

Inside The Eagle



New chaplain
brings Space
closer to Heaven,
page 8



Soldier reflects on
OPERATION IRAQI FREEDOM
one year later,
page 18

The Eagle

United States Army Space and Missile Defense Command

Volume 11, Number 4, April 2004



Photo by John Sterenberg

Mass graves in Iraq analyzed by spectral analysis

Air Force Master Sgt. Richard Burch and civilian spectral analyst/geologist Bruce Gerrick, both of U.S. Army Space and Missile Defense Command, kneel in a dust cloud, protected by Dutch Marines, as the helicopter bringing them to a suspected mass grave site departs. See related story on page 10.

General explains missile defense funding request to congressional subcommittee

By Sgt. 1st Class Doug Sample
American Forces Press Service

WASHINGTON, D.C. — The man in charge of safeguarding the United States against a ballistic missile attack warned members of the House Armed Services Committee's Strategic Forces Subcommittee on March 25 that in the coming years the country will face a ballistic threat from a variety of sources.

Air Force Lt. Gen. Ronald T. Kadish is director of the Missile Defense Agency, which has the task of building the nation's missile defense capability. He told the committee that intelligence estimates and Libya's recent admissions concerning its ballistic missile and weapons-of-mass-destruction programs show the United States is vulnerable.

Kadish was on Capitol Hill to detail and explain the Defense Department's request for missile defense funding in the department's proposed fiscal 2005 budget.

"Ballistic missiles armed with any type (of) warhead would give our adversaries the capability to threaten or inflict catastrophic damage," he said. President Bush, the general added, has called on the agency to aggressively develop the

capability to defend the United States and its allies against all ranges of missiles in all phases of flight.

Kadish said the funding would continue an aggressive research, development, test and evaluation effort to design, build and test the elements of a single ballistic missile defense system in what he called "an evolutionary way," along with modest fielding of the capability over the next several years.

"We recognize the priority our nation and this president ascribe to missile defense, and our program is structured to deal with the enormity and complexity of the task," he told the committee. "We are capitalizing on our steady progress since the days of the Strategic Defense Initiative, and will present to our combatant commanders by the end of 2004 an initial missile defense capability to defeat near-term threats of greatest concern."

Kadish told the subcommittee the ballistic missile defense system his agency is developing is a layered defense that will help reduce the chances a hostile missile would get through to its

See **Defense Funding**, page 4

SMDC to get new RDA deputy to commander

HUNTSVILLE, Ala. — In a change of position ceremony at 10 a.m. April 26 at the Bob Jones Auditorium at Redstone Arsenal's Sparkman Center, Mr. Michael C. Schexnayder will be assigned as the Deputy to the Commander for Research, Development and Acquisition, U.S. Army Space and Missile Defense Command. The RDA function is located at the Wernher Von Braun Complex on Redstone Arsenal with elements at White Sands Missile range, N.M. and the U.S. Army Kwajalein Atoll located in the Republic of the Marshall Islands.

Schexnayder, previously the associate director for the Systems, Aviation and Missile Research, Development and Engineering Center, U.S. Army Research and Development Command at Redstone Arsenal, will take over responsibility from Maj. Gen. John M. Urias. Urias, who previously was dual-hatted as SMDC's deputy commanding general for RDA and the Program Executive Officer for Air, Space and Missile Defense, leaves SMDC to perform PEO duties full time. The PEO, under the Assistant Secretary of the Army for Acquisition, Logistics and Technology, works to better synchronize air, space and missile defense programs and requirements in support of Army Transformation efforts.

The Command Corner



Lt. Gen. Larry J. Dodgen
Commanding General



CSM David Lady
Command Sgt. Maj.

Our Nation is at war. The Global War on Terrorism and the support of the Joint Warfighters involved in prosecuting that war — and ensuring they have what they need — are our top priorities. This command is deeply committed to this vital mission area, and the entire SMDC team of Soldiers, civilians and contractors is instrumental to helping us achieve success.

As the Army's only "concepts to operations" command, SMDC works closely with our military's combatant commands to identify operational requirements. We also conduct our own rigorous lessons reviews to capture and then assign lead responsibility for the areas. We have done exactly that concerning our ongoing support of OPERATIONS ENDURING FREEDOM and IRAQI FREEDOM. Work continues to resolve the lessons. In fact, within our operational units stationed in Colorado Springs and Alaska, aggressive training and certification initiatives have been implemented to enhance their state of readiness and deployability.

For areas requiring possible materiel solutions, our research and development activities develop the concepts and systems for detailed testing and evaluation. Other SMDC activities, including the Force Development Integration Center and the TRADOC System Manager for Ground-based Midcourse Defense, ensure synchronization of the doctrine, training and user requirements.

We have been instrumental in developing multiple cutting-edge technological solutions in support of our Joint Warfighters, including the Joint Tactical Ground Station (JTAGS), the Space Support Element Toolset-Light, the Patriot Advanced Capability-3 system, and SMDC's first integrated technology program for Directed Energy. Each of these developments has been deployed — and demonstrated great success — in support of combat operations. Work is ongoing to expand our satellite communications capabilities, detect short-range ballistic missiles and identify the firing location of enemy small arms. We are also working closely with other Army and Department of Defense commands and activities to hone our capabilities in the areas of Space Control and Information Operations. All of these capabilities are vital, and great efforts are being expended to get them to our deployed personnel as soon as possible.

Although SMDC is widely known for its technological contributions, the people of SMDC — from the subject matter experts at the High Energy System Test Facility at White Sands, N.M., to the Army astronauts in Houston, to the test and evaluation systems engineers on Kwajalein Atoll — are truly responsible for the many remarkable achievements throughout the command.

Of course, we can never forget the work being done by our "experts in the field," the forward deployed Soldiers with the JTAGS Detachment and Army Space Support Team currently serving in Southwest Asia. Everyone is responsible for helping to deliver advanced technology, missile defense and space-based products and services in support of the Soldier, the centerpiece for our efforts. Given our great responsibilities, all positions in SMDC are important.

This Global War on Terrorism is unlike any war this nation has fought before. However, the challenges are not insurmountable. They can be overcome with the same "Warrior Ethos" determination that made this nation what it is today.

As we look to the future, I ask each of you to be safe in your daily work and at home, continue to bring forth the great ideas and creativity that have been hallmarks of our past, and keep in mind the importance of what we do.

SECURE THE HIGH GROUND!

In March, Lt. Gen. Dodgen and I attended the Quarterly Training Briefings of 1st Space Brigade and 100th Missile Defense Brigade (GMD). We saw SMDC leaders placing great emphasis on training and certification programs. The 1st Space Bde. and the 100th Missile Defense Bde. (GMD) have developed tough, demanding training standards that prepare newly arriving personnel to serve as confident and expert members of our satellite control, space support, missile warning and missile intercept teams. We saw the results of successful weapons qualification, common task training and physical fitness programs. We also saw the need for hard work in the future, to develop the most flexible, adaptive and competent space Soldiers who possess a "Warrior Ethos."

The 1st Space Bde. commander has directed all his leaders to "... incorporate the Warrior Ethos into all training." His commanders and NCOs must make sure all training events are designed to produce experts who have demonstrated all tasks and have met or exceeded all standards under tough, realistic conditions. This requires careful planning, generous resources (time, facilities, equipment, expert trainers) and constant checking by brigade and battalion leaders to make sure this intent is accomplished.

