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The Eagle

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

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Mission accomplished! CET returns from the fight

By Ed White
SMDC/ARSTRAT Public Affairs

PETERSON AIR FORCE BASE, Colo. — Welcome home and farewell ceremonies are a staple part of life at U.S. Army Space and Missile Defense Command/Army Forces Strategic Command. Soldiers deploy and redeploy regularly. It's part of their jobs. Recently the Commercial Exploitation Team from 2nd Space Company, 1st Space Battalion redeployed from the Middle East after a year-long tour supporting OPERATION IRAQI FREEDOM.

"I could not have asked for a better team," said Maj. James T. Bushong, team leader. Each and every one of these Soldiers worked their tails off to support the fight."

"There are Soldiers, Sailors, Airmen and Marines who are alive today and a whole bunch of terrorists who are not because of the support this team provided," said Lt. Col. Lee Gizzi, battalion commander, 1st Space Battalion.

"They increased their productivity by a factor of three from the previous team," said Maj. Rob Gray, their company commander. "They have set the bar very high for their follow on team."

Col. Timothy Coffin, brigade commander, 1st Space Brigade, addressed the assembled Soldiers and civilians during the welcome home ceremony. "Each one of these Soldiers brought something special to the mix," Coffin said. "They were engaged and brought their special skills and experience to bear in support of the warfighter. I couldn't be prouder of a

team and their accomplishments."

Bushong returned to Gizzi a coin he was given a year ago when he took the team overseas. The coin acted as a rallying point for the team, a reminder of the importance of the mission and as a tangible reminder of the support they had from home. With each deployment from the battalion, a coin is given to the team or element leader and every one has been brought back successfully. There are 25 of these coins hanging in the battalion's conference room, all of which date from 2003 to the present.

"You were given two missions a year ago," Gizzi said.

"First was to support the warfighter with your CET system. Mission accomplished! Second was to return home with your troops and equipment intact. Mission accomplished!"

For those who do not deploy, very little changes. Their lives go on pretty much the same. For those who deploy, their



Photo by Ed White

CET return for Eagle: Capt. John Yungbluth gets a welcome home hug upon his return from a year-long tour supporting OPERATION IRAQI FREEDOM. The Commercial Exploitation Team is one of several units from U.S. Army Space and Missile Defense Command/Army Forces Strategic Command currently supporting operations in the Middle East.

lives can be entirely different for the experience. Every day in a war zone brings its own stress, its own surprises, both good and bad. No one who spends any time in a war zone comes away unscathed, unhurt. It's just not possible. But the war goes on, and more Soldiers go and come back changed by the experience.



The missile field and Missile Site Radar at the Stanley R. Mickelsen Safeguard Complex in Nekoma, N.D. Courtesy photo

From Concept to Combat

Celebrating 50 Years
of Excellence in
Missile Defense
and
Space Technology

SMDC/ARSTRAT —
1957-2007

This week in SMDC/
ARSTRAT history —
<http://www.smdc.army.mil/>
click on link

(See articles on pages 8-10)

The Command Corner



Lt. Gen. Kevin T. Campbell
Commanding General



CSM David L. Lady
Command Sergeant Major

"To remain the preeminent landpower on Earth — the ultimate instrument of national resolve — that is both ready to meet and relevant to the challenges of the dangerous and complex 21st century security environment." This statement — the Army's Vision statement — concisely describes the importance and urgency of our actions during a time of war. In support of this Vision statement, former Secretary of the Army Dr. Francis J. Harvey said during his recent Congressional testimony, *"The changes posed by the 21st century security environment drive the vision for the force that we must become to accomplish our mission and thereby to preserve the peace and freedom of our great nation."*

The strategic environment for the Army is likely to be defined for an extended period by our engagement in the war on terrorism. This "long war," characterized by geographically dispersed adversaries and threats, will require our Army to be heavily committed in two distinct operational areas — Afghanistan and Iraq — while maintaining a presence in many other countries. The Army will also continue supporting the operational homeland security mission in the continental United States.

During this uncertain time, our nation will likely face any number of threats, ranging from terrorism, to proliferation of weapons of mass destruction, to the use of ballistic and cruise missiles. In response to these evolving threats, the Army is transforming its forces and capabilities from a traditional focus to become more versatile against the range of irregular, disruptive and catastrophic challenges. The evolving security environment, the broad spectrum of operational challenges and necessity to remain relevant to the current fight drive the urgency and framework for the Army's transformation. Clearly, the importance of remaining *relevant* and *ready* in support of our nation simply cannot be over-emphasized. It is, therefore, quite appropriate this command has adopted as its theme, *"From Concept to Combat, USASMDC/ARSTRAT ... Relevant and Ready."*

Two recently published documents — the 2007 Army Posture Statement (APS) and the Army Space Master Plan (ASMP) — provide strategic direction and emphasis for the future. The APS informs Congress on the status of the Army and focuses on resource requirements necessary to accomplish the Army mission — "To provide necessary forces and capabilities to the Combatant Commanders in support of the National Security and Defense Strategies" — in support of the Army Vision.

The APS, available online at <http://www.army.mil/aps/07/index.html>, stresses the importance of relevant forces that are able to conduct combat operations immediately upon arrival in theater as part of joint, interagency, multinational, and coalition teams and can do so with little or no warning. Key capabilities that support these operational requirements include: intelligence that is timely, actionable, and draws upon all sources available; Soldier and unit protection; networks that contribute to common situational awareness and understanding for battle command; and information assurance and information security.

In support of where the Army is going in the future, the recently revised ASMP, approved in mid-November by Gen. Peter J. Schoemaker, chief of staff, Army, assesses capabilities that will enhance space as a key enabler in support of combat operations for the Army. This document will now serve as the basis for the Army's position on space matters and resource

See *Army* on page 3

It is odd to recall that for most of my career, I did not know that such an organization as SMDC/ARSTRAT (or its previous designations) even existed. It was sometime in 2001 that I first discovered the Space and Missile Defense Command. Visiting the Landstuhl Regional Medical Center, I wondered what organization operated a group of very large satellite dishes within sight of the hospital. Driving over to the compound, I was expecting to find 5th Signal Group Soldiers greeting me at the gate. Met by Soldiers wearing an Eagle on their sleeves, I asked "Who are you and what do you do?" They explained themselves, and I learned that another major command was serving within the U.S. Army Europe footprint, providing strategic communications and missile warning support to all of our units.

Over the next year, I noticed that Soldiers from the 1st SATCON Battalion were regularly graduating with honors from the 7th Army NCO Academy, at Grafenwoehr, Germany. Their success gave me an early appreciation of the high quality of Army Space Soldiers; highly intelligent, physically fit young women and men, able to surpass the highest of standards.

In the spring of 2003, I was preparing to depart USAREUR. Most of the Soldiers were deployed on OPERATION IRAQI FREEDOM. It was very disappointing to realize that I could no longer support them and their families. Then, the Army offered me an opportunity to grow and to continue my service. The nomination to serve as SMDC/ARSTRAT CSM was very exciting. Studying everything available concerning the Army in space, I eagerly competed and was very glad to be chosen to be the command sergeant major by the Army's senior air defender. I am very grateful that Lieutenant Generals Cosumano, Dodgen and Campbell have given me great responsibilities and support as we have supported the warfighter over these past four years.

We have raised this command to new levels of significance and relevance, providing capabilities only vaguely conceived of several years ago. The nation's first operational integrated ballistic missile defense system has been activated and tested. Two brigades have been activated as permanent, not provisional organizations, and have been manned, trained and equipped to provide both strategic and operational support to combatant commanders. Four battalions are permanent organizations, providing first-rate Soldiers and teams to meet the strategic communications, missile defense, and space support requirements of the national leadership and the armed forces. New capabilities are being fielded in the area of space support and space control.

We have taken the lead in clarifying the requirements for the Army Space Cadre and are actively engaged in identifying positions throughout the Army to join this cadre. Additionally, we are creating an office to advise the Army staff and the traditional branches how to best utilize members of the cadre.

Our technical training programs continue to produce Soldiers who are highly skilled technicians, able to assume missions of greatest strategic consequence. These Soldiers are now receiving the Warrior Skills training that they need and deserve, thanks to the attention and resources provided by our commanders and command sergeants major.

To the leaders — military and civilian — and the Soldiers and civilians who have brought this command so far: Well Done. It has been a privilege to serve as your command sergeant major and to be a member of this team.

See *Farewell* on page 3

The Eagle ... is an authorized unofficial newspaper published for military and civilian members of the U.S. Army Space and Missile Defense Command/ U.S. Army Forces Strategic Command published under the authority of AR 360-1. The editorial style applies the industry standard Associated Press Stylebook. Contents of *The Eagle* are not necessarily official views of, or endorsed by, the U.S. Government, Department of Defense, Department of the Army, or SMDC/ARSTRAT. This monthly newspaper uses offset reproduction and has a circulation of 2,250. Reader input is solicited and welcomed; however, no payment will be made for such contributions. For more information about SMDC/ARSTRAT or to view *The Eagle* on-line, visit our Web site at www.smdc.army.mil.

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What We Think

The Eagle asks:

How do you feel about the amount of time national media spends covering “sensational” news stories?



I feel that the media spends too much time on these types of stories, then provides their own “spin,” so to speak, on the particular issue. I would rather see the news media report on the occurrence, both good news and bad, and leave it to the viewer/reader to interpret it and not have a slighted view of the particular story.

Michael J. Lackey
SSO/Security Manager
Arlington, Va.



I think they spend too much time on the sensational items. It is more important that they cover actual stories that concern the community not just people’s interests. People’s interests and what is relevant to the community are usually two different things.

Spc. Douglass Riggi
4th Space Company
Peterson Air Force Base, Colo.



Have you ever heard the song by Jay Giles called “Dirty Laundry?” Everybody loves dirty laundry. They don’t want to hear when things are going good, which is why we never hear anything good about Iraq. All we hear about is people dying or bombs blowing up; and it is wrong.

Capt. Michael Edwards
Operations Officer
Headquarters
Colorado Springs, Colo.



Sgt. 1st Class Wade Viner
Human Resources NCOIC
Brigade Headquarters
Colorado Springs, Colo.

They tend to focus on the negative and spend way too long on sensationalism, drama, and making a big fuss about things when they really should be focusing on the pressing issues like continuing resolutions or budgets. These are things that the average Joe Blow is going to be concerned with. There are either not enough accents on the positive, or it is fluff, for example they go on and on about Anna Nicole Smith.



Sgt Mickey Lilley
Military Police Officer
49th Missile Defense Battalion
(Ground-based Midcourse Defense)
Fort Greely, Alaska

In my opinion, national media outlets spend a great deal of time on stories that are of entertainment value rather than serve to inform you of a developing situation. I feel that channels for entertainment news should be used for just that.



Lt. Col. Rob Phillips
G-3, Strategy and Policy
Huntsville, Ala.

As the Proverb says “A fool finds no pleasure in understanding but delights in airing his own opinions.” I’m quite disappointed with the mindless drivel the pundits banter about as news. I’d rather we looked at what was good and noble and discussed ideas, rather than dwelling on speculation and opinion that only tears people down. I neither know nor care why Brittany cut her hair off, but I suppose someone thinks it’s important.

