planning support. Ray is part of SMDC/ARSTRAT's initiative intended to help this command launch its LSS program.

Ray will also assist functional organizations and major subordinate elements as they identify areas that can be improved and by mentoring and coaching green belt and black belt candidates in executing their projects.

A master black belt is a recognized expert who has demonstrated proficiency in LSS statistical tools and expertise in leading and teaching others. Also, master black belts have demonstrated success in meeting an organization's strategic objectives by

planning, conducting, and implementing process improvements using LSS principles and practices.

His experience with quality initiatives is multi-faceted, working for PPG Industries as the aerospace business unit continuous improvement manager. During this time, he led the implementation of a successful Six Sigma program for the Huntsville facility as well as leading multiple lean manufacturing rapid improvement events. Ray also co-facilitated PPG Aerospace's Business Strategy and Planning sessions conducted for the Aerospace leadership team.

Prior to his work at PPG, Ray worked with General Electric, one of the nation's leading proponents of Six Sigma principles. Ray was certified as a Six Sigma black belt by GE in 2000.

A graduate of the University of Alabama, Ray has a bachelor's in mechanical engineering. His early career began as a manufacturing engineer, but his energy and communication skills led him into team facilitation and leadership. He has more than 10 years experience in facilitation and business continuous improvement. In



Courtesy photo

Tom Ray teaches the principles of Lean Six Sigma to green belts during a class on Redstone Arsenal, Ala.

addition, Ray is certified in APICS Production and Inventory Management (PCIM) and Lean Facilitation.

Ray is also a certified instructor for the Department of Army Lean Six Sigma program of instruction being provided to DA by the George Group. In fact, Ray recently led the training course held in Huntsville where 25 SMDC/

ARSTRAT employees graduated as green belt candidates. These new green belt candidates will have the added benefit of continuing their projects under his mentorship.

If you have questions about Lean, Ray is located in the Business Initiatives Office, room 1026, or he can be reached at (256) 955-4102 or e-mail Tom.Ray@smdc.army.mil.

Training prepares 25 as future Lean Six Sigma green belts

By Sandra McAnally, SMDC/ARSTRAT
Business Initiatives Office

Value-added is the first word that comes to Beth Whitaker's mind when she describes her recent green belt training. Then she pauses, mulling over a question, and continues, "I wouldn't know where to begin my project without having this green belt course. Even though it's a very common sense approach to solving problems, not a high tech concept, it is very beneficial to understand the Lean concepts when tackling a project designed to reduce the operating costs of doing business."

Whitaker, who works in Research, Development & Acquisition, Command Analysis Division, is one of 25 SMDC/ARSTRAT employees who recently completed the Department of Army-sponsored Lean Six Sigma Green Belt Course. The training is designed to teach Lean Six Sigma (LSS) principles and prepare students for conducting value stream analysis and rapid improvement events using a five-step approach.

As green belts, these employees can lead their organizations to become more efficient at processing work and to identify and eliminate redundant tasks that do not contribute directly to output or quality. Final certification will occur after their project is completed, and improvement recommendations and cost savings are implemented.

This two-week event was the first class hosted by SMDC/ARSTRAT in Huntsville, Ala. Students were nominated by their directors and supervisors based on their ability to lead and facilitate teams, to analyze problems using a prescribed tool, and for their opened minded approach to problem solving.

Each candidate brought a defined project to class the first week. During the two-

week course two Lean Six Sigma master black belts, who are certified instructors by the Department of Army, taught the curriculum and helped each student refine their project scope.

Students' next assignment is to use the Lean tools, working with a select team of co-workers and specialists, to make improvements in their selected work process.

Both Whitaker and Bob Hill, an engineer with Future Warfare Center's Simulations and Analysis Division, agree that starting a project would be difficult without the training they received.

When asked about the benefit he received from the training, Hill said "I have a whole new appreciation of LSS. I had an over-arching view previously, but not down to the lower level. I saw LSS as manufacturing tool, now I see how it fits our work at SMDC. Since my participation

in an earlier event, I have new appreciation of why and how, and that LSS can be very useful in my work and other projects in the command."

Hill also felt that one highlight of the training was the measure and analyze phase of the five-step process. "It refreshed my insight on how important it is to collect the right data to make sure you get the right results. Outputs restate the inputs. I will look more closely at cause and effect relationships during my LSS projects."

Hill's project deals with the readiness of the ARC to respond to customer requests. During his project, "High Performance Computing Modernization Process," Hill's team will look at opportunities to provide ARC customers a shorter response window.

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Courtesy photo

SMDC/ARSTRAT Lean Six Sigma green belts — Front Row Left to Right: Angela Jones, Lisa Vann, Debbie Mitchell, Beth Whitaker, Capt. Antoinette Fletcher, Terry Trussell, Teresa Brown, Rosalind Smith, Tara Ragan-Ward. Middle Row Left to Right: Mark Robbie, Barbara Dixon, Angela French, Edward Askew, Jeffery Shields, Capt. Tiffany Carr, Karen Butler, Maj. Roderic Spencer. Back Row Left to Right: Steven Lundberg, Sgt. 1st Class Wade Viner, Jeff Craver, Maj. Craig Holton, Robert Hill, Sgt. Michael Loper, Jeremy Collins, Lt. Col. Alex Robinson.