All five battalions are preparing or conducting technical and tactical certification programs to evaluate the individual and collective proficiency of Soldiers, crews and teams. Some programs, like those of 1st SATCON Bn. and the Theater Missile Warning Co. (2nd Space Co., 1st Space Bn.), are well-developed and regularly conducted. Others are newly designed, such as the 1st Space Co.'s program for certifying Army Space Support Teams. Our GMD leaders are meeting the challenge of designing and redesigning their certification standards as the command and control and missile launching systems are still being installed and undergoing constant hardware and software development. The Alaska Army National Guard Missile Defense Space Bn. has the additional frustrations of training when the day-to-day mission of securing the missile site almost consumes all available personnel.

Other training events reinforce common Soldier skills at the individual level, while training the detachment or unit to accomplish a tactical task. The Alaska Army National Guard Missile Defense Space Bn. and 1st SATCON Bn. units are training to defend perimeters; the space support and missile warning teams of 1st Space Bn. are training to move as part of convoys, react to ambush and to set up and take down their equipment in a wide variety of tactical situations. An example of a successful tactical training event was the live-fire react-to-ambush course conducted by 1st Space Bn. on the Fort Carson, Colo., firing range. Although 1st SATCON Bn. does not have a tactical role, the companies regularly conduct field training exercises, in order to keep their Soldiers proficient in common Soldier tasks in a field environment.

Lt. Gen. Dodgen and I are committed to providing resources for our Soldiers and units to better carry out their missions and to conduct training. The SMDC staff has worked hard to provide new HMMWVs for the Alaska battalion and to provide add-on armor kits for those vehicles. 193rd Space Support Bn. has new Space Support Element Toolsets-Light, purchased from year-end SMDC funds. As 1st Space Bde. becomes a permanent unit (losing its "Provisional" status), the opportunity exists to equip units to become more combat effective; for example, by re-equipping our Soldiers with M4 carbines instead of 9mm pistols as their personal weapons. We will carry the needs of our units to the Department of the Army, in order to equip our space warriors so that they can each be even better trained as "whole Soldiers," persuasive in peace and invincible in war.

ON POINT!

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Senior leadership approves new civilian personnel system plan

By K.L. Vantran
American Forces Press Service

WASHINGTON, D.C. — Senior leadership in the Defense Department approved the plans for the new National Security Personnel System, Secretary of the Navy Gordon R. England, who is heading the project, announced here April 14.

The system, authorized by the fiscal 2004 National Defense Authorization Act, will introduce changes in the way the department hires, pays, promotes, disciplines and fires its civilian employees.

Earlier this month, England and David S.C. Chu, undersecretary of defense of personnel and readiness, sent a letter to the department's civilian employees on the progress of NSPS.

"The task before us is to design a transformed system for the department's 700,000 civilian employees that supports our national security mission while treating workers fairly and protecting their rights," the letter stated. "We want to ensure that all stakeholders in the new system - including civilian employees (and) managers ... have an opportunity to

provide their thoughts, ideas, views and concerns."

While NSPS is mission-first, it's also employee-centric, England said. He encourages input from employees. Mechanisms such as Web pages and town meetings will not only provide information to the work force, but also will allow for feedback.

The plan also calls for "aggressive, but event-driven schedules," he said. The first milestone is to have a labor-relations draft regulation to the Federal Register by November.

"We have schedules, but they could be longer (or) they could be shorter, because it's event-driven and it depends on how we do each step," England said.

"We'll go through this in stages and phases," England continued. "We'll get feedback, and we'll keep improving the program as we proceed."

"It's a great opportunity to have a terrific program for our employees, and I'm convinced we will," he added. "The process will work and the product will be one that everyone will want to embrace and be proud to embrace."

April: National Child Abuse Prevention, Military Child Month

April is National Child Abuse Prevention Month and Month of the Military Child. America has a fundamental duty to protect the safety and well-being of its children. During National Child Abuse Prevention Month, we renew our commitment to preventing child abuse and neglect, and we dedicate ourselves to creating a safe environment in which our children can grow and thrive.



We have made progress in protecting America's children, but too many still suffer from abuse and neglect.

These young girls and boys depend on adults to recognize the risk factors and warning signs of abuse and to take action to end it. This responsibility is shared by parents, teachers, coaches, religious leaders, government officials, and concerned citizens in every community.

Since 1986, the Secretary of Defense has also recognized April as the Month of the Military Child, placing emphasis on how the stress of military life affects the children of Soldiers.

What We Think

The Eagle asks:

What do you like doing best with your children?



Emily Cunningham
Military Analyst
Studies and
Analysis Division
Battle Lab
Huntsville, Ala.

We love spending time together traveling and sightseeing all over the country. We especially enjoy learning about local history in the places we visit.



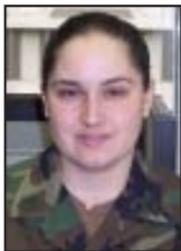
Cpl. Brian Golden
PAC NCO
D Company
1st SATCON Bn.
Camp Roberts,
Calif.

I enjoy wrestling with my daughter the most. I'm pretty busy during the week so seeing the smile on my daughter's face as she tries to tackle me makes up for all the long hours at work. I'm sure that my daughter appreciates me having fun with her when I'm home instead of me being some mean old man.



Staff Sgt. Jason
Smith
Security NCO
D Company
1st SATCON Bn.
Camp Roberts,
Calif.

I like just hanging out with my daughters, teaching and showing them new things.



Sgt. 1st Class
Desire'e Mubarak
Assistant Special
Security Officer
G-2
Arlington, Va.

There is no one thing I like doing best with my children. I enjoy spending time with them and seeing them laugh and enjoying themselves whether it be on a family outing, something we are doing together, or sitting around the dinner table talking.



Air Force Tech Sgt.
Victoria Marshall
EHF Comm Planner
RSSC-CONUS
MacDill Air Force
Base, Fla.

I like doing everything with my boys — we are a close knit family. We go roller blading together and ... just walk and talk in parks.



Capt. Mike Rembold
Chief of Special
Projects, G-3
Arlington, Va

My son, Ethan, is 4 weeks old. I like taking him out for walks with my wife in the evenings after work. Everything is new to him and he is easily fascinated by changes in his surroundings. However, the best thing I like doing with Ethan is feeding him his bottle (including the 4 am feeding) and then letting him fall asleep on my shoulder. It is an awesome experience!



Ed Longo
Security Specialist
FDIC
Arlington, Va.

I spend a lot of time with my kids, and we enjoy all types of activities. I have two children, a son who is 17 and a daughter who is a senior in college. I'm very proud of both of them and hope the time we have spent together has had a positive effect.



Spc. Brandi
Ferguson
Satellite Controller
A Company, 1st
SATCON Bn.
Fort Detrick, Md.

I am very proud of my children. My 8-year-old daughter is participating in the Fort Detrick talent show and my 5-year-old son plays T-ball. I just enjoy spending time with my children and watching them grow.



Spc. Corey Wilson
Satellite Controller
A Company, 1st
SATCON Bn.
Fort Detrick, Md.

I love to bounce my 4-month-old son on my knee and tickle him to make him laugh.