Army

continued from page 2

discussions with other members of the Joint space community. The ASMP also identifies Army needs and capability gaps and articulates the need for additional capabilities. The top Army priorities for space-based capabilities are:

- Enhanced satellite communications
- Early missile warning
- Assured access and asset protection
- Persistent surveillance
- Position, navigation, and timing
- Weather, terrain, and environmental

monitoring

In closing, four years ago this month, a coalition of military forces led by the United States launched combat operations in Iraq against Saddam Hussein and his Ba’athist regime. Today, the adversaries confronting our Soldiers have evolved and now employ asymmetric as well as conventional tactics. Defeating these capable adversaries requires well-trained Soldiers equipped with the most relevant and responsive capabilities we can provide. In commenting on the importance of this task, Gen. Schoomaker

stated, “The challenge for the future is to develop capabilities that provide overwhelming dominance for the Soldier. We must put American technology, intellect and resources to work to ensure success and the safety of those who perform these difficult tasks.” As you go about your daily work, look for opportunities where your efforts can make a difference. Supporting our nation’s warfighters at this important time truly requires our best efforts.

SECURE THE HIGH GROUND!

Farewell

continued from page 2

At the end of a 33-year military career, Ellen and I are ready to transition into the civilian workforce, and recognize that it makes good operational sense to do so. Younger, stronger, more recently deployed command sergeants

major deserve greater responsibilities, and our Soldiers deserve the best leaders available.

We are content with what we have been able to accomplish on behalf of our organizations and Soldiers. We leave knowing that this Army is strong enough to accomplish every

mission, provided that the civilian leadership provides our Soldiers with what they need to sustain the pace and bring us victory. We leave confident that SMDC/ARSTRAT will continue to develop into an even more significant and relevant organization, focused always on bringing space to mud and

capabilities to land warriors.

We are glad to be able to continue our partnership with SMDC/ARSTRAT as we transition into the workforce. We are proud to stay on this team and to help secure the high ground.

Farewell and thank you for your friendship and support.

ON POINT!

CG: The proof is in the pudding

Diane Schumacher
SMDC/ARSTRAT Public Affairs

REDSTONE ARSENAL, Ala. — SMDC/ARSTRAT military and federal civilian employees here attended a town hall meeting on March 8 conducted by Lt. Gen. Kevin T. Campbell, commanding general of the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command.

Campbell opened the meeting stating he wanted to share his thoughts about command issues affecting civilian employees. He also wanted to end his remarks with a question and answer session; however, he admitted he might not have all the answers to questions since he's been at his job only 90 days.

Campbell peppered his comments with a sprinkling of humor as he spoke, keeping the audience's attention.

But before he began talking about civilian issues, he introduced himself by sharing tidbits of personal information. Campbell informed the audience that he's been in the Army for about 33 years, all in air defense holding positions in operational commands mostly but some assignments were in joint commands.

"I'm from Massachusetts, which you can probably tell by my accent. And I'm a Notre Dame Football fan; I will not apologize for that," Campbell informed the attendees, whose response was laughter.

After his self-introduction, Campbell introduced George W. Snyder, a new SES (senior executive service) member and the new director for the SITE (sensors integration and test and evaluation) Directorate for the Technical Center here. He followed up announcing the upcoming retirement of William "Bill" C. Reeves Jr., director of Technical Interoperability and Matrix Center. May 1 is the scheduled retirement date.

Campbell said he wanted to focus on communications. He said he felt that with three locations (i.e., northern Virginia employees and some from Colorado Springs to Redstone Arsenal) coming down to two (the Arsenal and Colorado Springs), the consolidation will help in better communications and mission accomplishment.

"The JFCC [IMD] is so busy," he said, continuing, "Well, let me explain it like this: you could send them Santa Claus and when he opened the door he'd be kicked out if he had gifts they would have to unwrap." The audience laughed at the

analogy, appearing to understand his gist. "Their plate is really full," he concluded.

"Our job is to make progress, we can't hold our ground, we've got to give in sometimes," Campbell said, referring to communicating with other organizations and being accepting, as necessary, of their ideas. "My personal philosophy is to find the middle ground and move the ball forward," he said. The hidden meaning here was Campbell believes everyone in SMDC/ARSTRAT is one team, and everyone needs to look for ways to help each other; this idea was stated on a projected slide as he spoke.

Communicating is a large part of the command's mission, Campbell said.

He talked about a new means of communication to be installed within the command. It's called "SkiWeb" (pronounced "sky") and is used by USSTRATCOM (U.S. Strategic Command). It is a blog system. An SMDC/ARSTRAT page is now being developed. The Web site is currently available only on SIPRNET.

The site is used at this time by Colorado Springs but at some later date, command employees here will have SkiWeb at their desks. The idea is to use SkiWeb as a communications tool between command employees and leaders. This system is one Campbell used while he was serving as the chief of Staff for USSTRATCOM.

This system will give everyone in the command an opportunity to understand what's going on regarding missions because anyone will be able to enter a dialog on any subject. "It gives a person an opportunity to understand what's going on in some other division" within the command, Campbell said.

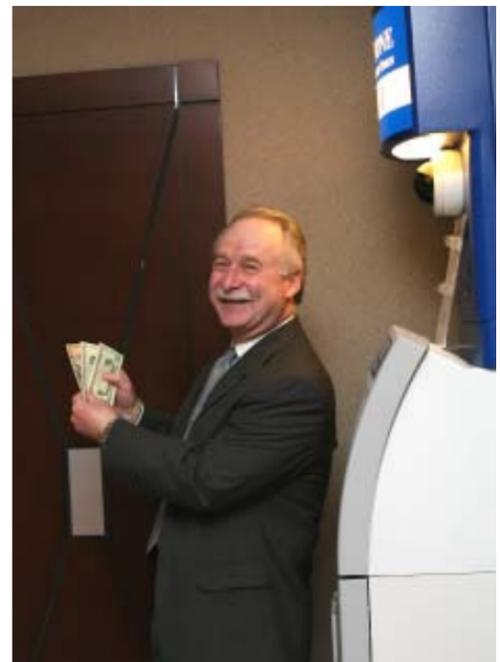
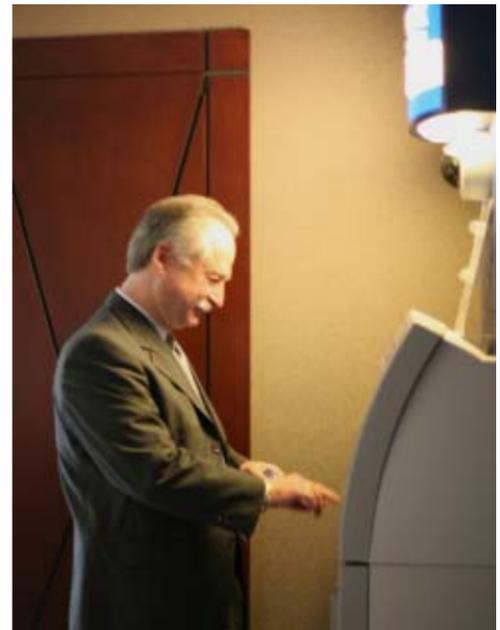
"Whether it's Pvt. Campbell or Gen. Campbell, anyone can participate in a SkiWeb discussion," said Campbell. "While I served at STRATCOM, it was not unusual to find an E-4 'talking' with a four-star, meaning Gen. Cartwright," he added. [Marine Corps Gen. James E. Cartwright is the commander of USSTRATCOM located in Omaha, Neb.]

Campbell told audience members when communicating, "ask yourself if there's anyone else who needs to know what you are discussing" [or writing], he said. "It's better to overshoot than undershoot," he added.

"Knowledge is power, and some human beings have contorted that," said

Von Braun Complex on RSA gets ATM

On March 1, the first (and happy) customer to use the newly installed ATM was Michael Schexnayder, deputy to the commanding general for research, development and acquisition, SMDC/ARSTRAT. Kudos to Robert "Ski" Rotkosky who got the machine put in place within the first three months as facility superintendent for the Von Braun Complex.



Photos by Diane Schumacher

See *Town Hall* on page 6

SBX completes successful journey to Alaska

Missile Defense Agency

WASHINGTON — Lt. General Henry "Trey" Obering, Missile Defense Agency director, announced Feb. 7 that the Sea-based X-band Radar has successfully traveled from Hawaii to the waters of the Aleutian Island chain of Alaska.

The SBX departed Pearl Harbor, Hawaii, Jan. 3, and conducted numerous sea trials and exercises while en route to Alaska and also continued the calibration of the X-band radar mounted on top of the ocean-going platform.

The largest radar of its type, the SBX is designed to

track and discriminate small objects in space, making it especially effective for missile defense. It provides very accurate information to the missile defense command and control system to help direct ground and sea-based interceptor missiles to a point in space where they can be placed in a position to collide directly with an in-coming missile warhead for a "hit to kill" intercept, while ignoring decoys and countermeasures.

As a testament to its durability and overall seaworthiness, the SBX successfully navigated several winter storms in the northern Pacific Ocean, encountering waves of

more than 50 feet high and wind gusts of more than 100 miles per hour. The SBX's platform was originally designed to support oil drilling equipment in the harsh environment of the North Sea, with its high waves, strong winds and freezing temperatures. Contrary to some published reports, this was the first time the SBX left Hawaii to make the journey north to Alaska. Previous departures from Hawaii over the past several months were to conduct sea trials, radar calibration and to support missile defense tests, not to transit to Alaska.

The SBX is 240 feet wide and

390 feet long. It stands 280 feet high from its keel to the top of the radar's protective dome, and weighs almost 50,000 tons. The SBX will be home-ported at the Aleutian Island of Adak starting late this summer after its mooring facilities have completed construction. The ocean-spanning mobility of the SBX allows the radar to be repositioned as needed to support both actual operations to defend the United States, its deployed forces, allies and friends against a ballistic missile attack, and is also used to support operationally realistic missile defense flight tests.

Civilian News

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

Rates of return were updated on March 2, 2007.

February 2007 **Last 12 months (3/1/06 -2/28/07)**

| | | | |
|--------|---------|--------|--------|
| G Fund | 0.34% | G Fund | 4.98% |
| F Fund | 1.53% | F Fund | 5.60% |
| C Fund | (1.95)% | C Fund | 12.05% |
| S Fund | (0.26)% | S Fund | 12.27% |
| I Fund | 0.18% | I Fund | 21.11% |

Percentages in () are negative.

Family emergency planning can help

Your family may not be together when disaster strikes, so it is important to plan in advance: how you will contact one another; how you will get back together; and what you will do in different situations.

- It may be easier to make a long-distance phone call than to call across town, so an out-of-town contact may be in a better position to communicate among separated family members.
- Be sure every member of your family knows the phone number and has coins or a prepaid phone card to call the emergency contact.
- You may have trouble getting through or the telephone system may be down altogether, but be patient.

Find out what kinds of disasters, both natural and man-made, are most likely to occur in your area and how you will be notified. Methods of getting your attention vary from community to community. One common method is to broadcast via emergency radio and TV broadcasts. You might hear a special siren, or get a telephone call, or emergency workers may go door-to-door. You may also want to inquire about emergency plans at places where your family spends time: work, daycare and school. If no plans exist, consider volunteering to help create one. Talk to your neighbors about how you can work together in the event of an emergency. You will be better prepared to safely reunite your family and loved ones during an emergency if you think ahead and communicate with others in advance. <http://www.ready.gov/america/makeaplan/index.html>.