**One Bravo Company, 53rd Signal Battalion,
Soldier learns the awful truth about the ...**

Bataan Death March

By Sgt. Nick Murja

FORT MEADE, Md. — I've been aware for most of my life that my grandfather, Alfred Haws, was a prisoner of war. Only this year did I actually sit down with him to hear his story and understand what that really meant. With him, I attended the annual meeting for The American Defenders of Bataan and Corrigador (ADBC); I found that his story, originally shared by many, is now only shared by an aging few.

Arguably the second greatest war crime in World War II, what follows is the story of tens of thousands of American and Filipino Soldiers.

On Dec. 7, 1941, Hawaii, then responsible for America's defense in the Pacific, unknowingly awaited a Japanese assault. Ten hours later, an attack as horrific as that of Pearl Harbor struck the Philippines premiere air location, Clark Field. Sixty fighter jets, most of which were still on the ground, were destroyed. This also included the obliteration of the runways used for incoming supplies. In the four months that followed, an estimated 12,000 American Soldiers and 66,000 Philippine Scouts would exhaust supplies.

With no reinforcements feasible, for lack of a runway and the depleted U.S. Naval Fleet, Soldiers found themselves with little more than the will to live. As the months wore on, rations were exhausted to only one-quarter of the normal fill providing little sustenance for energy to bout the dysentery, malaria and beriberi which infected the island.

On March 11, 1942, Gen. Douglas MacArthur was ordered to Australia, and the Philippines were viewed to be lost. April 7 of that year the front lines collapsed. Gen. Jonathan Wainwright succeeded MacArthur as general of the Armies of the Philippines, and

Gen. Edward "Ned" P. King Jr. became the commanding general of the Philippine-American forces in Bataan. Two days after the collapse, King, without informing Wainwright, surrendered the largest military force in American history. President Roosevelt now had thousands of stranded Soldiers on a small island much closer to the enemy than to any allied force.

A small number of Soldiers refused to become prisoners and fled, joining a significant resistance movement throughout the Philippines. The rest were abandoned to become prisoners, and the self proclaimed "Battling Bastards of Bataan."

The surrender also created a logistical problem for Japan. They had no place to store the nearly 80,000 troops they had acquired. My grandfather explained, "A Japanese officer stood on a table in front of a bunch of us and said that if it were up to him, we would all be killed on the spot."

The Japanese began their only solution on April 10, 1942.

Over the next eight days the prisoners were marched more than 60 miles, a "jaunt," that would later be called "The Bataan Death March."

Enduring extreme heat, humidity, hunger and fear, they marched with the pressure that falling out would only lead to death. Those who did were bayoneted. Soldiers broke ranks to run to the nearby Artesian wells, many of them were beheaded or lit on fire. Philippine women offering rice alongside the road were often horrifically mutilated for helping the enemy.

At San Fernando, most of the prisoners were loaded into box cars onto the railroad. They were conventional cargo cars used to hold 40 people, but up to 100 Soldiers were crowded in the cars pressed so tightly that they could do nothing else but stand. The lack of ventilation



Courtesy photo

Camp O'Donnell Memorial Monument in the Philippines was built by the organization known as "The Battling Bastards of Bataan" to honor the American men who died at Camp O'Donnell, while prisoners of the Japanese.

resulted in many suffocating and dying upright where they stood. Upon arriving at Camp O'Donnell, the POWs were sent on work details if they were healthy enough to contribute.

My grandfather recalled soaking an Army wool blanket, leaving it "ringing wet" with sweat from the sickness that plagued him. Not long after arrival, Claude, his older brother, died in his arms the same way many others would, by losing the will to live.

A few months later, Camp O'Donnell was closed, and the POWs were moved to another camp, known as Cabanatuan, only to find much of the same. The POWs would later report standing in water lines for hours or even days at a time. Sadly, many would die waiting. Most were sick multiple times and received only minimal food they called "Quan." "Cabanatuan Beef" became a staple for those who had the energy to hunt rats.

At both camps the dead were thrown into mass graves — a huge hole in the ground where the bodies were flung. One of the most famous pictures of the camp shows a line of POWs carrying their dead off to the grave. My grandfather stated, "From morning to night, the line never stopped."

The Japanese made the decision that the POWs would best serve their time as workers in factories. They were sent to more than 300 POW camps in Japan, Korea

and Manchuria. In order to reach their destination the Japanese loaded them onto "Hell Ships." The ships were claustrophobically packed, while death, disease and defecation filled the air. Several ships were sunk by American submarines only to have the survivors loaded onto other Hell Ships and in some instances, sunk again.

The POWs worked in iron mills, coals mines and other Japanese factories until Nagasaki was bombed on Aug. 6, 1945. Still others stayed in Cabanatuan and were later saved by the 6th Ranger Battalion.

As I spoke with my grandfather more than 60 years later, he only cried one time during the three hours reflecting the atrocities that he and many others endured. He explained how he felt when he set foot back on American soil. He choked up for a moment showing the deep seeded emotion he had for surviving one of World War II's most horrific incidents.