The M3P journey begins for 2nd Space Company

By Maj. Charles D. Nesloney
2nd Space Company
Commander

COLORADO SPRINGS, Colo. — Since 1997, Soldiers and Sailors have been manning the Joint Tactical Ground Stations (JTAGS) in Europe, the Pacific, the Middle East, Fort Bliss, Texas, and Colorado Springs. These personnel have had the 24/7, 365-day-a-year responsibility of delivering continuous, assured tactical ballistic missile early warning to the warfighter.

Although the existing system has served nobly and well, the time has come for the transition to a more modern and technologically advanced early warning capability. The Soldiers of 2nd Section, Alpha Detachment, 2nd Space Company, Fort Bliss, have the global task to train, test, evaluate and influence the doctrine for the new Multi-Mission Mobile Processor (M3P).

The M3P is the transportable in-theater element of U.S. Strategic Command's Theater Event System. It provides theater commanders a continuous, 24-hour capability to receive and process in-theater, direct down-linked data from Defense Support Program/Space Based Infrared System sensors to disseminate warning, alerting and cueing information on tactical ballistic missiles. It also provides information on other tactical

events of interest throughout the theater using existing communication networks.

On April 12, Chief Warrant Officer Santiago Gonzalez began the journey of learning, testing and fielding this new system with his section.

In October, Gonzales saw the beginnings of his new section.

"We have been preparing for the new M3P system to come online since the standup of the M3P section in October 2003," Gonzalez said. "We, the Soldiers of the M3P section, will become the leaders for the future of the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command. This is the beginning of a great new journey, which will broaden our horizons and lead us into the future. I am honored and look forward to leading this Army Element into the new millennium, by fielding the most technically advanced system the Army will have in its inventory."

Between April 2004 and

June 2005, 2nd Section, Alpha Detachment will travel to Boulder, Colo. and White Sands Missile Range, N.M. to execute the initial operation test and evaluation. This 15-month mission will not only be the test bed for 2nd Space Company's future operations, but will also redefine how SMDC/ARSTRAT interacts in the Theater and Strategic level operations of ballistic missile early warning. Training is one of the fundamental reasons for conducting operational tests of product improvements on new weapon systems, and the by-product will be a better-trained and more qualified Soldier to operate the M3P system.

"I expect the process to be mentally and physically demanding, as what we do here will set the precedent for future use of the M3P system," said Sgt. Stephen Vogler. "Our crews are prepared to perform these duties, while still focusing on the maintenance of our general mission as Soldiers."

The joint mission,

encompassing the Air Force, Navy and Army, is based upon the Space Based Infrared System and will replace the architecture and capabilities of the Defense Satellite Program.

"I think that once I complete the M3P training, I'll be proud to say to others that I was one of the very first to ever be trained on the system," said Pfc. Joshua Spangler. "If the system ever helps with a major accomplishment or military breakthrough, I will take pride in the fact that I was one of the very first crew members to take part in the fielding of the system."

The M3P section will consist of a 42-foot fifth wheel shelter, one 5-ton tractor, three 5-ton cargo trucks, two tactical generators and one high mobility, multipurpose, wheeled vehicle (HMMWV) with trailer. Outside the continental United States, M3Ps, when directed by U.S. Strategic Command, support the strategic enduring mission and will provide a relay of Space Based Infrared System satellite preprocessed infrared data via the MILSTAR defense satellite system to support strategic early warning.

"It will be good to learn the new system and see where Army Space is going as we take yet another step to remain vigilant and protect our way of life and ensure the safety of our people," said Pfc. Ivan Virruet.



An artist rendition of the new Multi-Mission Mobile Processor (M3P)

Defense Funding

continued from page 1

target. The system, he said, would give the United States "better protection by enabling engagements in all phases of a missile's flight, and make it possible to have a high degree of confidence in the performance of the missile defense system."

The system's reliability, synergy and effectiveness can be improved by fielding overlapping, complementary capabilities, the general said. "In other words, the ability to hit a missile in boost, midcourse or terminal phase of flight enhances system performance against an operationally challenging threat."

However, all of these layered defense elements must be integrated, he said. "And there must be a battle management, command and control system that can engage or reengage targets as appropriate. And it all must work within a window of a few minutes," he added.

Kadish emphasized to the subcommittee that a layered missile defense will not only increase the chances that the hostile missile and its payload would be destroyed, but "it also can be very effective against countermeasures, and must give pause to potential adversaries."

The general further emphasized that the nation's missile defense capability is just beginning. "What we do in 2004 and 2005 is only the starting point — the beginning — and it involves very basic capability," he said.

"Our strategy is to build on this

beginning to make the BMD system increasingly more effective and reliable against current threats, and hedge against changing future threats," he said.

DoD is asking Congress for \$9.2 billion in fiscal 2005 to fund and support initial configuration and activities to place the BMD system on alert. That amount is a \$1.5 billion increase over the fiscal 2004 request, Kadish said.

"The increase covers costs associated with fielding the first GMD, Aegis BMD, sensor, and command, control and battle management installments and will allow us to purchase long-lead items required for capability enhancements."

The agency is also asking for \$200 million in fiscal 2005 to develop advanced systems to develop laser technology and laser radar, advanced discrimination, improved focal plane arrays, and a high-altitude airship for improved surveillance, communication and early warning, the general told the legislators.

Another \$834 million is being requested to buy equipment and ramp up the testing of the Terminal High Altitude Area Defense program, a capability to engage in the late midcourse and terminal layers of missile defense.

THAAD recently completed its design readiness review, and development hardware manufacturing is under way, Kadish said. The THAAD radar was completed ahead of schedule and rolled out this month. Flight testing is scheduled to begin in the first quarter of fiscal 2005 at White Sands Missile Range, N.M.

Kadish said the Missile Defense Agency also will be able to begin assembly and integration of two tracking and surveillance satellites. The budget request for that program is \$322 million.

Also included in the budget are several science and technology initiatives to increase BMD system firepower and sensor capability and extend the engagement battle space of terminal elements, Kadish said.

He said one effort toward increasing BMD system effectiveness in the midcourse phase will be placing multiple "kill vehicles" on a single booster, thus reducing the discrimination burden on BMD sensors.

Kadish told the committee that congressional support for key changes in management and oversight have allowed his agency to execute the missile defense program responsibly and flexibly by adjusting the program to its progress every year, improving decision cycle time, and making the most prudent use of the money allocated. Periodic changes in the RDT and E program have collectively involved billions of dollars — "that is, billions of dollars that have been invested in more promising activities, and billions of dollars taken out of the less efficient program efforts," Kadish told the lawmakers.

"The ability to manage flexibly in this manner saves time and money in our ultimate goal of fielding the best defenses available on the shortest possible timeline," he said.

Battle Lab director receives Presidential award

By Marco Morales
SMDC Public Affairs

WASHINGTON, D.C. — The director of the Space and Missile Defense Battle Lab received the Presidential Meritorious Rank Award March 12 in a standing-room-only ceremony conducted at the Pentagon.

Acting Secretary of the Army Les Brownlee and the Vice Chief of Staff of the Army Gen. George W. Casey Jr. presented various awards to 46 individuals including Laurence H. Burger, a member of the Senior Executive Service. Burger earned the Presidential Meritorious Rank Award for exceptional long-term accomplishments during his tenure as director of the SMD Battle Lab, a major subordinate element of the U.S. Army Space and Missile Defense Command (SMDC) located at Redstone Arsenal, Ala.