10th Annual Space and Missile Defense Conference scheduled for Aug. 13-16

Mark your calendars now! 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 for this year's event is "Celebrating 50 Years in Space and Missile Defense." The SMD Conference is widely attended by more than 6,000 professionals from throughout the United States and our allies around the world. Event sponsors include the National Defense Industrial Association — Tennessee Valley Chapter (NDIA-TVC), Army Space and Missile Defense Association (ASMDA), and the Air Defense Artillery Association — Huntsville Chapter (ADAA). 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. The conference also will include a training and technology track focused on emerging technologies. Sessions will also cover space support to the warfighter, homeland defense, and the integration of cruise missile defense. Evening receptions and hospitality rooms offer additional networking time. There will be exhibit displays throughout the entire VBC and daily attractions in each hall, including presentations from local and celebrity authors. These attractions, along with the viewing of all exhibits, are free and open to the general public. To register for the conference, visit the Web site at www.smdconf.org, or contact Jeanne Weaver at (256) 533-6986 or fax (256) 533-4508. Register before July 1 to save money. For additional information, please contact Giselle Bodin at (256) 955-3889 giselle.bodin@smdc.army.mil.

Military News

Military.com web site

If you haven't checked out www.military.com, you are missing out on great information that can be beneficial to you and your family members. You get up-to-date military news, information on military benefits, U.S. entertainment news and there's even a trivia link.

Military OneSource offers free online tax filing

The Defense Department's Military OneSource family support program is once again offering free, online tax preparation and filing for Servicemembers and their families. It's also available to active duty National Guardsmen and reservists and their families. Filers who use Military OneSource's online system can expect to receive their refund within ten days. Military OneSource tax consultants are trained to answer questions on preparing and filing taxes and provide other financial management information. Additionally, through the Military OneSource Web site at www.militaryonesource.com, Servicemembers and their families can get guidance and answers to questions. Tax-filing assistance also is available through the Internal Revenue Service's electronic filing program.

Understanding veteran's health care

In October 1996, Congress passed the Veterans' Health Care Eligibility Reform Act, paving the way for the Medical Benefits Package plan, available to all enrolled veterans. The Medical Benefits Package emphasizes preventive and primary care, offering a full range of outpatient and inpatient services. In addition, combat veterans returning from active military service may be eligible to receive free health care services and nursing home care for up to two years, beginning on the date of separation from active military service. This benefit covers all illnesses and injuries except those clearly unrelated to military service (common colds, injuries from accidents that occurred after discharge, disorders that existed before joining the military). Dental services are not included. If you want treatment for health conditions you claim are related to combat operations, you will be physically examined. See Web site www.military.com/benefits/veterans-health-care. This section will help you to understand your VA health care benefits eligibility, enrollment requirements, and specialized programs.

Troops to teachers adds new program

The Troops to Teachers' new Hire in Advance Program, which has launched in Las Vegas, Denver, and Newark, N.J., guarantees teaching jobs for eligible military up to three years before they retire or separate from active duty. Troops who qualify for the Hire in Advance program can send in applications and interview with school officials, who can officially hire them up to three years before they leave active duty. The Troops to Teachers and the Hire in Advance Program are both open to military spouses as well. For more information, visit www.proudtoserveagain.com.

College credit for military experience

Pursuing a college degree can be the best career move you can make, but it can also be very expensive and time consuming. That's why claiming credit for your military experience is vital. Applying your military experience credits could save you as much as \$600 and five months on a typical 3-credit college course. The American Council on Education (ACE) continuously evaluates military schools, correspondence courses and occupations to determine the amount and level of academic credit each should be awarded. Through ACE, you can take academic credit for most of the training you have received, including Basic Training. The ACE military evaluations program is funded by the Department of Defense and coordinated through the Defense Activity for Non-Traditional Education Support (DANTES) program. Visit the ACE Military Programs Web site to see how much credit you may have earned. The first step to claiming the credits you have earned is to request a transcript from your military service. Each service will provide unofficial personal copies and send schools an official copy of your transcript at no charge. Each service branch has their own system for recording your military education and experience credits. The Army uses the AARTS system, which automatically captures your academic credits from military training, and standardized tests. The AARTS system is available to enlisted Soldiers only, see aarts.army.mil. Army Officers must use DD Form 295 (Application for Evaluation of Learning) to report their military training and experience.

SMDC/ARSTRAT gets new SES member



George W. Snyder

George W. Snyder, a new SES (Senior Executive Service), was selected in February as the new director for the Sensors Integration and Test & Evaluation Directorate (SITE).

The SITE directorate, within the Technical Center, is a part of the Research, Development, and Acquisition element of the U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command. He is the principal

program director and technical advisor for advanced Research and Development plans and programs pertaining to sensor integration and test and evaluation matters.

Before this new assignment, Snyder was the deputy director of the Applied Sensors, Guidance, and Electronics Directorate of the Aviation & Missile Research, Development, and Engineering Center.

He was also the program manager for the compact kinetic energy missile advanced technology demonstration

program.

Snyder has worked for the federal government more than 25 years and served 10 years as an officer in the U.S. Army Reserves, Corps of Engineers.

He has a bachelor of science degree in civil engineering from VMI (Virginia Military Institution), a master's degree in engineering from UVA (University of Virginia) and a master of business administration/MS in management from Massachusetts Institute of Technology Sloan School of Management.

Town Hall

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Campbell. Some people like to keep what they know to themselves and use it "as power rather than sharing" for all to glean from, he said. "That's not the way I want you to operate," he continued, adding, "Don't protect it, share your information."

Campbell said he has shared what his focus areas are with the command's senior leaders and wanted to share that information with the audience. "Those areas are recorded, and it's a living document," he said. He adds and subtracts from it, he added.

Two slides were presented listing the general's current focus areas. On the day of the town hall meeting, areas included successful implementation of NSPS (national security personnel system), mission readiness ISO Army/joint forces; IMD covering conops, weapons release authority and other issues; technical demonstrations of high energy laser technology, advanced hypersonic weapons and cruise missile defense.

Also listed on the slide was LSS (lean six sigma) covering partnering with MDA on joint ventures and operationally responsive space covering TACSAT, to find direct value for the ground commanders.

Campbell is looking for successful implementation of NSPS, he said. It affects a lot of command employees, but not everyone just yet. "I've asked supervisors to create proper performance objectives with their employees," he continued. [NSPS became effective March 18 for some employees.]

Regarding the BRAC (base realignment and closures), everything seems to be happening on time and nearly all employees, civilian and military will be moved out of the Arlington, Va., offices by mid-June, said Campbell. There are 33 people coming here from Virginia (D.C.) and there are 180 military, civilian and contractor positions to be moved or filled by Oct. 1.

Campbell touched on the subject of LSS, a program designed to help organizations evaluate the effectiveness of how they work. The idea is to ensure an organization's method of getting a job done is of high quality while being accomplished in the quickest of time. Sometimes organizations will find that they've got too many people doing the same job. LSS can help eliminate redundancy in accomplishing missions and provide cost savings to an organization.

"I was skeptical when I first heard of lean six sigma," said Campbell, "but that was because I've always been in operations." He read a book that quickly and

easily explained the purpose of LSS and went to briefings on the subject; it was during those times that he realized the program made sense to him, he said.

There are two advantages to LSS that he sees: it helps the command save dollars so those dollars can be moved to some other project that needs more funding, and it enables senior leaders and supervisors to know if employees need to move off one project to another causing employees to be of more added value to the command, said Campbell. "It isn't about trying to cut people from jobs," he said. He reminded the employees that LSS events are led by people in the process who are empowered to make improvements.

The movement of people out of SMDC/ARSTRAT into MDA (Missile Defense Agency) appears worrying, said Campbell. Adding there's been talk of moving parts of SMDC to MDA. "I've talked to Lt. Gen. Obering [MDA director] and explained that I've noticed some moves already made that didn't seem coherent," he told the audience. "We will have to change a bit, he said. "We will go to MDA with a plan" wherein SMDC/ARSTRAT "can really provide added value," he said.

"We are trying to deliver a lean system to the warfighter," Campbell said. There are times people are using a space item or service, and they don't even know it, he said. "We have to prove to the Army that SMDC is providing a direct service," he added. "I want them [MDA] to come to us. The command must be competitive so programs or personnel aren't taken from the command and given to MDA. "Then we can expect them to go looking elsewhere for [people or systems] they want," Campbell concluded.

Following these remarks, Campbell opened the floor to a Q and A session, but no one raised a hand. "When I get here, frequently you will find me in your trenches so you can ask me questions — but in a kind and gentle manner, please," the general said.

Audience members chuckled at the comment. He followed up by encouraging employees to go through their chain of command to settle issues that may arise. However, he said he would of course, speak and meet with employees, but he really preferred that they start with their chain of command first regarding complaints. "They are competent people," he said.

William M. Congo, director of the command's public affairs office asked Campbell if a decision had been made whether or not Campbell would be the senior mission commander on Redstone

Arsenal. "Yes a decision was made. Gen. Griffin wants to keep it [the position] in the AMC (Army Materiel Command) channel," was Campbell's reply. [Army Gen. Benjamin S. Griffin is the commanding general for AMC.]

One audience member told Campbell that she had heard a lot of rumors about SMDC/ARSTRAT not having enough funds to keep the command running through FY07 and into the middle of FY08, and asked him if those rumors were true.

Looking to his deputy chief of staff, G-8, Col. Mark V. Glynn, Campbell stated, "We are okay in 07. [FY] 08 also looks okay. The operating budget is okay. The customer revenue fluctuates, it isn't predictable ... I wouldn't be surprised if someone targets Kwajalein [for budget cuts] because we have initiatives to go to remote operations off-island." Campbell did not expound on the issue. He reiterated that "FY08 looks very healthy." Glynn nodded his head to the affirmative.

The employee then asked if the former commanding general (Lt. Gen. Larry J. Dodgen) had spoken to Campbell about a new initiative for the command's civilian workforce.

At this point Reeves stood up to explain there was a committee trying to help G-1 (personnel) bring in personnel who are less experienced, new in federal employment and even younger in age.

Col. James L. Bedingfield, chief of staff for the command, then stood up and explained to audience members that there had been an initiative with Dodgen to bring in employees new to civil service and low in grade to train them up to attain higher grades and be of more added value.

"How do you access a less experienced workforce in the fields needed?" Bedingfield asked. Everyone has a level playing field at lower grades, so they are to be mentored, he added.

To this statement Campbell replied, "I charge supervisors to set aside funding to send their employees to schools or events that are broadening for them. I need help from various supervisory levels on where to send employees for their professional development. I've got the message."

Campbell closed the town hall meeting by stating, "I'm really thrilled to be in command, it's probably the last thing I'll do in this green suit. Philosophically, I've felt the role of a commander is to serve you. I will try to do my best to serve you, so you can do your duty better. It's my duty to serve you, that's how I view it. Period."

"The proof is in the pudding," he concluded and again promised to "be in your trenches."