Apart from a memorial march in White Sands, N.M., and the annual ADBC convention, these Soldiers seem to be forgotten. As Frank Hewlitt, an Associated Press writer, penned, "No mama, no papa, no Uncle Sam ... no aunts, no uncles, no cousins, no nieces, no pills, no planes, no artillery pieces and nobody gives a damn, and nobody gives a damn"... about the Battling Bastards of Bataan.

Lean

continued from page 17

"The ARC is a high visibility facility," said Hill. "Our goal is to save customer time — be ready to turn their request around and provide the service they need in a professional but quick response."

For Capt. Tiffany Carr of 1st Space Brigade in Colorado Springs, Lean Six Sigma green belt training energized her.

"During the first training week I came with an open mind, and as I sat here a light went on about how it will benefit the AG personnel process. Also, this method has very diverse application for both military and civilian work forces.

"I love that all students give input and ideas on how to improve problems," she said. "Working through the class simulation model, you want to scream, but at the

end you are happy to see the outcome or solution to the problem.

"I'm really excited about the process and application to my project, Processing Military Awards in a Timely Manner," said Carr. "I plan to turn the whole AG processing system upside down — to get rid of wasted time, redundancy, and rework. I have six or seven projects that I plan to 'Lean,' and I want to get those processes flowing as smooth as water flowing down the river."

On May 18, Michael Schexnayder presented diplomas to graduating green belt candidates. As deputy to the commander for Research, Development, and Acquisition, he is very supportive of the Lean Program in the command and encouraged students to press forward with their new knowledge and become a black belt in the

future.

"This training will help you look at the work in a different way," Schexnayder said. "Use good judgment to help others in changing a process. Choose carefully in the projects to analyze, because project choice can be more important than the process you put into place. Congratulations to each of you for successes at graduation and in your future projects."

While students are working on their projects, they will receive guidance from the Business Initiatives Office Lean Team led by Candace Holcomb and mentoring from Tom Ray, Lean Six Sigma Master black belt and course instructor. After project completion and review by DA, green belt certification will be awarded by the deputy undersecretary for the Army for Business Transformation.

In a galaxy far, far away ...

By Ed White
SMDC/ARSTRAT
Public Affairs Office

COLORADO SPRINGS, Colo. — Reenlisting is a very personal decision, and the ceremonies tend to have their own flair. 1st Space Brigade Soldiers have conducted reenlistment ceremonies in giant satellite dishes, on top of Pikes Peak, at baseball stadiums, and no less important in building three presided over by the commanding general. So, a Star Wars themed reenlistment might not seem so far, far away from the norm.

So, what is a Star Wars theme and how does it relate to a reenlistment? It means that a storm trooper is presiding

over the reenlistment, and one of the attendees is Chewbacca.

Sgt. Burch Parshall wanted a unique ceremony, so he challenged his commander to help him out. It was one of those “if you will, I will” things and his commander agreed.

“We did the ceremony in uniform first,” said Capt. Tom Wiktorek, Parshall’s commanding officer in Headquarters and Headquarters Company (HHC) 1st Space Battalion and presiding officer at the ceremony. “Then, after the real ceremony, I put my storm trooper outfit on, and we did it again.”

Chewbacca was portrayed by Spc. Michael Mellenthin of HHC. His costume came from a rental store in Colorado Springs. The storm trooper



Photo courtesy of HHC 1st Space Brigade

Chewbacca, alias Spc. Michael Mellenthin, Sgt. Burch Parshall and an Imperial Storm Trooper portrayed by Capt. Tom Wiktorek celebrate Parshall’s reenlistment in a really out-of-this-world way.

outfit, however, is part of Wiktorek’s personal and quite extensive collection of Star Wars gear.

“The first ceremony made Parshall’s reenlistment official, the second ceremony made it fun,” Wiktorek said.

Echo Company Soldiers committed to serving

Reaffirming commitment through reenlisting provides opportunities for Soldiers

FORT BUCKNER, Okinawa, Japan — As our nation still fights for the preservation of freedom, and Soldiers continue to pay the ultimate price for it, there are still those brave souls who continue to provide their selfless service to the nation.

In the month of March alone, Echo Company exceeded the reenlistment mark for the mid-term career Soldiers.

Staff Sgt. Zachary Hedlund, Staff Sgt. Michael Brondsema and Sgt. Ernest Mari all reenlisted for an additional six-year term, giving them the opportunity to cash in on their reenlistment bonus and choice of station. On the other hand, Staff Sgt. Gil de Lamadrid reaffirmed his commitment to the Army by reenlisting to an indefinite status.

Soldiers, fellow noncommissioned officers and officers of the company had the opportunity to share with these NCOs during this special moment. As is the norm for this type of ceremony, the reenlisting Soldiers shared some of the experiences of their military career.

Some spoke about their experiences in the desert, their mentors, families, and the expectations they have for the rest of the term they have just reenlisted for.

When a Soldier reenlists, so do the family members — all reconfirm their commitment to continued Army life.

Spouses, who dedicate their time not only to their family but who also provide support to the Family Readiness Group in the unit, were recognized in giving the company the feeling that regardless of where their Soldier fights or where they work, they are still “ARMY STRONG!”