According to the award nomination summary, "Mr. Burger has created the premier Battle Lab in the Army by emphasizing the delivery of innovations to the warfighter. He has developed an environment that rewards creativity while retaining a focus on serving the ultimate customer — the warfighter. This far-ranging vision was most evident as the Battle Lab was called to deliver a prototype air defense command and control test bed for operational use within 24 hours of the

Sept. 11, 2001, attacks.

"This prototype was placed into service on the East Coast on Sept. 13 and continued to operate 24/7 until a permanent installation of the command and control capability was installed on Dec. 12. Additionally, this test bed has been called into service to aid in the protection of the President."

"I am greatly honored to receive this award," Burger said. "The Battle Lab accomplishments are really due to the great team we have finding new ways to support the warfighter. This award is really due to the hard work and ingenuity of each of the BL members. I really do have the best job in the command — leading the Battle Lab."



Laurence H. Burger

Each year, the President recognizes and celebrates a small group of career senior executives for exceptional long-term accomplishments. Beginning with awards granted in 2003, eligibility for this award is extended to other categories of high-performing senior career employees. Winners of this prestigious award are strong leaders, professionals and scientists who achieve

results and consistently demonstrate strength, integrity, industry and a relentless commitment to excellence in public service.

There are two categories of rank awards: Distinguished and Meritorious. Award winners are chosen through a rigorous selection process. They are nominated by their agency heads, evaluated by boards of private citizens and approved by the president. The evaluation criteria focus on leadership and results.

Burger, who has more than 20 years government and industry experience, outlines general program policy to support the Battle Lab's primary roles in bringing space and missile defense innovations to the warfighter. Beginning in 1980, he worked for four years in the Baton Rouge Chemical Plant for Exxon Chemicals.

He began his government career in 1984 with the Ballistic Missile Defense Systems Command, one of SMDC's forerunners. He joined the Airborne Optical Adjunct (AOA) Project Office, one of the first large Army missile defense programs begun in the 1980s. Burger has served in increasing roles of responsibility including experimentation, requirements development, operational analyses, modeling and simulation, high performance computing and systems engineering.

Minuteman missiles soldier on as Peacekeepers retire

By Gerry J. Gilmore
American Forces
Press Service

WASHINGTON, D.C. — The U.S. military will upgrade its Minuteman III intercontinental ballistic missiles while retiring its Peacekeeper missile force, a senior officer told a Senate subcommittee March 25.

The larger, multinuclear-warhead-carrying Peacekeeper ICBMs are being decommissioned as part of the Moscow Treaty brokered between the

United States and Russia in May 2002.

"With Peacekeeper deactivation proceeding as planned, the Air Force has implemented an aggressive life extension program for the Minuteman III ICBM force to ensure weapon system reliability through 2020," Navy Adm. James O. Ellis Jr. explained to members of the Senate Strategic Forces Subcommittee.

Ellis heads the U.S. Strategic Command at Offutt Air Force Base, Neb., which oversees U.S.

military global strategic planning, including nuclear deterrence.

Ellis noted "reliability upgrades" would be performed on the Minuteman III's critical components. These, he said, include replacement of the missile's guidance and propulsion systems.

SMDC's Reagan Test Site on Kwajalein Atoll will play a part in the Peacekeeper decommissioning and Minuteman III reliability upgrades, according to

Maj. Dennis Gaare, RTS ICBM test director.

The range will catch two last Peacekeeper Glory Trips before the summer 2005. Those missions offer the most visual display for residents with its nine RVs streaking across the sky.

Also, the range will see four tests over the next two years of the upgraded Minuteman IIIs, in addition to the three normally scheduled Minuteman missions, Gaare said.

"Bottom line, we should be in the ICBM testing business for many years," Gaare said.

First deployed in 1986, the Peacekeeper is a four-stage rocket system designed to carry 10 nuclear warheads, according to a STRATCOM fact sheet. There are now about 50 Peacekeepers.

The Minuteman, a smaller, three-stage rocket system, has undergone numerous improvements since it was first deployed in the early 1960s, according to STRATCOM. The Minuteman III version, deployed in 1970, was designed to carry three nuclear warheads, according to an Air Force fact sheet, but after a 1992 arms treaty the Air Force reduced its

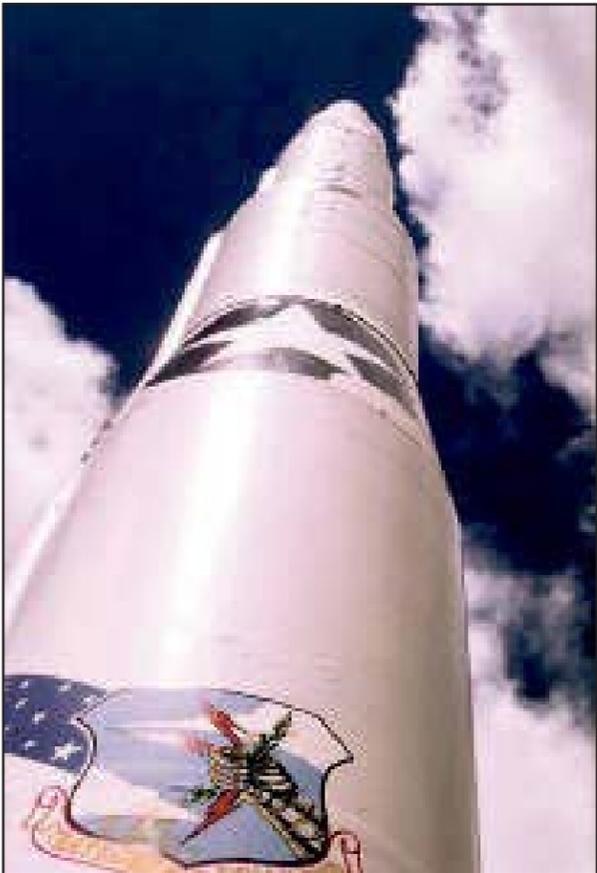


The Peacekeeper will retire after 2005.

payload to one warhead.

About 500 Minuteman IIIs are in the U.S. nuclear arsenal, according to STRATCOM. Ellis said the Minuteman III will become America's sole land-based nuclear-warhead carrying ICBM system after the Peacekeeper is retired.

President Bush and Russian President Vladimir Putin signed the Moscow Treaty on Strategic Offensive Reductions, an arms-control agreement that called for the two countries to substantially reduce their strategic nuclear arsenals over the next 10 years, on May 24, 2002, in Moscow. (Hourglass Editor Jim Bennett contributed to this report.)



Photos courtesy of U.S. Strategic Command

The Minuteman III will serve as the only ICBM in the U.S. force through 2020.

Career field picks Commander's Award recipient

SMDC Public Affairs

Most people who join the work force traditionally select a career field they'll work in for a good part of their lives. But for Dennis Stout, the job chose him.

Stout, who recently earned a Commander's Award for Civilian Service, is a security team leader and special security officer in the U.S. Army Space and Missile Defense Command's Deputy Chief of Staff, G-2 (Intelligence) in Arlington, Va.