Maj. Joseph Miley, executive officer 49th Missile Defense Battalion, describes the building behind him — the Defense Satellite Communications System — to the Polish TV Correspondent, Piotr Krasko. The DSCS supports the satellite communications within the GMD System.



Piotr Krasko, correspondent TV Poland, talks with Col. Thom Becsh, director, Operations Support Group Alaska, about the Exo-atmospheric Kill Vehicle during an interview held Feb. 21 in Alaska. The EKV is the part of the ground-based interceptor that will collide with an incoming inter-continental ballistic missile in space.

Polish media tours Alaskan Missile Defense Complex

Story and photos
By Sgt. Jack Carlson III
Unit Reporter

FORT GREELY, Alaska — Reporters from the Washington-based Polish Radio and Polish TV toured the Missile Defense site here Feb. 21. Together the two media outlets have an audience of 14 million people.

The reporters had the opportunity to eat lunch with and interview Soldiers of the 49th Missile Defense Battalion (Ground-based Midcourse Defense). Made up entirely of Alaska Army National Guard Soldiers, the battalion has two missions — manning the missile defense system and securing the Missile Defense Complex.

European media is increasingly interested in the Ground-based Midcourse Defense system, as Poland and the Czech Republic are currently being considered as hosts to future bases of the system.

“The intent of this visit was to make sure that the people of Poland had accurate information on the basic look and design of a functional missile defense site,” said Polish TV reporter, Piotr Krasko.

Once on the Missile Defense Complex, the media representatives received a tour of the site with multiple visual opportunities — previously cleared for security purposes. This visit marks the first time television media has been allowed to film inside the MDC.

“It is important for us to have the Missile Defense story told. When you are around such an incredible system all the time, the incredible becomes the ordinary,” said Maj. Joseph Miley, executive officer, 49th MDBn.

While on site, the Polish reporters wore a staple familiar to anyone venturing to walk in Alaska during the snow season — Yaktracks. The traction device straps to the bottom of shoes, helping the wearer get increased traction while walking on snow and ice.

The visitors liked the Yaktracks so much they went to the Fort Greely Post Exchange and purchased some to take home with them.

“We were hoping for great weather, and with temperatures hanging around 40 degrees below zero, we got more than we expected,” said Jan Mikruta, Radio Poland correspondent.

Delta Company puts safety first

By Capt. Ryan Renken
Unit reporter

CAMP ROBERTS, Calif. — Safety is an important part of life. From accidents to natural disasters, it is always important to be trained and ready to act if needed in an emergency situation. Recently, the Delta Diablos of the 53rd Signal Battalion began the first iteration of their bi-annual Safety Week. The idea behind Safety Week was to train the Soldiers on realistic emergencies that might arise and check their readiness.

“The whole week prior, we had briefed all the Soldiers to remember that the company was going to be conducting a Safety Week,” the Delta Company commander, Capt. Conway Lin, remarked. “We told them something was going to

happen. We just did not tell them when.”

Sgt. David Engelhardt, the Delta Company safety noncommissioned officer, planned four safety related scenarios: earthquake, heart attack, electrocution and fire. “With some of the scenarios, the Company Safety SOP (Standard Operating Procedure) lays out step by step instructions for the Soldiers to follow,” Engelhardt remarked. “With some of the scenarios, like the electrocution one, the Soldiers had to think for themselves on what steps they needed to take.”

After each squad had been tested by Engelhardt and was evaluated by the company commander and first sergeant, Delta Company was confident in their safety program. “We did a great job. However, I know we can do better,” Lin remarked. “Since this is annual training,

our next Safety Week will address recognizing an emergency better.”

The squads had trouble catching on that they were being assessed and tested with the first scenario, but after that all of the squads understood what was happening and performed above and beyond. “We validated our safety SOP and the training we had been giving our Soldiers,” Sgt. 1st Class Chris Plale stated.

The next training will encompass some of the old scenarios and some new ones. “People do not realize that the temperatures here at Camp Roberts can get below freezing in the mornings during the winter and above 100 degrees in the summer months. Next year, we will be including some hot weather related safety scenarios for the Soldiers to overcome,” Lin stated.



Photo by Ed White

Joint community at Peterson learns about Army Space and Missile Defense operations

Col. Roger Mathews, deputy commander for operations of the U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command takes an afternoon to brief about 120 noncommissioned officers of U.S. Northern Command on Peterson Air Force Base, Colo. He explained what the Army is doing in the arena of space support to the warfighter and missile defense.

Strategic Defense Command/ Strategic Defense Initiative

By Sharon Watkins Lang, SMDC/ASTRAT, Historical Office

The Strategic Defense Initiative concept envisioned a three-tiered defensive system — creating the ability to intercept a target missile in the boost, midcourse and terminal phases of its flight.

By 1984, with over 25-years of experience in ballistic missile defense, the Army and more specifically this command, then known as the U.S. Army Strategic Defense Command (USASDC), was given the lead in most of the SDI programs.

In the boost phase, the system incorporated a Boost Surveillance and Tracking System, the Space Based Laser and the Ground Based Laser. The Army shared responsibility for the SBL with the Air Force, while it was assigned sole control over the GBL.

In the midcourse phase, the SDI system architecture envisioned a Space-Based Surveillance and Tracking System, a Space Based Interceptor (SBI), a Neutral Particle Beam, and the Exoatmospheric Reentry-vehicle Interceptor Subsystem (ERIS). The Air Force oversaw the development of the SSTS and the SBI and shared responsibility with USASDC for the NPB. The Army directed the development of the ERIS.

The final layer of defense, the terminal phase, employed the Airborne Optical Adjunct, the Ground Based Radar, the Ground Based Surveillance and Tracking System (GSTS) and the High Endoatmospheric Defense Interceptor (HEDI). The USASDC was the lead on all of these programs.

Finally, development of a Battle Management/Command, Control and Communications system was shared by all three primary elements: the Air Force, the Army and SDI Organization.

As the programs continued to progress through the decade, they were increasingly redefined by budget concerns. With the advent of the 1990s, budget cuts in the SDI program resulted in the termination in some of these technology programs. The Ground Based Laser Project Office closed in January 1991, six months after the dedication of the ground based free electron laser facility. Both directed energy programs, however, continued in a research status.

Although President George H.W. Bush announced a plan to “vigorously pursue” the Strategic Defense Initiative in 1989, change was on the way. Later that year, President Bush commissioned an independent review of strategic requirements for a “new world order.” The resulting Strategic Defense Architecture emphasized boost phase kill technologies and the Brilliant Pebbles.

The new world order was soon upon us. 1991 saw both the advent of the “age of Star Wars” and the demise of the Soviet Union. Coined by a reporter from The Los Angeles Times, the Age of Star Wars recognized the first use of missile defense technologies to intercept a target missile during combat. At the end of that year with the dissolution of the Soviet Union, the Cold War came to an end. The new environment brought a reassessment, but not a termination of the Ballistic Missile Defense program and an increased emphasis upon the Theater Missile Defense program.

In his 1991 State of the Union Address, President Bush announced a new direction for the Strategic Defense Initiative. The new system known as the Global Protection Against Limited Strikes or GPALS would provide a defense against “purposeful strikes by various Third World powers developing ballistic missiles, or accidental or unauthorized launches from the U.S.S.R.” The GPALS architecture focused on three elements — a ground based national missile defense system, ground and sea-based Theater Missile Defenses, and a space-based global defense system.

The Program Executive Office-GPALS, which has since evolved into the PEO Missiles and Space, was created in 1992 to transition the technologies for this new initiative. To create the new organization, the command’s PEO Strategic Defense and the U.S. Army Missile Command’s PEO Air Defense merged to form the PEO-GPALS.

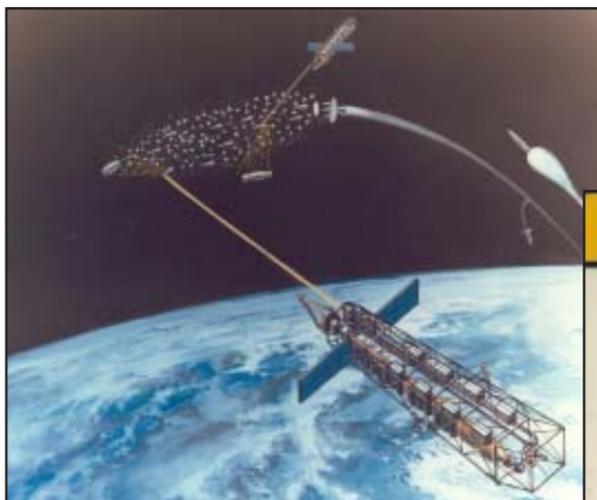
The following command Strategic Defense efforts transferred to the PEO GPALS: Ground Based Radar, ERIS/Ground Based Interceptor, GSTS, HEDI, Site Defense and Regional Operations Center/Communications. They were joined by other command initiatives — the Theater High Altitude Area Defense and Extended Range Interceptor (now known as PAC-3) Project Offices, and the Adjunct Sensors, Arrow and Testbed Product Offices. That, however is another chapter.



High Endoatmospheric Defense Interceptor (HEDI)

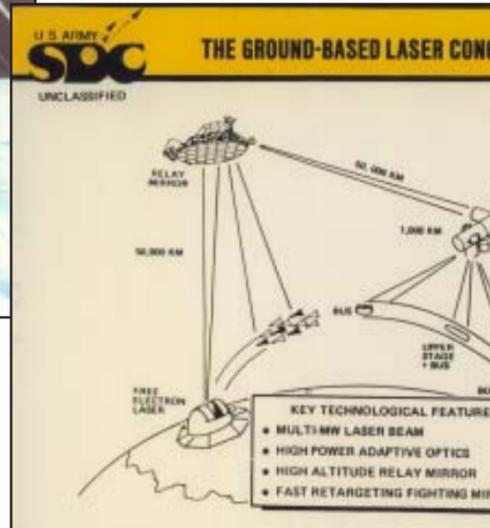
- A modified Sprint
- Contains infrared seeker in nosecone which must endure temperatures of 1,500 to 200°F as well as pounds pressure
- Sapphire window cooled by flowing gaseous nitrogen
- Speed — Reached Mach 7 in 8.5 seconds
- Tests conducted — 3
- Intercepts attempted — 0

Neutral Particle Beam/Ground Based Laser



- Concept destroy target by disabling vital electronics
- Line of site weapon
- Goal demonstrate long-term space capability

- Boost Phase Interceptor
- Free Electron Laser
- Radio Frequency FEL
- Induction FEL





President Ronald Reagan

Where do we get 'Star Wars?'

By Sharon Watkins Lang
SMDC/ASTRAT
Historical Office

Almost as soon as President Ronald Reagan introduced his Strategic Defense Initiative, the effort and its associated projects were mocked as nothing more than science fiction — “Star Wars” technology.

Since March 1983, however, the two concepts have been tied together. The current system is even referred to by some writers and critics as the “Son of Star Wars.”