Phase II of the Von Braun Complex nears completion

Phase II of the Von Braun Complex on Redstone Arsenal, Ala., will soon be ready for occupants. Construction of the 234,000 square-foot building began in October 2005. There is a ribbon cutting ceremony scheduled for July 30. Employees of the Missile Defense Agency and some from SMDC/ARSTRAT will occupy the new building later this year.



Photos by Dottie White

Leadership and communication training

Charlie Company, 53d Signal Battalion

LANDSTUHL, Germany — Recently, a junior NCO (noncommissioned officer) from Charlie Company seemed troubled about how to conduct an even-oriented counseling session.

The counseling session centered on an event in which a subordinate was disrespectful. Since the event was still fresh, the junior NCO had mixed feelings on what to write in the counseling statement and what to leave out since his counseling session seemed destined to become a heated one regardless of the guidance given to his Soldier.

As expected, the NCO was clear that the guidance given should serve as a tool for development, yet he didn't know how to do that because he would have to focus on the behavior of the Soldier without seeming accusatory.

Upon hearing about the dilemma, the company executive officer, 1st Lt. Carlos Santana, reflected on his own training and realized that he had taken in and internalized some learning points from his 1st Sgt. Martin Chaffee.

"Some months back, he had taken the time to briefly talk to me about some points from our monthly CO2 training. In truth, I thought nothing special of it at the time, yet something told me to keep the copy that he gave me of the lesson plan," said Santana.

The focus of the training centered on understanding effective communication techniques, styles and barriers. Compared to operations training, this small piece of information did not stand out in Santana's eyes, yet he understood that he should take to heart the guidance that Chaffee was providing.

Effective corrective counseling comes

from effective communication training.

"When counseling, one must tell the person how his or her behavior affects the unit without judging the subordinate's behavior," said Santana. "By following this guidance, the counselor avoids threatening a person over his or her performance. In other words, if a leader endeavors to have his subordinate absorb the guidance given, then that leader should attempt to avoid actions and behaviors where his subordinate's willingness to listen is blocked."

With this in mind, Santana reminded the NCO that he needed to focus on the facts of the event to outline the subordinate's performance in detail. This would first allow him to chronicle the incident for any future counseling actions and would allow the subordinate to see the facts plainly on paper. If the event was chronicled correctly, no room would be left for ambiguity or misinterpretation.

After this was accomplished, Santana suggested the junior NCO now focus on how his subordinate's behavior affected the unit. This way the leader tied behavior to standards and separated constructive criticism from judgment, a key process in keeping the communication lines open.

By talking with Santana about the process for several minutes, the noncommissioned officer seemed to have found his answer to the counseling problem — all it took was a couple of minutes to reflect back on past guidance. Imagine that, company training useful to operations!

As a leader, it's essential to note the importance of actively developing one's ability to communicate effectively and, in this regard, members of Charlie Company found that training had actively prepared them to do just that.

ID theft scam targets deployed troops' families

American Forces Press Service

WASHINGTON — The American Red Cross is warning military spouses about a new identity-theft scam that targets family members of deployed troops.

The Red Cross was alerted of the scam earlier this month, said Devorah Goldberg of the Red Cross.

The scam involves a person with an American accent calling a military spouse, identifying herself as a representative of the Red Cross, and telling the spouse that her husband was hurt in Iraq and was medically evacuated to Germany. The caller then says that doctors can't start treatment until paperwork is completed, and that to start the paperwork they need the spouse to verify her husband's social security number and date of birth.

It is hard to determine how many spouses have been targeted by this scam, Goldberg said, as there are many ways for spouses to report problems like this. However, one confirmed report was enough for the Red Cross to act, she said.

"We know that it happened to one person; it was probably going to happen to others, and we wanted to be prudent and alert people," she said.

American Red Cross representatives typically do not contact military members or dependents directly and almost always go through a commander or first sergeant, according to a Red Cross news release. Military family members are urged not to give out any personal information over the phone if contacted by unknown individuals, including confirmation that their spouse is deployed.

In addition, American Red Cross representatives contact military members or dependents directly only in response to an emergency message initiated by a family member, the news release said. The American Red Cross does not report any type of casualty information to family members; the Defense Department will contact families directly about family members' injuries.

It is a federal crime, punishable by up to five years in prison, for a person to fraudulently pretend to be a member of, or an agent for, the American Red Cross for the purpose of soliciting, collecting, or receiving money or material, according to the news release. Any military family member who receives such a call is urged to report it to his or her local family readiness group or military personnel flight.

Talk show for spouses

Featured at Military Spouse Magazine, ClubMom.com, Military.com, Army.com and more, Army Wife Talk Radio is an internet talk radio program for wives. The tagline, Our Life, Our Family, Our Soldier says it all. This weekly internet talk radio broadcast with up to date information, tips and empowerment for spouses is hosted by Tara Crooks.