"This career field really picked me," Stout said. "My first civil service job was with a G-2 shop, and I have stayed with it." Currently a GS-13, Stout has served more than 14 years in federal service. He has served at SMDC eight years.

The citation on his award states that his "expertise in security matters ensured effective and efficient operations throughout the headquarters in Arlington. He has meticulously managed the personnel and physical security needs of the headquarters and has maintained the highest standards in security awareness and assurance."

The Tuckerman, Ark., native says his job is what keeps him busy and interested. "We are a one-stop shop. We are

responsible for everything from access control to arranging for safes, to changing locks and security clearances," Stout said, adding, "I'm the middle man for the extended G-2 security staff for customer support.

"The cast of characters is one thing I like about working at SMDC," Stout said.

"This place is not 'ho hum.' There is always someone coming and going. I like meeting new people and the point of view they bring to SMDC. There are not very many people who

have been here longer than me," he said. Stout has been married five years and enjoys playing golf on his leisure time.

"He is wonderful to work with," said Sgt. 1st Class Desire'e Mubarak, one of his co-workers in the G-2 shop. "Regardless of the situation, he makes things happen and gets the job done."



Dennis Stout, security team leader and special security officer from the Arlington, Va., G-2 staff and Rose Gore, the entrance security guard, discuss the visitors log process.

Photo by Cali Coulthard

Guardian Angel program needs volunteers

During the war, Army buddies watch over each other. When service members leave their buddies and return home they will need family and friends to watch over and assist them through what could be a difficult time of readjustment. There are numerous ways individuals can help.

First and foremost, let them know you care and appreciate their service to our country by reminding them to practice safety while they are home.

The question is often asked why are service members at a higher risk after a war. They are returning from a war zone. Many have been there for 12 months or longer.

Returning home will be a major adjustment for them. They will have to reintegrate and learn a normal life style again. Driving, social interaction and everyday life will be much different than what they experienced in Iraq. Some may have a tendency to overindulge. Others may experience difficulty in relationships. These factors place them at high risk for accidents and injuries.

Operation Guardian Angel is a program designed to help protect our service members once they return home. It is a national campaign that encourages families, friends,

neighborhoods and communities to remind service members to practice safety when they return home. Its primary objective is to help protect service members from injury or accident; let them know we are proud of them, and we care; and to provide citizens an opportunity to get involved.

Anyone that cares enough to help our service members stay safe once they return home can become a Guardian Angel.

There are several things a Guardian Angel can do. Guardian Angels can talk to service members they know. They can remind service members to:

- Drive with caution and have a plan for DUI avoidance if they intend to consume alcohol.
- Offer to call a cab to help get them home safely.
- Use the appropriate safety gear and buddy system during recreational activities such as hiking and swimming.
- Do anything you can think of that will help ensure their safety.

For more information about the Guardian Angel program go to <http://safety.army.mil/home.html>.



Defense Department report cites need for more base cuts

By Gerry J. Gilmore
American Forces
Press Service

WASHINGTON, D.C. — The U.S. military still has too many bases and other infrastructure, a senior Defense Department official said here March 23.

DoD's 2005 Base Realignment and Closure report just submitted to Congress estimates the department doesn't need about a quarter of its current overall infrastructure, Raymond F. DuBois, deputy undersecretary of defense for installations and environment, told reporters at a Pentagon media roundtable.

"This is exactly the time we need to do a BRAC," DuBois said, pointing to today's changed national security environment and the ongoing need for the department to become more efficient to better manage taxpayers' dollars.

Congress authorized DoD to perform another BRAC for 2005. Recommendations from four previous BRACs conducted in 1988, 1991, 1993 and 1995 resulted in the accumulated closure of 97 installations.

DoD is transforming to meet 21st century threats like global terrorism, DuBois said, noting the U.S. military is now "fighting in new and different ways, using new and different weapons systems." However, he said, the department's Cold-War-era based infrastructure "is not where we would like it to be and how we would like it to be." And the imbalance between DoD's changing force structure and infrastructure,

he noted, will grow as time goes on.

Because modern military units coming into the pipeline -- like the Army's Stryker brigades -- pack a bigger punch but require fewer Soldiers than predecessor organizations, DuBois said, another round of base realignments and closures makes sense.

Army Chief of Staff Gen. Peter J. Schoomaker made that point in October 2003 at the Association of the U.S. Army's annual meeting. "We can get more power out of smaller organizations," the general said.

In the training realm, however, DuBois pointed out that many new weapon system -- like precision-guided missiles -- require more training space than is available at some older installations. Increased joint operations, he noted, also are part of BRAC criteria.

The BRAC report, DuBois emphasized, provides an inventory of DoD bases and installations, but no recommended list of base closures or realignments. That process, he said, will be worked out between the Defense Department and a nine-member Defense Base Closure and Realignment Commission over the next two years.

The commission, according to DoD documents, is required to provide the president with a report no later than Sept. 8, 2005, containing its findings and conclusions based on a review of DoD's recommendations.

Auburn alumni receive outstanding achievement awards

Riley receives lifetime award for chemical engineering

HUNTSVILLE, Ala. — It was like receiving lifetime achievement recognition at the Academy Awards for one U.S. Army Space and Missile Defense Command engineer.

Leon H. Riley, a general engineer in the Technical Center's Advanced Technology Directorate, was named Outstanding Alumnus in Chemical Engineering by the Samuel Ginn College of Engineering and the Department of Chemical Engineering at Auburn University, Ala., for his many contributions to chemical engineering.

The award was presented March 19.

"In addition to this award, we in the Department of Chemical Engineering want to thank you for your lifelong contributions to the field of chemical engineering and continued service to education and our nation," said Christopher Roberts, the department chair.

"I feel wonderful about receiving this award," Riley said. "I think it is an honor — one that I never anticipated receiving when I was a student. I am certainly delighted and excited."

"I am certainly proud of Leon," said Dr. Richard A. Curtis, director of SMDC's Advanced Technology Directorate. "He is one of the most prolific inventors and hardest workers I have known.

"Over the last several years, his ideas have resulted in millions of dollars in funding to the Army SMDC for technology developments," Curtis said. "Leon has contagious enthusiasm for his work and does his best to infect the rest of us. His award is well deserved."

Riley got his start in engineering with a bachelor's degree in chemical engineering through the Reserve Officer Training Corps program at Auburn University — then Alabama Polytechnic — in 1954. After three years on active duty as an armament electronics officer in the U.S. Air Force, Riley returned to Auburn and received a bachelor's degree in electrical engineering in 1960.

The Headland, Ala., native started work with SMDC in 1987, when SMDC was the Strategic Missile Defense Command. He holds 13 patents for his inventions.

Riley currently manages and directs research and development programs at five universities and in industry. These programs include research that will provide smaller, lighter and more fuel-

efficient military hardware that will operate with less maintenance and less logistics requirements.

A recent demonstration of a chemical engineering process managed by Riley occurred at Auburn University Dec. 16, 2003.

Auburn University demonstrated a breakthrough in fuel cell technology. In a process called reformation, the demonstration converted military logistics fuel into 99.999 percent pure hydrogen which provided fuel for a Proton Exchange Membrane fuel cell. The fuel cell then powered the operation of a mobile radar.

"The subsequent use of fuel cells to efficiently produce electricity has the potential to be as much as three times more fuel efficient than traditional approaches that rely on internal combustion engines," Riley said.