The question is where did it begin? The term itself refers to George Lucas’ popular 1977 science fiction film. It soon became a part of the vernacular and was used to criticize

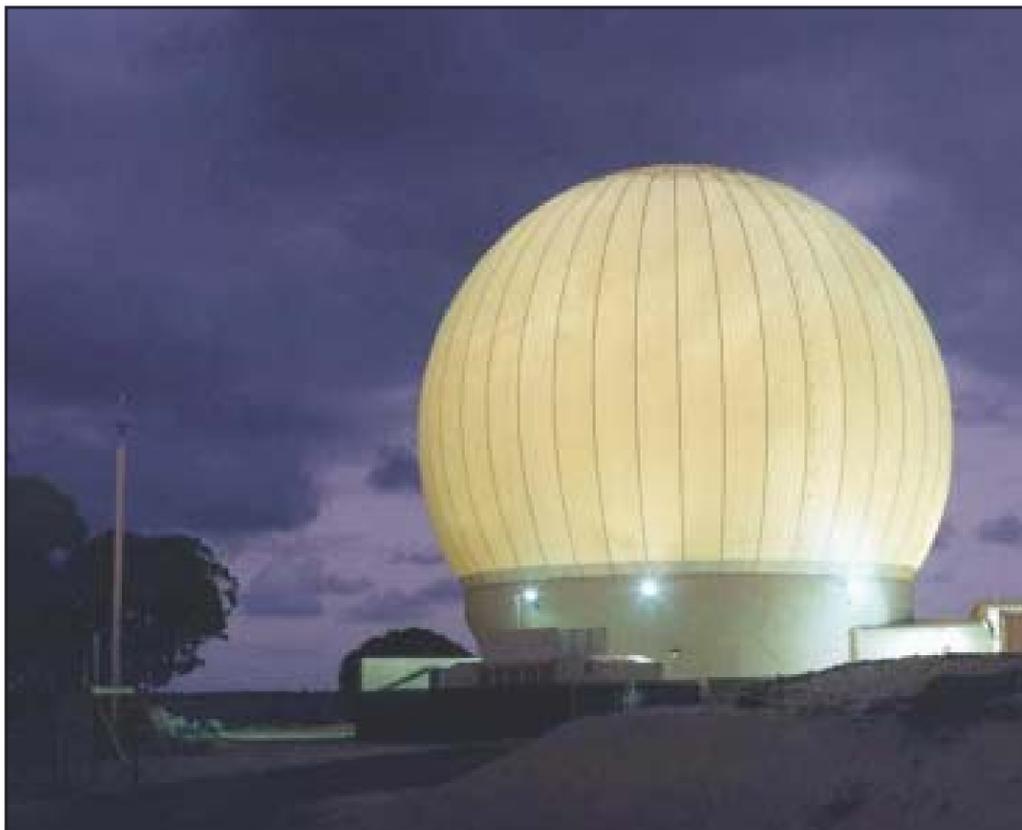
various space-based Pentagon projects.

The historians at the Missile Defense Agency, however, trace the link to a March 24, 1983, article from *The Washington Post*. This article quotes Senator Edward Kennedy (D-Massachusetts), who described the president’s proposal as “reckless Star Wars schemes.”



Exoatmospheric Reentry Vehicle Interceptor Subsystem (ERIS)

- Midcourse interceptor
- On-board multi-band seeker and data processor
- Infrared Focal Plane Array Technology
- Advanced Beryllium optics and tracking algorithms
- Lightweight – 160 kg
- Tests conducted – 3
 - Intercepts attempted – 2
 - Successful intercepts – 1
- Functional Test Validation for the GBI



Ground Based Radar (GBR)

- Perform surveillance, acquisition, tracking, discrimination, fire control and kill assessment
- Phased array, X-band Radar
- Radiating surface 12 meters in diameter
- Full power acquisition range – 4,000 km or more (prototype reduced range)
- Part of the National Missile Defense System
- Prototype constructed at Kwajalein



Airborne Optical Adjunct/Airborne Surveillance Testbed

- Prototype of the Boeing 767
- Modified cupola — 86 feet long and 10 feet high
- Originally designed for two sensors
- Aircraft-based LWIR technology
- Wide field of view optics
- Focal plane array with 30,000 cryogenically cooled LWIR silicon detector elements
- Three color scanning
- Sensor sensitive enough to detect the heat of a human body at a distance greater than 1,000 miles
- Operate at altitudes in excess of 40,000 feet
- Gathers data in the boost, postboost, midcourse and reentry phases



Ground Based Surveillance and Tracking System (GSTS)

- Midcourse and Terminal Sensor
- Ground-based missile launched LWIR and visible wave-band sensor
- Lightweight beryllium optics
- Mission — locate, track and discriminate targets from decoys
- Relays data to ground based station to provide weapon tasking and in-flight target support
- Reusable sensor payload
- Provide means to see over-the-horizon

all as 10,000

al components —

ft operation

CEPT (U)



A new initiative for national defense

By Sharon Watkins Lang
SMDC/ARSTRAT Historical Office

Mar. 23, 1983 — President Ronald Reagan announces his Strategic Defense Initiative. "We seek neither military superiority nor political advantage. Our only purpose — one all people share — is to search for ways to reduce the danger of nuclear war."

On March 23, 1983, President Reagan addressed the nation from the Oval Office and shared his vision for the future.¹ Faced with calls to reduce defense spending, Reagan warned against the apathy of the 1930s which "invited the tragedy of World War II." He urged citizens to call upon their representatives and continue to restore the nation's military strength.

Since the advent of nuclear weapons, national security policy had relied upon offensive nuclear deterrence and mutual assured destruction (MAD). The MAD theory held that neither side would pursue a first strike, given the knowledge that the opposition would respond in kind resulting in the destruction of both nations. With the exception of the command's SAFEGUARD System, deployed for a short period in the 1970s, the United States had not extensively pursued deployment of defensive options.

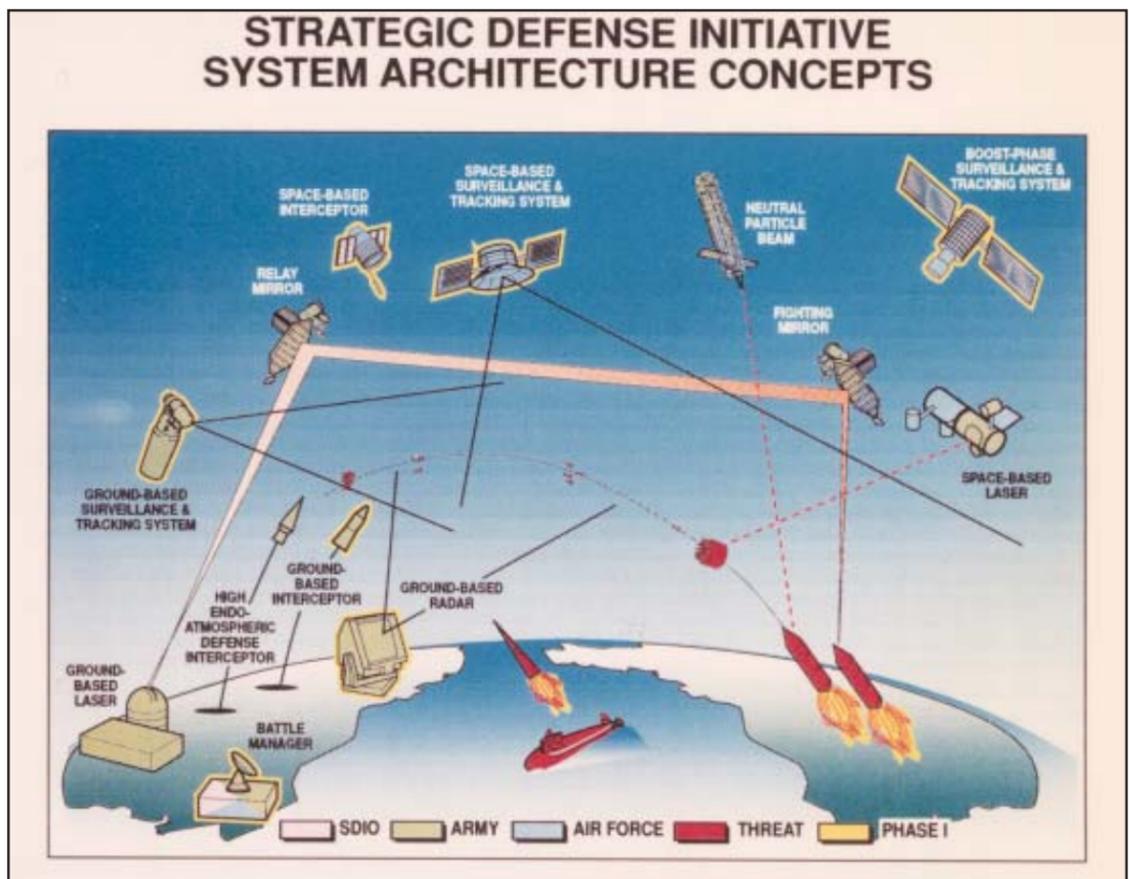
President Reagan observed that "the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence." As a result, he and his administration continued to pursue negotiations with the Soviet Union to reduce the levels of all arms.

In the interim, Reagan's vision of the future introduced a new national policy which rested upon strategic defense. He argued that current technology, despite its limitations, was at a level to begin this initiative. Although it might take years or decades to complete, the investment in this initiative was necessary "to free the world from the threat of nuclear war." Reagan then challenged the scientific community "to give us the means of rendering these nuclear weapons impotent and obsolete."

Implementing the Initiative

With this speech a new era began. Two days later, President Reagan issued National Security Decision Directive #85. In it he called for a study to define an intensive research and development effort, conducted in accordance with the Anti-Ballistic Missile treaty, to eliminate the threat posed by nuclear ballistic missiles. Two commissions were actually appointed to explore this initiative, one addressed Defensive Technologies and the other Future Security Strategy.

Composed of political scientists and analysts, the Future Security Strategy



Study addressed the strategic and political implications of the program. The "Hoffman Report" included two primary decisions both of which supported the concept of a national missile defense. The first held that missile defense could enhance deterrence. The second was more specific. It concluded that anti-tactical ballistic missiles systems could serve as a first step toward a national defense system.

'Wouldn't it be better to save lives than avenge them?'

— President Ronald Reagan

A group of fifty scientists and engineers, including the command's former Technical Director Dr. James R. Fisher, developed the 7-volume Defensive Technologies Study. The "Fletcher Study" presented two models for a missile defense research program. The favored program was to be technology constrained and called for a funding level of \$1.405 billion in 1984 increasing to \$4.766 billion in 1989. The alternative program, funded at a lower level, was referred to as the fiscally constrained program. The technology program consisted of five basic research areas: Systems; Surveillance, Acquisition Tracking and Kill Assessment (SATKA); Directed Energy Weapons;

Kinetic Energy Weapons; and Supporting Technologies (Survivability, Lethality, Space Power, Space Logistics; Communications, Computers and Software). The technology constrained program became the guide for the Strategic Defense Initiative.

One year after his introductory speech, President Reagan issued NSD Directive 119 formally establishing the Strategic Defense Initiative. The Secretary of Defense was assigned responsibility for this new program, which was to emphasize non-nuclear technologies. The Secretary in turn created the Strategic Defense Initiative Organization², a multi-service agency, which would oversee the development of a layered missile defense system. Given the advances already made in missile defense technology, the lead in many cases was given to the Army. The Army's contributions to this endeavor were made by this command, known then as the U.S. Army Strategic Defense Command.