Photo by Sgt. Jack W. Carlson

Members of 49th Missile Defense Battalion (GMD) sit at the tip of freedom's spear

Sitting at their consoles literally at the "tip of freedom's spear," Bravo Crew, 49th Missile Defense Battalion (Ground-based Midcourse Defense), operates the GMD portion of the Ballistic Missile Defense System. The system has been manned 24/7 since achieving limited defensive capability in September 2004. Located at Fort Greely, Alaska, the battalion is composed of more than 200 full-time Alaska Army National Guard Soldiers. Those 200 Soldiers make up nearly 10 percent of the state's National Guard.

1st Space Battalion deploys in support of OIF

By DJ Montoya
1st Space Brigade

PETERSON AIR FORCE BASE, Colo. — Soldiers from the 1st Space Battalion were recently given an early morning farewell ceremony as part of a deployment at U.S. Army Space and Missile Defense Command/Army Forces Strategic Command's operational headquarters building here.

Col. Timothy Coffin, commander of the 1st Space Brigade, addressed an audience of more than 100 composed of Soldiers, Family members, civilians and contactors, as the Soldiers prepared to deploy in theater as part of OPERATION IRAQI FREEDOM. Their mission will be to provide space-based products and capabilities to the warfighter on the ground.

"We are here today to honor and bid farewell to these Soldiers — your Soldiers — who they are, what their capabilities are, their professionalism, their training and the way they've prepared to do this mission," said Coffin. "On the other hand parting is hard. We are going to miss you while you are gone. But we do know that you are being called upon to do an important task, an important mission."

Coffin then explained to the audience that he was issuing to the battalion commander a brigade mission coin. Its purpose is to set the conditions for success for this unit's team leader to ensure everybody is connected right and that they can do their mission well and return home safely.

As Lt. Col. Lee Gizzi, commander of the 1st Space Battalion stepped forward to accept the coin from Coffin he reflected on the current status of the battalion by pointing to the fact that nearly 80 Soldiers



Photo by DJ Montoya

Lt. Col. Lee Gizzi, commander 1st Space Battalion, accepts a brigade mission coin from Col. Timothy Coffin, commander 1st Space Brigade, as 1st Sgt. Douglas Bram from the battalion looks on during a recent deployment ceremony on Peterson Air Force Base, Colo. Members of the 1st Space Battalion are deploying in theater as part of OPERATION IRAQI FREEDOM providing space-based products and capabilities to the warfighter on the ground.

under his command are currently deployed in support of the war effort.

"When you take into consideration the fact that we have Soldiers in Korea and Soldiers in Germany essentially already forward deployed or forward stationed doing the mission, you can see the majority of the battalion is now committed to the fight. This is a historic mark for this battalion because of our level of contribution to the war around the world," he said.

"Whatever they need, whatever we need from SMDC/ARSTRAT, folks here in Colorado Springs stand ready to provide that support 24/7 and we couldn't do it without you," Gizzi said.

To the families Gizzi echoed Coffin's

sentiments by saying, "this is a difficult time but you are the unsung heroes in this war. You are the ones that allow us to go forward and do our job, to accomplish the mission because we know the home front is taken care of. And we certainly could not do it without you."

As has been done so many times in the past, Gizzi called forward the unit team leader Maj. Jeff Groskopf and presented him with the battalion mission coin saying, "Just like Col. Coffin said, I'll charge the commander with responsibility of accomplishing the mission and bringing the Soldiers back safe and sound."

"That's what it is all about," Gizzi said. "That's what leadership is. That's what it means to take care of Soldiers — accomplish the mission and bring them back."

Groskopf accepted the coin and commented, "To me the deployment is two parts. Soldier readiness is the first, and I can guarantee this part. These Soldiers are ready and trained. The second is Family readiness, and I thank you. You are the ones who make sure they are ready to go out the door and do what they have got to do, so they can get back safely as quick as they can. So again, spouses, I would like to thank you as well."

"Soldiers, you are ready," Groskopf said. "We will go do our mission, and we will bring everyone back. That is what we owe to each other."

Gizzi also took an opportunity to present a certificate of appreciation and personally thank Al Batey from Welcome Home Global War on Terrorism Heroes Fund, a program of The Home Front Cares, Inc., a local community non-profit group, for stepping in at the last minute to provide breakfast for Soldiers deploying.



Photo by Henry Norton

OIF veteran throws first pitch for Stars

Staff Sgt. Howard Andrews exhibits intense concentration as he throws the first pitch during the Huntsville Stars — West Tennessee Diamond Jaxx game May 19 in Huntsville, Ala. Andrews, who lost a leg during combat in Iraq, has remained on active duty and serves as operations noncommissioned officer for the Missile Defense Agency's Ground-Based Midcourse Defense Joint Program Office in Huntsville. He was recognized for his service during "Salute the Troops Night" at Joe Davis Stadium.



Photo by Sgt. Jack W. Carlson III

General officers visit Fort Greely

During a recent visit to the Missile Defense Complex at Fort Greely, Alaska, Lt. Gen. Steven Blum, chief, National Guard Bureau, and Lt. Gen. Clyde Vaughn, director, Army National Guard, met the Soldiers of the battalion charged with manning the missile defense system. Shown here, Blum and Vaughn listen as Staff Sgt. Russell Craig, weapons operator, Delta Crew, 49th Missile Defense Battalion, briefs his function on one of five fire direction crews. During their visit, they were also briefed on the unique mission of securing and defending the Missile Defense Complex by Military Police Officer Sgt. Jeffery Tipton (not shown), Alpha Company, 49th Missile Defense Battalion. Situated on the unforgiving but serene Alaska mountain range, Greely experiences seasonal extremes typical of sub arctic areas which can provide an added challenge to the military police mission.