Another demonstration held Dec. 4, 2003, at Mississippi State University in Oxford, Miss., also managed by Riley, successfully demonstrated an alternate power source using a 400 amp alternator attached to a High Mobility Multi-Purpose



Leon Riley

Robertson honored for electrical engineering work

HUNTSVILLE, Ala. — The electrical and computer engineering alumni of Auburn University bestowed high honors on the Space and Missile Defense Technical Center's deputy director March 19.

Dr. Rodney L. Robertson received the Outstanding Electrical Engineer Award for his work to promote careers in science and engineering to high school students through the Army Space and Missile Defense Association- and National Defense Industrial Association-sponsored activities such as Adventures in Engineering and scholarship programs. Another reason is for his work on the Auburn University Electrical and Computer Engineering Industrial Advisory Board.

"It was a great honor to receive the award," Robertson said. "There are a lot of very good electrical and computer engineering alumni who have graduated from Auburn. It is an honor to be chosen for the award from such a select group of individuals."

Robertson's principal areas of expertise are the design, development, testing and evaluation of sensor systems (optics, radar and laser radar), sensor data collection, systems engineering and

laser radar. He also holds a master's degree and a doctorate in engineering from the University of Alabama in Huntsville.

"The laser radar used a multiple-folded technique and produced more than 100 watts of average power in a small, lightweight package that could be used as a seeker onboard an interceptor," Robertson said.

He also led the development of 0.53 micron, 1.06 micron and 10.6 micron laser radar transmitter and receivers that were installed in the Advanced Measurements Optical Range (AMOR) facility.

"I led efforts to provide other upgrades to the AMOR facility such as developing a new target mount that had the capability of providing realistic target motions for full-size targets," he said.

As the deputy director of the Space and Missile Defense Technical Center, Robertson manages the day-to-day research, development, test and evaluation activities for the Army's space and missile defense technology program. He ensures the command's efforts are balanced and integrated to support the Army, the Missile Defense Agency, and the Program Executive Office for Air, Space and Missile Defense.

Robertson was promoted as a member of the senior executive service Sept. 9, 2001. He has more than 23 years of professional experience in science, engineering and management covering a broad spectrum of activities in advanced sensor technology, research, design and development. Robertson has managed numerous sensor technology programs in the sensor technology area. He became the acting director, Sensors Directorate, in May 1999. In June 2001 he also assumed additional duties as the associate director, Technology, and deputy director, SMDTC.

"Rodney came to work with us in 1986," Jess Granone, director of the SMD Technical Center, said. "He has always been a quiet individual with a tremendous work attitude and a thirst to learn. His most outstanding attribute is his integrity — as a husband, father, engineer and citizen. I consider it an honor to work with him."

(Articles by Debra Valine, Editor, *The Eagle*)



Rodney Robertson

'This is a tremendous honor for Leon and Rodney. It is a testament to the cutting-edge engineering we are performing at SMDC. Other outstanding alumni also recognized included the chief executive officer of AirTran, a worldwide vice president of GlaxoSmithKline, and the director of NASA's Kennedy Space Center. This demonstrates the level of this award and their tremendous accomplishments.'

— Laurence Burger
Director, SMD Battle Lab

Wheeled Vehicle's engine to develop ~5Kw to power a Sentinel radar.

"The engine driven on-board alternate power source will provide emergency back-up power to Sentinel's 10 KW mobile electric power supply when the generator is unavailable or to provide immediate power to the radar during the setup or tear down," Riley said.

"Having the 400 amp alternator power supply on-board will assist the military's power electronics systems to maintain exceptionally high operational readiness rates."

signal and data processing. His current interests are focused on applying the development of advanced technology to meet the needs of the warfighter by enhancing the performance of existing space and missile defense systems and to meet the requirements of future systems.

Robertson, who graduated from Auburn in 1980 with a bachelor's degree in electrical engineering, said his greatest technical achievement was leading the development of a compact, lightweight, carbon dioxide,

New chaplain brings space closer to Heaven

By Sharon L. Hartman
SMDC Public Affairs

PETERSON AIR FORCE BASE, Colo. — Deployed to Iraq with the 3rd Armored Cavalry Regiment, Maj. Chris Faria was in the midst of the war, dodging bullets and taking cover as the occasional mortar round flew overhead.

Yet one detail makes this all too familiar story stand out — as the regimental chaplain, Faria's only weapon was his Bible.

Having been an Army chaplain since 1989, Faria has served in many different command environments and has faced numerous distinctive challenges, but when he received his current assignment orders, a challenge awaited him that he had not faced before — becoming the first-ever command chaplain for U.S. Army Space and Missile Defense Command.

Barely taking time to shake Iraqi dust off his boots, Faria reported for duty in January and had to approach things a little differently.

"First of all, since SMDC has not had a chaplain, and the organization is so huge and spread out, I think the hardest thing is going to be getting people to recognize that they have a chaplain," Faria said.

"Secondly, I'm not a visitor; I'm their chaplain. I think chaplains are assigned but pastors are chosen. There's a big difference. They don't have any say about the chaplain being assigned but they have to give permission for you to be their pastor, and I hope as I meet people and talk with them that they give me permission — in as much as I can enrich their lives."

By regulation, a chaplain is responsible for advising the unit commander on morals, morale and the spiritual well being of the Soldiers, their family members and civilians of the command. Promoting a good quality of life, assisting Soldiers in developing a top-notch set of life skills, guaranteeing freedom of religious expression are key pieces that a chaplain is responsible for.

"I'm a bit biased in that I believe life skills are primarily authored by God," said Faria.

"God invented life, so He knows what it's about. If you really want to know how to do well in your marriage, read the scriptures. If you really want to know how to do well with your co-workers, read the Book of Proverbs. If you want to know how to deal with your children,

it's right there. I'm not saying it's a repair manual, but there is much in the scripture that would guide people in developing life skills that will enable a good quality of life."

Chaplains are required to protect the first amendment rights of Soldiers regardless of the chaplain's religious beliefs.

"A Soldier has the right to worship God according to the dictates of their conscience, and within the provision and boundaries of whatever that mission is," Faria said.

"Simply because he dons the green does not mean that he or she forfeits the right to worship according to their conscience. It will not always be easy. A Soldier may be Jewish, and it may be sundown, but the bad guys are shooting in his direction ... we may have to postpone the Shabbats service for a bit, but the Jewish Soldier understands that, and he knows that eventually we are going to get there.

"Chaplains are there to make sure we keep the

chaplain's duty as a Soldier themselves is to march into combat with other Soldiers.

"We don't point and say hey, go there ... we grab their arm and say let's go. We walk with them," affirmed Faria.

"I've seen Soldiers deathly afraid; I've been afraid. I've seen a lot of people who support the Soldiers with supplies and equipment, but they're not there when the Soldiers are hurt and bleeding. The chaplain is.

"Moses once wrote that God remembers that we are but dust. We know our life span is terribly short, and my goal is, yes, to have a combat ready Soldier, but also to help equip the Soldier with the skills to deal with life's difficulties — with the long range in mind. I think what the chaplain brings to the table is the why of it. He brings the eternal perspective."

The chaplain spoke at the command's quarterly prayer breakfast in March, and — having just returned from Iraq — it was only appropriate that

times of quietness."