(Footnotes)

¹ Note: The full text of President Reagan's speech can be found at <http://www.fas.org/spp/starwars/offdocs/rrspch.htm>.

² The Strategic Defense Initiative Organization (SDIO) became the Ballistic Missile Defense Organization in 1993. It is now known as the Missile Defense Agency. (Note: This BMDO is separate and distinct from the Army organization that became the U.S. Army Strategic Defense Command in 1985.)

SMDC/ARSTRAT leaders receive media training

During March, media training was provided for nine SMDC/ARSTRAT senior executive service members. George W. Snyder, new director for the Sensors Integration and Test & Evaluation Directorate within the SMDC/ARSTRAT Technical Center learned how to work with and react to electronic and print reporters and was briefed on proper methods for conducting on-camera interviews. He used role playing to capture newly learned skills. The training was provided by Scott Stearns, Office of the Chief for Army Public Affairs, and John Cummings from SMDC/ARSTRAT's Public Affairs Office. Their critique of Snyder was positive. They were surprised to see how at ease he was in front of a camera and how well he maintained eye contact.



Snyder and trainers review his presentations to critique body language, eye contact, voice volume, speech clarity, operational security and inclusion of a commander's message.

Photo by Diane Schumacher

Space operations: A quick education for space enablers

By Diane Schumacher
SMDC/ARSTRAT Public Affairs

REDSTONE ARSENAL, Ala. —On the cold last day of January, Dr. Rodney L. Robertson opened a three-day Space Operations Training seminar with a welcome to an audience of U.S. Army Space and Missile Defense Command/Army Forces Strategic Command engineers, scientists and analysts.

Robertson, director of SMDC/ARSTRAT's Technical Center, said the point of training was to get more people certified in space operations. He said "it's a good series of classes" and if well received, he thought more series of instruction would be scheduled. Follow up surveys reflect the three day presentation was well received.

The seminar, Jan. 31 to Feb. 2, was offered to all SMDC/ARSTRAT employees not in the Functional Area 40 (FA40) job series or Army Space Operations Officers. The classes on Feb. 1 and 2 were classified, so this article focuses on the first day which covered a myriad of unclassified information.

Larry A. Mize, chief of training, directorate of combat development (DCD) within the Future Warfare Center (FWC), was the first presenter for the day.

"Imagine fighting a war without GPS [Global Positioning System], without FBCB2 [Force 21 Battle Command, Brigade and Below], or without PLGRs [Precision Lightweight GPS Receiver, a handheld device], or even outside the scope of military operations, imagine trying to use an ATM machine" he said. Without the development or use of space capabilities — and not only in support of military operations — the world as we know it today would not function the same, Mize added.

Mize showed photos taken by satellites of locations in Iraq where the number of satellite antennas on building roofs could be counted. One picture taken in 2005 of Haifa Street in Baghdad showed 174 satellite antennas. Satellite imagery does two things: it provides intelligence and it provides opportunities for designing and building, deploying and controlling satellites — for whoever uses satellites.

At least 40 countries employ satellites in space, Mize said. Whether one lives in the United States, Japan, China, Russia or any other country, if there are satellites

in space, if a country has an astronaut program or a missile defense program, then there are people working and earning a living. The space profession field offers thousands of jobs.

Mize explained that the Army Space Cadre is made of military and civilian space professionals and space enablers, therefore all employees in any U.S. federal agency working on space issues are members of the Cadre. "Space enablers are employees whose primary career field is not space but they perform unique tasks applied to space capabilities," Mize said.

The next speaker was Lenny Gehrke, a former Air Force intelligence senior NCO (noncommissioned officer) with more than 17 years in space operations. He is the assistant course director, space operations officer qualification course, Colorado Springs, Colo. He began his pitch by saying the conference was "more of an education than it is training."

Gehrke covered space weather, satellites, GPS and BFT (blue force tracking) and much more.

Embedded in his slides were several short video segments to help explain various laws of nature and laws of motion. Although attendees knew the law of gravity, Gehrke presented a comical video as a visible aid to understanding the law.

Gehrke also shared his "toilet bowl" theory. "If a satellite comes in toward earth, it travels faster. If a satellite comes in contact with resistance such as orbital debris, the satellite is positioned in a lower orbit and speeds up much like debris in a toilet, the closer it gets to the center, the faster it travels," he said in an effort to explain low-earth orbiting satellites. He said it was important for space enablers to understand orbiting which would help them in many of their projects.

Space weather is another important subject space enablers should understand. "Weather in space? Yes," stated Gehrke.

"There is an 11-year solar cycle in space weather," he said. This cycle has been to blame for interference with communications, but space weather can also help communications by reflecting off the atmosphere to communicate with other countries. There have been instances where deployed Soldiers picked up communication from Mexico. However, "this kind of communication is used more by

Ham operators as a hobby than by the military," said Gehrke.

Space weather affects satellites. "What we need to understand about space weather is when it's going to occur and to ensure we use our satellites effectively," Gehrke said. "Space weather has rendered many of our satellites useless in the past. Understanding how to protect our satellites and when properly to use them can ensure mission success," he added.

"We need to care about this because of the impact on our warfighters," continued Gehrke. "Space weather has caused lost imagery, lost communications and alignment errors so that satellites don't 'know' where they are," he said.

Space enablers must also understand the basics of telemetry, tracking and commanding of satellites, Gehrke said.

Telemetry is the data coming from a satellite, to include photographs, plus information showing the status of battery power, solar cells, thermal controls and more, said Gehrke.

Satellites must be tracked. Tracking is data that tells the satellite operator where the satellite is, he said. "If we don't track our satellites, we will lose them because satellites' 'addresses' in space are always changing," he added.

Commanding is sending commands from the ground station to the satellite to perform tasks, such as 'go to back-up battery power' or 'collect imagery,' said Gehrke.

Loss of data or a satellite is expensive and mission requirements can't be met, not to mention such losses can also result in the loss of lives, Gehrke said. Space enablers need to know that.

"Many in the audience have worked on some space programs in the past, but don't fully understand the big picture when it comes to space," Gehrke said. They also may not understand the different mission areas and things that can affect space systems, he said. "Perhaps you will have a better appreciation for how your job affects other people on different parts of a project," he added.

Gehrke moved on to discuss GPS. He said GPS has three missions: proper position tracking used to synchronize digital communications; time transfer, which comes from the Atomic clock on

See *Space Operations* on page 15

Survey shows training sessions on time, on target

By Diane Schumacher
SMDC/ARSTRAT
Public Affairs

At the end of each day of the three-day Space Operations Training session, Jan. 31 to Feb. 2, attendees were asked to complete a survey regarding their opinions on the presentations.

Tom Coleman, chief, space cadre training program within the directorate of combat development of the Future War Center, gathered the returned surveys for evaluation. There was an 88 percent return rate and "the surveys were very positive all around," he wrote in an electronic message.

"Our main concern is always that we design, develop, and deliver instruction that is student-centered," Coleman wrote. "The quotes ... confirm that the team [training] did just that," he added.

Of the variety of questions asked on the survey, here are two with some quoted answers returned to Coleman.

Q: Did this course help you in your current position? How?

"Yes, it reinforced what I had learned on-the-job — focused information." *Col. David K. Cox*

"Yes, it gave some insight to communications equipment and processes I presently

work with." *Kevin Woodsinger, safety engineer, Tech Center*

"Yes. Good for helping my employees learn more about space and space operations. They work in technology and not specific space areas, but must be aware of space and its impact." *Gisele Wilson, chief, system test support division*

Q: Did the information in this course link up with your knowledge on the same topic and areas?

"Yes, especially the discussion on bandwidths. Communications bandwidth discussion was excellent for the allotted time." *Stan Smith, project engineer*

"Yes, it did reinforce [much] of the bits of information I've acquired on the job and helped complete the picture for me by filling information gaps and tying up loose ends." *Terry Smith, analyst*

"Yes, utilizing space to aid the warfighter in meeting his mission requires extensive training plus understanding the science, infrastructure, and limitations of space assets." *Kay Blankenship, project engineer*

One major recommendation made by most attendees was to keep the MTT [mobile training team] in Huntsville, Coleman wrote in his e-mail message.

Motorcycle Safety



Personal protective equipment

SMDC/ARSTRAT Safety Office

All personnel who operate their motorcycle on a Federal installation must properly wear the following personal protective equipment (PPE). Additionally, all Soldiers and DA civilians on official duty must wear the PPE while riding their motorcycle off a Federal Installation.

- A motorcycle helmet that meets standards established by the U.S Department of Transportation. The helmet must be fastened under the chin.
- Impact or shatter resistant goggles or full-faced shield properly attached to the helmet.
- Sturdy footwear. The Army specifically requires the wear of leather boots or over-the-ankle shoes.
- Long sleeved shirt or jacket, long trousers, and full-fingered gloves or mittens designed for use on a motorcycle.
- A brightly colored outer upper garment during the day and a reflective upper garment during the night.
- Motorcycle operators may not use headphones or earphones while driving a motorcycle on a DOD installation.

Department of Defense installation requirements

SMDC/ARSTRAT Safety Office

Any person who operates a motorcycle on a Department of Defense installation must be appropriately licensed to operate a motorcycle on a public highway.

Additionally, before operation of any motorcycle (except motorcycles with three wheels or an attached sidecar) on a Federal installation, DoD personnel (military, civilians and contractors) must successfully complete an approved rider or operator safety course.

Personnel requiring training should contact their local installation safety office for course dates and locations.

Motorcycle safety information on Web

Additional motorcycle safety information is available on the CommandNet safety page at: <https://commandnet.smdc.army.mil/SafetyOffice/Occupational/Motorcycle/Safety.html> and the SMDC/ARSTRAT Web site at: <http://www.smdc.army.mil/SAFETY/Occupational/Motorcycle/Safety.html>.



UNITED STATES ARMY
THE CHIEF OF STAFF

DEC 28 2005

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Motorcycle Mentorship - Ride Smart, Ride Safe, Team Up!

1. Motorcycles can be a great form of transportation and entertainment, but they must be respected. We lost 45 of our fellow Soldiers in fiscal year 2005 and 6 Soldiers so far this fiscal year operating motorcycles. Most accidents involved unsafe vehicle operation, poor risk management, or those who operated beyond their abilities.
2. Every Soldier is critical to our mission success. We train Soldiers to operate safely by mitigating risk, passing on the benefits of our experience, and correcting mistakes. Leadership and risk management do not end with the duty day.
3. Just as we mentor and develop new Soldiers, I am asking experienced motorcyclists to mentor new riders and help them develop their riding skills and knowledge. I recommend commanders test a motorcycle mentoring concept described in the enclosed US Army Motorcycle Mentorship Program. Potentially, this Army-wide network of motorcycle clubs could foster relationships between riders and create a supportive environment of responsible motorcycle riding, while serving as a force multiplier.
4. I also envision the development of a mentoring program that will provide motorcycle operators the opportunity to work together to maximize their skills, reduce accidents, and have fun. Commanders need to look out for their motorcycle riders. Make sure your Soldiers are trained to ride smart. Actively seek out those who have or are considering purchasing bikes to make sure they take the safety courses and encourage them to join these clubs.
5. Those who ride motorcycles must operate them safely and within their abilities, practice good risk management, and always wear the proper personal protective equipment. Team up and ride together; look out for those riders who aren't ready for more advanced challenges, and mentor them as they develop their skills.