SMDC/ARSTRAT plays host to history

By Diane Schumacher
SMDC/ARSTRAT Public Affairs Office

REDSTONE ARSENAL, Ala. — In observance of the 232nd Birthday of the U.S. Army on June 14, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command Historical Office presented a display of 18th and 19th century weapons systems here.

Costumed interpreters were on hand to discuss the full scale reproduction of Revolutionary War cannon and equipment and a display of 1860s Sea Coast Artillery projectiles and equipment. The Sea Coast Artillery was the forerunner of our current strategic defense systems.

Mark Hubbs, Stephen Hutson and Tod Jordan are reenactors and were dressed in period clothing made of wool and linen. They are dedicated to participating in living history demonstrations and commemorative events across the southeast. Hubbs and Jordan each purchased or made what they had on display. Hutson's uniform and his display of Sea Coast Artillery projectiles are owned by the SMDC/ARSTRAT Historical Office.

Participating in living history events is each man's hobby, but they've kept their day jobs. Hubbs works in SMDC/ARSTRAT's Historical Office; Hutson is a civil engineer and works in the command's Technical Interoperability and Matrix Center; and Jordan works for Program Executive Office, Aviation, in the Chinook Project Office.

Jordan was dressed as a Tennessee Volunteer during the War of 1812. Most Tennessee Volunteers were not issued uniforms, so his clothing was typical of a common laborer such as a farmer, a farm hand or even a merchant in the early 1800's. The working class of people in that time period wore clothing mostly made of linen or wool. Jordan's pants, smock and cravat (tie) for the shirt were all made of linen. His shirt was made of cotton although in cooler seasons he wears the traditional linen shirt.

He also wore a seven-inch tall round hat made of wool felt which was a replica of the hats men wore. Real period hats were

made mostly of beaver skin, Jordan said. Americans would hunt beavers, skin them and send the pelts to Britain. British hat makers would return the pelts in the form of tall round hats. Ribbons and ostrich feathers adorned most military hats, he said, and his hat had those accoutrements on it.

Everyone wore hats before the 20th century; to not wear a hat was considered improper. "You just wouldn't catch anyone without a hat," said Jordan. "The British reported they would see volunteer Soldiers without socks and shoes but they never saw one without his hat," he added. Hats were worn as much as possible. There was a workman's hat made of linen for use inside a home or business to keep dust and bugs out of the hair and hats for outdoors to prevent sunburn and to keep the head warm in the cold and cool (by sweat) in warm or hot seasons.

Jordan's display was of a volunteer Soldier's equipment. He had a period replica of a linen knapsack that held a Soldier's wool blanket, a change of clothing, gloves and a sleeping hat. Also on display were a linen haversack and the items Soldiers kept in it. There was a fire kit — a small metal box that contained flint, a piece of steel, small pieces of rope, a small square of cotton fabric, all the things needed to make a fire in the 1800's. Embedded in the metal container was a magnifying glass to use to start a fire as well.

The haversack would also contain other equipment. There was kitchen equipment that consisted of a small fry pan with a folding handle, a copper cup and a copper dish that could serve as a plate and a bowl, like a miniature pie plate. The fork was two-pronged with an inserted wood handle and a spoon made from the horn of a local animal such as steer, elk or buffalo. Carried next to the haversack over the Soldier's shoulder would be a powder horn which was also made from



Photos by Diane Schumacher

Tod Jordan stands ready in his Tennessee Volunteer Soldier "uniform" to answer questions from a viewer. A uniform was whatever clothing the man owned because he could not afford an actual uniform.

the horn of a steer or buffalo. It held black powder. The Soldier would also carry a small leather sack containing small lead balls for a rifle.

When reporting for duty, a militia Soldier had to bring with him at least two weapons, Jordan said. His firearm was most important, which was supplemented by an edged weapon, usually a tomahawk, "hawk" (or hatchet) and a knife or sword. A Soldier was also expected to bring one pound of black powder and 30 lead balls for his rifle. Jordan pointed out that the tomahawks American Indians used were not invented by the Indians, but were imported from Europe and traded for or sold to Native Americans.

Hutson was attired in a U.S. Army Heavy Artillery uniform from the 1850's. His outer coat and pants were authentic and made of wool broadcloth. The royal blue frock coat was fingertip length and its edges were piped with red wool to indicate he was in the Artillery. The pants were sky-blue in color.

Hutson said the uniform really isn't too hot to wear in warm temperatures because of all the sweating a man would do while wearing it. The sweat would seep into the wool keeping the Soldier cool. The hat he wore was the standard dress hat for the U.S. Army from 1855 until the early 1870s. His hat bore the brass crossed cannons of the Heavy Artillery.