The key points of his dialogue were that combat faith is experienced by Soldiers, it is terribly personal, it is bluntly honest, and no matter what, God has the final say.

A new event the chaplain is sponsoring is the command Bible study — a brown bag lunch event on Wednesdays at SMDC Colorado Springs — is open to all members of the command.

"It's a little bit of a different approach to Bible study. I don't believe in the pooling of ignorance," said Faria.

"We all have an opinion, but we actually study the Word. We don't just have a big group hug. A lot of different traditions are represented there and that can spark a little debate, but I don't mind. It can be a challenge, but it can be rich too. I just have two rules about debate. The first is it is better to discuss in the light than to argue in the dark.

"I don't think people really change. You'll have people who will have different agendas and have their own hobbyhorses. I have mine; I ride it daily. I believe that Christ is the only way to God. God revealed in the flesh. At the same time I understand there are other people with different perspectives. When somebody asks 'what do you think of something?' and you don't know, say you don't know and be very honest about it. If someone does know, they are obligated to tell you so you are not left in the dark.

"My second rule is to always be a gentleman and be polite. Scripture admonishes Christians to do that. Unfortunately there are a lot of well-intentioned Christians who turn out to be well-intentioned dragons. The apostle Peter is very clear. He says 'be ready to give an answer with the hope that lies within you,' but he also says 'always setting Christ apart as Lord in your heart.' So in other words, do whatever you say you are doing under his direction, but the last part of the verse is 'do it gently and reverently.'"

Faria is a Soldier's chaplain. A student of history originally, while studying the Bible he felt a call to arms — both spiritual and physical. He suddenly felt a true compulsion to become not just a minister of the Word, but also a minister to Soldiers, to become a military chaplain.

The chaplain has followed that calling down a trail that has led him through many Army posts, in and out of combat zones, and now to SMDC.



Photo by Sharon L. Hartman

Chaplain Chris Faria goes on-the-air during a recent interview with Dr. Bob Grant, a local Christian radio host in Colorado Springs, Colo.

military and the Soldiers' faith connected. We put a huge hedge around that and become a Soldier's advocate. We don't have to agree with the Soldier. By regulation it says that the chaplain will ensure the free access of the first amendment rights regardless of the chaplain's beliefs and the beliefs of the Soldier so there has to be equity there, and we protect that. I think we are part of that equation."

Enabling Soldiers to be combat ready is another key area chaplains are accountable for that's made visible more in times of conflict.

"I often say you can wrap a multi-million dollar tank around a Soldier and if it breaks he can still get out and fight with an M-16 or a 9mm. But if the Soldier is broken, if he is thinking about problems that are going on at home while he is deployed, he is not combat ready. He is combat deficient," said Faria.

In addition to making sure Soldiers are ready for combat; a

his topic was combat faith.

"A mortar round, an IED is non-discriminatory. It'll kill a Christian just as fast as it will kill an atheist. Jewish Soldiers were shot. Islamic Soldiers were shot, Catholics, Protestants you name it they were all shot. I think now that without a shadow of a doubt, combat faith grabs war by the lapel," Faria said.

"Everybody has all sorts of different experiences in combat and there's that old adage that there are no atheists in foxholes. I disagree. There are atheists in foxholes. I saw people do two things when I was in Iraq. They either became terribly hardened in their hearts toward other people in order to try and deal with the horror of war, or they grew in faith.

"Whatever you have at a moment of turmoil is what you have at a moment of turmoil. It sounds almost simplistic, but it's true. You don't develop faith while you are being shot at. You develop faith during

SMDC employee satisfaction survey results are in

By Sandy McAnally
Command Evaluation Directorate

"The survey says ..."

This was a common TV-land slogan years ago, but the slogan was heard again in the past weeks throughout the U.S. Army Space and Missile Defense Command. The results of this year's Employee Survey have been tallied and here's what SMDC employees are saying.

- Satisfaction among all employees was 3.70 on a 1-to-5 scale.
- 66 percent of those responding gave favorable ratings to all questions, either agreeing or strongly agreeing with conditions in the command.
- 88 percent of those who took the survey know their customers and stakeholders and their requirements.
- 82 percent feel their work unit has goals aimed at meeting or exceeding customer expectations.
- 84 percent of those responding feel differences among individuals are respected and valued.

The survey also says:

- 24 percent of those surveyed feel there is effective communication among SMDC organizations.
- 33 percent are familiar with the Army's new Strategic Readiness System and Balanced Scorecard.
- 44 percent agree that their work unit has mapped their work processes.
- 46 percent feel they get information they need on how well their organization is doing.

Employee feedback is an essential part of a productive work force. That's why SMDC uses the yearly survey to ask

employees their views on the working environment in the command.

Most employees were satisfied with their work unit, citing the high-quality products and services they deliver to customers and a high confidence level in knowing how to

measure the quality of their work. However, employees would like more information on Strategic Planning, a "Corporate" vision for the Command, and the Army's new Balanced Scorecard.

Overall the command recorded a slight gain in employee satisfaction since the 2003 survey, from 3.68 to 3.70. Strengths were noted in five of six categories with customer focus and human resource issues receiving the highest ratings.

How do the results help us?

We are trying to find out what employees feel and say about their jobs, to identify systemic weaknesses, and to implement changes that support our most valuable resource — SMDC employees.

Candi Holcomb of Command Evaluation Directorate helped to launch the first survey in 2000 as part of the APIC process to examine how employees feel about leadership, process management, customer focus, information and analysis, human resources, and strategic planning. Holcomb remembers that "prior to APIC, we didn't have an employee feedback mechanism that was actionable. The survey process provides the command a means to listen to the voices of employees,

	2004	2003
Leadership	3.73	3.71
Strategic Planning	3.42	3.40
Customer and Marketing Focus	3.93	3.88
Information and Analysis	3.59	3.55
Human Resources	3.75	3.71
Process Management	3.60	3.64

similar to the way we listen the voices of stakeholders. It was (or we) envisioned that the survey would provide more accessible information for managers to discuss with their employees during staff calls and use the feedback as a basis for improvements."

Can we do better?

Only 21percent of SMDC employees took the survey during December 2003 and February 2004. This participation rate poses the question: Can we do better?

"You bet," said Col. David G. Farrisee, SMDC Chief of Staff. "The greater the response, the more management knows about what employees feel passionate about.

Comments and ratings from the survey point out that communication among SMDC organizations needs improvement. The survey is an excellent communication tool," he said.

What's next?

You probably won't see these SMDC results as a category on future TV game shows, but this feedback gives us the opportunity for all of SMDC to continue making positive changes in the future.

NASA plans Kwaj test and model rocket launch

By Jan Waddell
Kwajalein Hourglass

The NASA Wallops Equatorial Ionospheric Studies II, or EQUIS II, program will launch 14 sounding rockets from Roi-Namur during August and September and offer educational outreach projects for Kwajalein students.

"NASA personnel will begin arriving around July 7 with a full complement of NASA, contractor and science folks in place on Roi by the end of July," said Betty Flowers, public affairs specialist, NASA Wallops

Flight Facility.

"The launch window extends from the first of August to the end of September. However, we would like to have all operations complete by mid-September."

At the Kwajalein Jr.-Sr. High School EQUIS II presentation in March, John C. Hickman, project manager for the EQUIS II project, provided an overview of the EQUIS Mission.