PETER J. SCHOOMAKER
General, US Army

Knowledge— Official Safety Magazine of the U.S. Army

Check out and subscribe to the new source for Army safety information at <https://crc.army.mil/Knowledge/>.

(This new magazine combines the previous *Countermeasures*, *Impax* and *Flightfax* magazines.)



To identify unsafe motorcycle helmets

SMDC/ARSTRAT Safety Office

It's clear ... motorcycle helmets save lives. To help protect the lives of motorcycle riders, the U.S. Department of Transportation (DOT) requires that all motorcycle helmets sold in the United States meet Federal Motor Vehicle Safety Standard (FMVSS) 218.

This standard defines minimum levels of performance that helmets must meet to protect the head and brain in the event of a crash. Each year, DOT conducts compliance testing of a variety of motorcycle helmets to determine whether helmets being sold in the United States meet the Federal safety standard.

Because helmets add such a critical margin of safety for motorcycle riders, many States now have laws requiring use of helmets that meet FMVSS 218 requirements. Some motorcycle riders are violating these State laws by wearing unsafe helmets that do not meet FMVSS 218. Most of these helmets are sold as novelty items and circumvent FMVSS 218's requirements.

In some cases, some motorcyclists purchase these helmets in the mistaken belief that they offer protection. However, many people who wear these novelty helmets know that they are unsafe — but wear them anyway. This article explains how to identify unsafe novelty helmets as well as how to distinguish unsafe helmets from those that meet the Federal safety standard.

Here is what to check for:

Thick inner liner

Helmets meeting the minimum Federal safety standard have an inner liner usually about one inch thick of firm polystyrene foam. Sometimes the inner liner will not be visible, but you should still be able to feel its thickness. Unsafe helmets normally contain only soft foam padding or a bare plastic shell with no padding at all.

Sturdy chin strap and rivets

Helmets meeting the DOT safety standard have sturdy chinstraps with solid rivets.

Weight of helmet

Depending on design, unsafe helmets weigh only one pound or less. Helmets meeting FMVSS 218 generally weigh about three pounds. Become familiar with the weight of helmets that comply with the Federal safety standard. These helmets provide a more substantial feel.

Design/style of helmet

The DOT safety standard does not allow anything to extend further than two-tenths of an inch from the surface of a helmet. For example, while visor fasteners are allowed, a spike or other protruding decorations indicate an unsafe helmet.

A design such as the German Army style or skullcap style may be a clue to an unsafe helmet. Unsafe helmets are noticeably smaller in diameter and thinner than ones meeting the DOT standard. However, some German Army style helmets may meet Federal requirements.

You'll need to check for weight, thickness, sturdy chinstraps, as well as the

"DOT" and manufacturer's labels to make sure the helmet meets the Federal safety standard. Familiarize yourself with brand names and designs of helmets that comply with DOT requirements.

For example, a full-face design is a good indicator of a safe helmet. To date, we have never seen a full-face design novelty helmet.

DOT sticker

Helmets that meet FMVSS 218 must have a sticker on the outside back of the helmet with the letters "DOT," which certifies that the helmet meets or exceeds FMVSS 218. It is important to note that some novelty helmet sellers provide DOT stickers separately for motorcyclists to place on non-complying helmets. In this case, the DOT sticker is invalid and does not certify compliance.

Snell or ANSI label

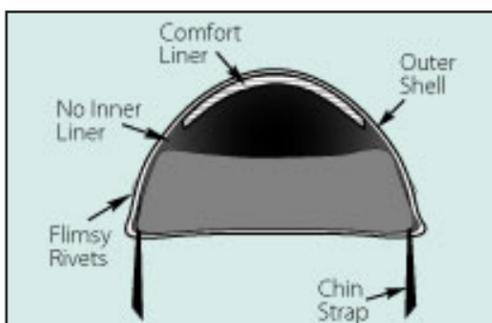
In addition to the DOT sticker, labels located inside the helmet showing that a helmet meets the standards of private, non-profit organizations such as Snell or the American National Standards Institute (ANSI) are good indicators that the helmet also meets the Federal safety standard. To date, we have never seen a novelty helmet that has a phony DOT sticker in addition to a phony Snell or ANSI label.

Manufacturer's labeling

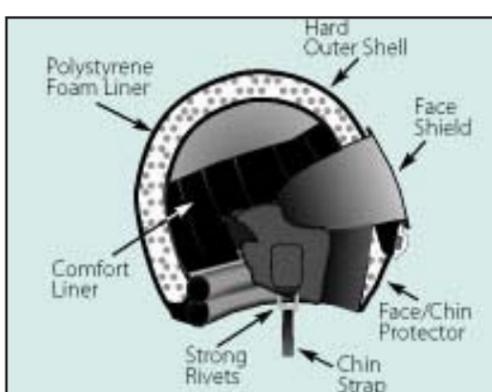
Manufacturers are required under FMVSS 218 to place a label on or inside the helmet stating the manufacturer's name, model, size, month and year of manufacture, construction materials, and owner's information. A helmet that does not meet the Federal safety standard usually does not have such labeling.

Remember a DOT sticker on the back of the helmet and proper inside labeling do not necessarily indicate that a helmet meets all DOT requirements. Many helmets have counterfeit DOT stickers and a limited few also have manufacturer's labeling. But the design and weight of a helmet, thickness of the inner liner, and the quality of the chin strap and rivets are extra clues to help distinguish safe helmets from non-complying ones.

Unsafe Helmet Interior



Safe Helmet Interior



Motorcycle helmets are effective in preventing serious brain injuries

SMDC/ARSTRAT Safety Office

Helmets prevent brain injury. Motorcycle helmets save lives and prevent devastating and debilitating head injuries. Motorcyclists who ride without helmets run a significantly greater risk of death or permanent injury. The U.S. General Accounting Office (GAO) has the data that proves it.

GAO reviewed 46 studies of motorcycle helmets and helmet laws. Here's what they found:

- Helmeted riders have up to a 73 percent lower fatality rate than unhelmeted riders.
- Helmeted riders have up to an 85 percent reduced incidence of severe, serious, and critical injuries than unhelmeted riders.
- The GAO concluded: "Because there is convincing evidence that helmets save lives and reduce society's burden of caring for injured riders, Congress may wish to consider encouraging states to enact and retain universal helmet laws."

In its *Report to Congress: Benefits of Safety Belts and Motorcycle Helmets*, NHTSA confirms the facts:

- Motorcycle helmets are 67 percent effective in preventing brain injuries.

Unhelmeted motorcyclists are more than three times as likely to suffer a brain injury as those who are helmeted.

"When I had my motorcycle crash and suffered my head injury, it changed my life, and it took a huge toll on my family. If anyone has the opportunity to reduce the number of head injuries, I would personally urge them to do whatever they can to spare another person from this ordeal."

— **Doug Wilson,**
motorcycle crash victim,
Maryland

Enlisted Soldier leads the way for 100th HHB

By Spc. Michael B. Cost
Unit reporter

COLORADO SPRINGS, Colo. — A proud portion of one Soldier's career began Feb. 2 at the 100th Missile Defense Brigade (Ground-Based Midcourse Defense) headquarters here when 1st Sgt. William Jewell was not only pinned with his new rank but took over responsibility of Headquarters and Headquarters Battery from 1st Sgt. Herbert Rodriguez.

After a few dry runs, the real ceremony began, which was a big day for some other Soldiers too. Master Sgt. Russell Hamilton was promoted to sergeant major, Staff Sgt. Eddie Negron was promoted to sergeant first class, and the Soldier about to take the reigns as "first shirt" was promoted to first sergeant.

Following the three Soldiers' promotions was a Change of Responsibility from Rodriguez to Jewell. Afterwards, the ceremonious passing of the sword from one non-commissioned officer to the other signified the passing of responsibility — a tradition dating back to about 1840. NCOs carried swords in the days of slow loading muskets as a last line of defense if closed in on by enemy Soldiers. Swords changed from weapons to symbols with increasing technology, but the tradition still holds.

Rodriguez, who was the initial first sergeant here for approximately three years, was up first to speak. "I want to

thank my wife and kids for putting up with the long hours. I would not have been able to help my Soldiers as much without their support and I want them to know I love them," said the outgoing leader. Rodriguez's family was in attendance and his wife was given a bouquet of flowers. After his speech, the Soldiers attending the ceremony applauded him as he departed his position as HHB's *first* first sergeant.

Jewell, who has been an NCO with the 100th for approximately three years, attributed most of his success to the support of his wife and family as well. "Taking care of your family is paramount to your success in the military," said Jewell. His wife was also in attendance and was the person chosen for the honor of pinning Jewell with his new rank.

He has worked with operations, force protection, and anti-terrorism for the 100th and feels "very confident," as he put it, coming into this leadership position. Having all this experience with different portions of the MDB has shaped an experienced and knowledgeable leader.

"He has done a lot of stuff throughout his career including field artillery, military police, and crew duty here for a while," said Capt. Bryan Murphy, anti-terrorism/force protection officer of the brigade, who worked with Jewell for two years. "He was good administratively, but I think he is



Photo by Sgt. 1st Class Robert Cunningham

Sgt. 1st Class William Jewell gets pinned with his new rank of first sergeant by his wife Stacy at 100th Missile Defense Brigade Headquarters in Colorado Springs, Colo. Jewell honored his family by saying that he appreciated their support throughout his time thus far in his career.

also going to be a great leader," said Murphy.

Many enlisted Soldiers strive to make it into leadership positions like the one Jewell is in. When it comes to taking care of his Soldiers, Jewell proclaimed, "As leaders I believe it's our responsibility to train our subordinates to replace us, and if you haven't done that, you haven't done

your job. Teamwork toward mission accomplishment is a focus of mine; we are one unit and one team. I don't believe in leadership by e-mail, so Soldiers will be seeing my face."

The future of the 100th MDB HHB looks bright with the positive and hands-on leader traveling its halls and facilities.

Echo Company Soldier/NCO of the Year selected

By Sgt. Daniel Cox, Unit reporter

FORT BUCKNER, OKINAWA, Japan — Boards are an important part of any Soldier's career. In a board, Soldiers are judged on their knowledge, appearance and their ability to keep their composure in a tense situation.

The Echo Company Soldier of the Year/NCO (noncommissioned officer) of the Year board took place on Feb. 9 to determine which Soldier and NCO would move on to the Pacific Regional Board.

The day turned out to be great for one Soldier and one NCO. It was a day they had studied and prepared for during the past 12 months; the day they knew meant

a trip to the Pacific Regional Board in Hawaii and hopefully the first step on the road to the Army Soldier/NCO of the Year board. It was this first step they had been waiting for and few could have been more eager to get this day behind them.

Sgt. Carlotta Stevens showed up at the board with a lot of motivation, looking good and standing tall. She was also the sponsor for two of the Soldiers competing for the Soldier of the Year title but walked away herself with the NCO title.

Sgt. Ernest Mari, who was a specialist at both the Soldier of the Month and the Soldier of the Quarter boards, took the title as Soldier of the Year. Mari was promoted to ser-geant in January and came to the

board ready to take home the title. Extremely knowledgeable and very confident Mari came into the board with every intention of raising the bar and setting the standard very high.