The Soldier he represented was an artilleryman at a coastal fort working cannon or musket, for anti-ship defense. The display included items used by an artilleryman defending a fort from ship attack. His table held a Model 1842 Springfield musket, an exploding eight-inch cannonball, "grapeshot" for a 32-pounder gun and a 30-pound Parrot Shell. Grapeshot was a stack of nine small cannonballs that provided multiple projectiles from one shot of a large cannon. Also on the table was an 11-foot



Mark Hubbs explains to SMDC/ARSTRAT employees on break, the maintenance, loading and firing of three-pounder field gun. Guns like this were made of iron tubing weighing 350 pounds, were 48 inches long and had a 2.92 inch bore.

See *History* on page 24

Delta Company uses latest laser recognition technology

By Pfc. Richard Taylor, Unit reporter

CAMP ROBERTS, Calif. — The room was cold and damp, stale sweat ran down the back of the Soldiers' interceptor vests as they struggled to line up their cold iron sights through their issued protective mask.

It felt as though they had been lying in the prone supported position for hours, then they saw the glinting hew of a silhouette barely breaking out through the enveloping blackout of the simulated night fall.

The Soldiers quickly re-adjusted and



Photo by 1st Lt. Clint Rutter

Sgt. 1st Class Alfredo Martinez demonstrates the importance of basic rifle fundamentals when firing.

took their shots, then exhaled. "All right number three, four and six stay put, and the rest of you are good to go," said a voice as the lights came back on at the (EST) Engagement Skills Trainer 2000.

The EST 2000 is used here to train and qualify Soldiers of Delta Company, 53rd Signal Battalion, in night and for CBRN (chemical, biological, radiological, and nuclear) fire.

The range uses a series of three state-of-the-art digital light projectors to display an interactive life-size image of a firing range in a smattering of environment and conditions, coupled with fully integrated

M-4 carbines that include automatic built in recoil simulation. These added together create a training environment which simply cannot be surpassed by anything less than actual rounds going down range.

"I hadn't qualified in over a year since my unit was disbanded, and I was used to paper targets," said Spc. Mark Watson of Delta Company. "The pop-up range was good training."

When fully set up and utilized the EST 2000 uses laser recognition technology, which is emitted

from the modified M-4's. These lasers hit the special backdrop where the projection of the pop-up range is displayed. The laser detects the location of impact on the projected picture, registering not only a hit or miss, but an exact pinpoint location of where the target was struck, giving instant gratification of a successful hit, or potential miss.

The sheer ability to qualify in all necessary basic rifle marksmanship skills in a single day as quickly as everyone can qualify is a powerful tool in Delta Company's training arsenal. The safety aspect alone cannot be rivaled. Since the EST 2000 uses no projectiles whatsoever, it completely eliminates the range non-commissioned officer-in-charge's greatest fear, accidental discharge. Plus training is not sacrificed because the EST 2000 simulates real conditions so accurately.

Delta Company Soldiers have become well prepared and more confident of their abilities as riflemen and rifewomen since incorporating the EST 2000 in the training schedule.

"It's an awesome training tool," said Spc. Donald Eckels. "It cuts down a lot of the time involved in preparing for a night fire range."

And with the approval of the users, the EST 2000 will continue to be used in Delta Company's training schedule for some time.

Bravo Company has fun in the sun

By Spc. Chad Kennedy
Unit reporter

FORT DETRICK, Md. — There is nothing like a summer day filled with fun, food and friendly competition, and that's exactly what Bravo Company, 53rd Signal Battalion Soldiers and family members enjoyed on April 20. The Black Dragons ended their yearly squad competition with their annual Organization Day, hosted by the Company's Family Readiness Group.

The event proved to be a great opportunity for new Soldiers and their families to be welcomed into the fold, especially new company commander, Capt. Marcus White, and new 1st Sgt. Robert Meredith. Because some of the Soldiers would be working during the picnic, the squad competition was spanned across a two-week time frame. This meant that everyone had a chance to participate. The Organization Day ended the competition with a barbecue-style potluck, flag football, a pie in the face fundraiser and award ceremony.

The squads competed in multiple events in an effort to win the Commander's Cup trophy. Headquarters faced off against 1st Squad and 2nd Squad faced off against 3rd Squad. Early on, basketball proved to be the most intense event. After the first week, competition was very close, but 3rd Squad seemed to be in the lead. They had won all of their first round match-ups except volleyball and were looking forward to the next round. 1st Squad made their presence

known with two major comebacks and victory in both volleyball and spades. By the end of the second round of events, Headquarters had clearly taken the lead after finishing in first place overall in basketball, bowling and checkers. The competition was very close and the "Scramble Events" would be the deciding factor as to which squad would be announced the overall winner.

The picnic couldn't have taken place on a better day. The weather was sunny and it seemed to be the warmest day of the year thus far, great for a day at Burba Lake. Starting off the days activities were a few final events to end the Commander's Cup Competition. Later, a group of Soldiers played a fun game of flag-football while others socialized, listened to music and played cards. The games didn't last very long once the food came off the grill. Spc. Demetria Hunt grilled hot dogs, hamburgers and chicken to go along with the different salads that were brought in true pot-luck fashion. Everyone sat down to enjoy a meal together. There was plenty of dessert to go around, but some got more in their hair than in their mouth.