The Pacific Regional board will take place on Apr. 2-4 in Hawaii. At this board, the competitors will also need to have an oral presentation as part of the rating system. The winner of the Regional Board will move on to the Major Command level and the winners from there will compete at the Department of the Army board.

Stevens and Mari performed well and will hopefully be an example to encourage other Soldiers from the unit to strive for such greatness.

Back to basics, Echo Company Soldiers learn new WGS System

By Spc. Steven Fagan
Unit reporter

FORT BUCKNER, OKINAWA, Japan — Echo Company, 53rd Signal Battalion recently completed a class on the Wideband Global Satellite to be launched in the near future. The WGS will be the newest communication tool in the Armed forces of the United States.

The class taught by Vincent

Yacono, the operations analyst at Echo Company, was four days of intensive training on the capabilities and operations of the WGS. The satellite will revolutionize joint communications for the Armed Forces and its effort during this time of war.

The topics covered include, but were not limited to, cross communications between bands such as Super High Fre-

quency and Ka frequencies, the band width increase from the Defense Satellite Communications System III to the WGS, and the general construction of the satellite itself. The Soldiers in the class also learned of the new propulsion system onboard as well as command and control responsibilities.

This class was given as a familiarization of the WGS's capabilities and operations.

There will be months of intensive training to follow for the Soldiers at Wideband Satellite Communication Operations Centers around the world to teach them how to properly maintain and operate the spacecraft. The Soldiers of Echo Company are looking forward to the challenges and responsibilities that are to follow with the new communications system.



Two small scales like the one shown in the photo are used to weigh each axle, and the weight is written above the wheel.

Photo by Ed White

JTAGS weighs in

By Ed White
SMDC/ARSTRAT
Public Affairs

COLORADO SPRINGS, Colo. — Any time a unit deploys a myriad of large and small details have to be considered. When the unit is deploying by air, one of the most important considerations is how much vehicles and equipment weigh because the weight, length and height of the pieces determine how and where in the aircraft they are loaded.

Aircraft loading is a sophisticated science demanding accuracy in order to get a flight off the ground.

"It is vital to know the exact dimensions and weight of the vehicles and the equipment they are carrying," said Sgt 1st Class Richard Gabriela. "When

it is loaded onto an aircraft, the loadmaster is going to protect his aircraft. So if the weight is off or the vehicles are loaded incorrectly, or any detail is out of place, that loadmaster will take that vehicle off the manifest, and it will sit at the airport holding area until it is made right."

The Colorado Springs based Joint Tactical Ground Station crew recently practiced the process of weighing, measuring and ensuring the loaded vehicles would be accepted by an Air Force loadmaster. They measured out the interior size of a C-17 and practiced measuring and weighing their vehicles and loading them into the proper space.

"This is just something we have to know how to do very well," said Gabriela.

Space Operations

continued from page 11

GPS satellites and makes the clock on a cell phone more accurate than a watch one sets; and detects nuclear detonation for treaty reasons. He added that GPS provides precise position, velocity and time to users in any weather, 24 hours a day worldwide, said Gehrke.

Military GPS devices are better than civilian devices which are neither as secure nor as accurate. Civilian GPS have selective availability which means known errors have been injected into the navigational signal, but that's been turned off, said Gehrke. The NCA (National Command Authority, i.e., the President of the United States) has approval authority to have the SA turned on or off, he said. Even with SA turned off, the military receivers still have better accuracy, he added.

The military GPS device is secure, accurate and "anti-spoofable," meaning encryption prevents false signals and positioning errors. If the military device is used without an encrypted "key" it works just like a commercial device and there is no security. The military GPS uses dual frequencies (the civilian device uses one) which provide better accuracy, has no SA and two different codes get transmitted. These and other advantages make the use of GPS more reliable for a warfighter.

A downside to military GPS devices is that they can be hard to come by for the warfighter because they are expensive.

Soldiers have turned to using commercial devices out in the field, said Gehrke. A disastrous result of using commercial GPS devices in a war is that it's easy for the enemy to hone in on, then the enemy sends in firepower to eliminate our forces.

Gehrke also briefly discussed BFT or Blue Force Tracking. It's a system that helps prevent fratricide and "tags" along with GPS, he said. Even many pets have a BFT-type chip implanted by their owners in case the animal becomes lost, he added.

BFT technology identifies and tracks U.S. troops, its allies or Coalition Forces to give the combatant commander in the field enhanced battlespace situational awareness, which reduces fratricide, said Gehrke. All units use BFT and their vehicles also have it embedded. BFT

situational awareness shows a commander where he is, where his troops are and enemy location. It has eliminated the "fog of war," Gehrke concluded.

Thomas A. Gray, an education and training specialist at Fort Leavenworth, Kan., who works in the training branch within the DCD, FWC provided instruction regarding satellite communications (SatCom) and space law.

Gray began his remarks by listing pros and cons about SatCom. The pros: A communications satellite equates to the highest antenna. Because of this, the warfighter's line of sight is not affected by distance and it provides worldwide communication to remote locations. The cons: Communication satellites and associated requirements for launch are costly, component failure results in loss of the satellite as there is no way to physically repair the satellite and satellites are vulnerable to anti-satellite weapons and jamming.

With various bandwidth sizes and atmospheric conditions, differences in satellite frequencies are important for space enablers to know and understand, said Gray. This ensures proper design of systems to support ground forces using satellites.

Gray explained that satellite based communication occurs in three frequency ranges. Communication outside these ranges is affected by the atmosphere's "transmissivity" or ability to pass through the different layers of the atmosphere. Frequencies below this range tend to reflect off the atmosphere back to the earth and those above this range get absorbed by the atmosphere and never reach the satellite.

The bandwidth, the impact of space weather, global weather and jamming issues must all be taken into consideration when deciding which frequency system to use for satellite communication, Gray said.

But bandwidth isn't enough for space enablers to learn about and understand, it's also communication, said Gray. A bandwidth is a "pipe" in which only a certain amount of data can be sent. Therefore, more satellites are needed and those can be bought from commercial entities, Gray said.

"As the Department of Defense continues to tax its military satellites,

DOD finds the demand is outstripping its bandwidth capability," said Gray. DOD uses commercial satellite systems to augment its military systems. "It's cheaper to buy existing satellite usage time than for DOD to make its own," he said.

Gray concluded his SatCom presentation by stating the future of communication lies in the transformational satellite. "TSAT is a concept that will serve as the satellite communication backbone," Gray said. "It will be used to prosecute warfare."

The next topic Gray tackled was space law, policy and doctrine. He said space law and policy are predicated upon customs, international laws and treaties, domestic law and policy statements, and directives from the President, the Department of Defense, the Armed Services and other government organizations.

Briefly, the principles of international space law are: Sovereign states are legally equal, space above a nation is not "national airspace," international law applies to outer space, space is free for everybody, space will be used for peaceful purposes and space objects must be registered with the United Nations. And unofficially, if something regarding space is not specifically illegal, then it's legal, said Gray.

"Much like the concept of international waters and the open sea, outer space is not owned by anyone; however, 'airspace' is owned by the country under that air, said Gray. There is no real definition of where space starts, he added.

"Since a satellite is not in controlled flight but rather falling (orbiting) around the earth in its orbit, nations cannot disallow overflight of a satellite," said Gray. However, if an incident occurs, the problem belongs to the country that put the satellite in orbit, he said.

These concepts were important to grasp in order to understand space laws, he said.

Gray concluded the first "space education day" with a computerized video of what space operations may be like in the year 2035. The audience watched as U.S. Army missile defenses protected citizens using ground-based direct energy lasers to disable enemy tanks and holograms to fake out enemies into thinking U.S. forces were smaller than what they were ... or perhaps will be one day soon.

Missile Defense Agency update

Air Force Lt. Gen. Henry "Trey" Obering, Missile Defense Agency director, briefs the press outside the new MDA building in the Von Braun Complex on Mills Road March 8. Obering gave information on the progress of construction of the new building, plans for the next MDA building in the complex and news regarding MDA's BRAC implementation. He announced plans to implement a nationwide recruiting effort for vacant jobs and commended Huntsville and North Alabama for their cooperation and efforts in assisting MDA as it becomes part of the community. Obering said construction is progressing well on the second phase of the Von Braun Complex. The \$44 million building will house about 900 MDA employees. "I expect we will move in there some time in the late summer," Obering said. "It looks to be going well and right on schedule." The \$220 million third phase of the complex will house more than 2,200 employees with construction scheduled to begin in late 2008 or early 2009.



Photo by Pam Rogers, MDA Public Affairs



Courtesy photo

1st Space Brigade member joins NCO ranks in ceremony

By Ed White
SMDC/ARSTRAT
Public Affairs

Sgt. Joshua Foye was recently adopted into the noncommissioned officer ranks by promotion to the rank of sergeant in a simple ceremony in Iraq. Foye has clearly demonstrated his potential and is now recognized for his efforts. He is a member of the 1st Space Brigade.

In the Army, promotions are watershed moments. One minute a Soldier is subordinate and the next he or she is a leader. Or, at least that is how it may look to the

uninitiated. While these promotions occur with some ceremony, there is a certain austerity about them as well. The individual receives the new rank and goes right on about the business of defending our nation.

One of the biggest jumps for the individual Soldier is from specialist to sergeant. As the promotion order says, special trust and confidence is placed in the person being promoted. This has taken a long period of training and observation by the leadership before someone is entrusted with leading others. It is both an honor and a responsibility that is bestowed with the stripes.

Space Soldier reenlists in Iraq

By Master Sgt. Dennis E. Beebe,
Multinational Coalition-Iraq
Public Affairs Office

BAGHDAD, Iraq — Reenlistments are a common occurrence in the Army, but one recent reenlistment stood out among the rest.

Staff Sgt. Yolanda T. Rife is the first U.S. Army Reserve Space Soldier to reenlist in theater. Rife has been here for three and a half months out of her one-year-tour, and her husband Bill, a government contractor, is also located here at the Victory Base Complex, and was able to attend the ceremony. Rife's son is a college freshman, attending Sacramento City College in Sacramento, Calif., and lives with Rife's parents while his own are deployed.

A member of Army Space Support Team 18, Rife took the reenlistment oath from her commander, Maj. John Hennessey, on the third-floor balcony of the Al Faw Palace at Camp Victory, Baghdad, Iraq, on Feb. 17. Rife is assigned to provide Space support to Multi National Corps — Iraq headquartered here in one of Saddam's former palaces.



Photo by Master Sgt. Dennis E. Beebe

Staff Sgt. Yolanda Rife (right) reenlists in Baghdad. The officiating officer is Maj. John Hennessey (left) and holding the flag is her husband, Bill, who is a contractor stationed at Camp Victory.

When asked why she reenlisted, Rife said "I love my God, my country and the U.S. military." Rife has volunteered to come back into the Army Reserves, volunteered to come to Iraq, and now she has volunteered to stay another six years in the Army.

A veteran of the first Gulf War, Rife previously was in Iraq in 1990-1991 in

support of the 1st Armored Division, in a Signal Support role. Her plans after this deployment are to interview with the Seminary at Liberty University in Virginia to pursue her goal of entering the Army Chaplain Corps as a minister. After school and becoming ordained as a minister she wants to re-enter active duty as an Army Chaplain.