The pie in the face fundraiser was a great success as participants donated money to be able to throw a pie in the face of the person of their choice. One Soldier donated more than \$100 to pie the platoon sergeants and a squad leader. The fundraiser helped the unit raise \$484 which will be used to support other functions throughout the year.



Photo by Sgt. Tashana Coleman

Bravo Company Soldiers watch as fellow teammates spin around a bat with their heads down before making a wobbly run back to the start line.



Photo by Capt. Matthew Kisner

Bravo Company 1st Sgt. Robert Meredith and Sgt. Andrew Sanders cheer on the Headquarters Company tug of war team, telling them to pull harder during the championship match.

At the end of the day the Commander's Cup trophy was presented to 3rd Squad, and awards were presented to the winners of each individual event.

"This was a great chance for Soldiers and their families to spend time together and to

build bonds with one another," said Staff Sgt. Alicia Brogden when asked about the day. Each person had their own way of participating in the Organization Day activities, and the variety of events created a fun atmosphere for everyone.



Photos by Spc. Jonathan Presley

Pfc. Scott Anderson shows off the 41-pound Mega-Mahi he caught during a recent fishing trip with fellow Echo Company Soldiers.



The fishermen of Echo Company proudly display their catch after a recent fishing trip. The 11 Soldiers caught more than 200 pounds of fish in five hours of fishing.

Echo Company Soldiers test their sea legs

By Sgt. Ernest Mari, Unit reporter

OKINAWA, Japan — In the early morning hours on May 9, 11 Soldiers from Echo Company 53rd Signal Battalion (SATCON) boarded the Seiya Maru, a fishing vessel skippered by Captain Billy Fanska of Saltwater Fishing Okinawa, and left port for the China Sea.

Their mission: to catch some fish. And catch fish they did — A LOT of fish.

After about two hours travel to one of Cap'n Billy's "hot spots," the trolling lures were dropped into the sea, and the wait began ... and ended about 10 minutes later. Cries of "fish on!" erupted as the

reel of one of the trolling rigs spun out of control. Staff Sgt. Zachary Hedlund took the rig, and thus began a five-minute battle with what turned out to be a fairly large mahi mahi.

And so it went for the next few hours.

A mahi was caught, the lure was dropped back into the sea, and within minutes another mahi was on the line. At one point, all three trolling lines had a fish on. One of these was thought to be a marlin (one of the most prized species of sport fish) due to the fight it put up against Echo Company commander Capt. Todd Vick, but the fish turned out to be an above average-sized mahi that had

apparently been eating its sea wheaties.

Not long after the Vick vs. mahi bout, Pfc. Scott Anderson reeled in a much smaller one. After being heckled for a few minutes about the "sardine" he reeled in, Anderson was on the rig once more in what turned out to be the highlight of the trip — a 10-plus minute struggle that resulted in the capture of a mammoth 41-pound mahi.

By trip's end, 11 mahi and five tuna were in the cooler headed to shore with the proud fishermen. All told, more than 200 pounds of fish were caught in five hours of fishing — not a bad score at all for a bunch of Signal Corps land-lubbers.

History

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Photo by Diane Schumacher

Stephen Hutson in full uniform of 1850's U.S. Army Heavy Artillery representing an artilleryman at a coastal fort working cannon or musket, for anti-ship defense.

rammer staff for a 32-pounder sea coast gun.

Hubbs was dressed as a sergeant in the First Continental Artillery, circa 1780. He made the uniform (he sewed it himself) copied from an original on display at the U.S. Military Academy at West Point, N.Y. The uniform was made of hemp, which is not sold in the U.S. anymore, a cloth commonly used in the 1800's.

"It wears like iron, you can't make holes in it," Hubbs said. The stockings he wore were made of wool with the type of fiber used for nearly all clothing until the early 20th century, he said.

Although cotton cloth was a commodity in the 18th and 19th centuries, it was quite expensive. Only the rich could afford to have clothing made of cotton, thus uniforms and other clothing were made of wool or linen until the invention of the cotton gin, Hubbs added.

Sporting a "cocked" hat (three corners) as part of the uniform, Hubbs discussed why the hat was designed with the brim folded up. It was simply to show off wigs people wore, he said. All classes of society wore wigs; the upper class

wore wigs of human hair, middle class wore wigs of horse hair and the poor, if they could afford it, wore wigs made of linen threads.

He explained the loading, firing and maintenance of a three-pounder field gun. A cannon was displayed, it was a copy of a type that saw heavy use during the American Revolution and the War of 1812. Hubbs built the oak carriage on which the cannon sat based on an 18th century ordnance manual with the help of SMDC/ARSTRAT engineer, Doug Burdette.

The carriage and gun together weighed about 1,000 pounds. The ammunition for the gun was a three-pound solid lead ball and took 12 ounces of black powder to fire. The firing range ran 300 yards to 1,800 yards, depending on the degree of elevation of the gun. The gun was usually manned by a crew of 13 Soldiers, but as few as four men could take care of the firing, movement and placement of the carriage and gun, Hubbs said.

The display had a good turn out of viewers, Hubbs said. It was definitely interesting, especially for Civil War buffs. Time was well spent learning bits of history not taught during school-age years.