He explained the rockets can take less than two years from the time of "inception to the time it is launched." NASA Wallops scientists will use sounding rockets to measure different phenomena in the atmosphere with each launch scheduled to last between 5-15 minutes. Sounding rockets travel approximately 180 miles to 900 miles into the upper atmosphere with payloads from 40-100 pounds depending on what the scientists intend to measure.

The missions will study disturbances in the ionosphere and, since it is most active at the magnetic equator, Kwajalein Atoll is the ideal location. The scientists are looking for ionosphere

storms to monitor.

"When scientists see what they are looking for, then we will launch," Hickman said. "We launched from Kwajalein in 1990, and had six very successful launches."

The launches from Roi-Namur will carry sky-dye and various instrumented payloads. The sky-dye cloud is visible for 200-300 miles around Kwajalein Atoll for about 15 minutes. Cameras will be set up on Likiep, Bikini, Rongelap and Roi-Namur to film the dye-cloud. The dye detects particles in the ionosphere and the instrumentation documents the activity.

Scientists from NASA Goddard Space Flight Center, Clemson University and Cornell University will study energy disturbances in the upper atmosphere and Dr. Miguel Larsen, of Clemson University, serves as the chief scientist for the campaign, Flowers said. According to Larsen, the scientists want to study the phenomenon to better understand it.

The NASA Wallops personnel will also work with Kwajalein school personnel to provide Kwaj students with

some unique opportunities.

"Education and outreach is very important to NASA, and our employees genuinely enjoy working with kids of any age," Flowers said. "The group we have coming to Kwaj is just terrific with children and more than willing to share with them the excitement of launching rockets and what can be learned from the launches, from engineering and science to astronomy."

One outreach project project NASA Wallops' personnel talked with the students and faculty about was a model rocket building and launch competition.

NASA Wallops will provide about 12 model rockets to the school along with motors. High school students will form groups to design and build the model rockets. Students will also have the ability to use software to effectively analyze the stability and altitude, if launched, of the rockets they design.

The student groups will then compete against each other and test their ability to skillfully design and build model rockets along with predicting the rockets flight and stability.



The Killing Fields of Iraq

A personal accounting of the discoveries of mass graves and how

By Master Sgt. Richard Burch, USAF
Spectral Operations Resource Center

SOMEWHERE IN IRAQ — *The buses would arrive early in the morning; having driven all night from some small village; each packed with men, women and children. They would find themselves in a desolate, barren stretch of nowhere ... their final resting place. The soldiers would empty the buses, lining up their victims, hands bound and — if lucky, eyes blindfolded — at the edge of a trench. The soldiers would begin their long day's work of methodically slaughtering the families. At the end of the day, they'd bury their work, pack up, and prepare for their next day of loyal duty to Saddam.*

Since the overthrow of Saddam Hussein, there have been bone-chilling discoveries, almost on a daily basis, of the atrocities committed by the former Baath party. These grisly reminders come in the form of mass graves, dotting the landscape in more numbers than anyone would care to imagine. At last count, there are more than 270 reported mass graves with more than 50 verified by international forensic teams. The number of Iraqi and foreign victims of Saddam's regime is estimated anywhere from 100 to 400 thousand people. As the search for these mass graves continues, spectral analysts with the U.S. Army Space and Missile Defense Command - Colorado Springs have been called on for their expertise.

As a spectral analyst to the Coalition Provisional Authority Space Support Cell (CPA SSC), I became involved with the search for Iraqi mass graves during my first tour of duty in Baghdad, from May through July 2003. One of the agencies we supported was the Ministry of Human Rights, which had been given the daunting task of assessing and verifying reported Iraqi mass graves. The Space Support Cell initially was tasked with providing high-resolution imagery and mapping support to the team for site survey planning. It became readily apparent that spectral imagery could play a valuable role in the mass grave assessment. My first attempt at using



Photo by John Sterenberg

Air Force Master Sgt. Richard Burch, standing, takes a breather while colleague Bruce Gerrick digs an exploratory trench during a hunt for mass graves. The men, from U.S. Army Space and Missile Defense Command, were on a mission in Iraq using high-resolution imagery to detect and date the mass graves of Saddam Hussein's regime.

spectral analysis to support the team was a success, in that I could determine the location of the site by highlighting the soil

disturbances in the area, but since they already knew where the mass graves were located, the information was of minimal value.

I contacted Bruce Gerrick, senior spectral analyst/geologist with SMDC's Spectral Operations Resource Center (SORC), for some ideas on how to use spectral data to highlight features that might indicate a mass grave. I gave Gerrick, an SRA International contractor, the background on what I had already provided to the CPA team and hoped there could be something we could key on to find mass graves.

There is no such thing as a "mass grave finder," since there are no definitive indicators to differentiate a mass grave from any other soil disturbance. Gerrick did notice that my analysis was keying on a certain mineral, gypsum, common in the arid regions of the Middle East. When the soil has been disturbed, the gypsum can be identified on the surface.

Knowing we could find gypsum after the gravesite had been initially dug, we could go back in the data archives to analyze spectral data over the same area to find when there was no gypsum present. We are able to narrow down the time frame of when the event occurred using that information.



Photo by Air Force Master Sgt. Richard Burch

The remains of a life cut brutally short by Saddam Hussein's henchmen, were uncovered in a mass grave with the help of spectral imagery from U.S. Army Space and Missile Defense Command.

SMDC located them

Ian Hansen, the CPA assessment team leader, explained that if we could accurately analyze spectral data around each one of the verified mass graves and prove that the events took place during a certain time frame, the results could be used as evidence to prosecute the former regime, including Saddam Hussein.

The SORC (FWD) had only two weeks left on our deployment orders, so I passed all my contact information to the CPA team, and guaranteed them the full support of the SORC.

Just over two months after my return to the United States, the Director of the Human Rights and Transitional Justice Ministry sent a letter to SMDC – Colorado Springs requesting support from the SORC, specifically Bruce Gerrick and myself, with “on-site” mass grave assessment. They wanted us to accompany the mass grave assessment team to some unverified, still pristine, mass grave sites to perform geologic and spectral analysis.

The assessment team wanted to prove that the indicators we were finding in the spectral data were definitely at the suspected sites and also to find other indicators that would help their case.

The search begins in southern Iraq

We'd hardly set our bags down in Baghdad when we were told to get ready to leave for a two-week site assessment. We were going to the southern desert near the border of Saudi Arabia to verify several suspected mass graves from the mid-1980s.

We flew from Baghdad to Basrah to catch our connecting flight, a low-level high-speed combat ride in a British CH-47 Chinook. We arrived at a Dutch Marine security force base, our forward operating location, and began preps for our missions. It was decided we would drive out into the desert each day before sunrise and return after sunset. We would need this “secrecy” to ensure our movements would be hidden from the local populace, hopefully keeping these sites as pristine as possible to afford the oncoming international excavation teams untouched forensic evidence.

Some of the coordinates of suspected sites turned out to be nothing more than empty desert, but one site had heavy vehicular tracks into and out of the area, large-scale excavations, with no real rhyme or reason, and old sun-bleached clothing. Bruce and I began the geologic analysis of the area, taking notes of spatial and spectral features that might help us with site verification. We found

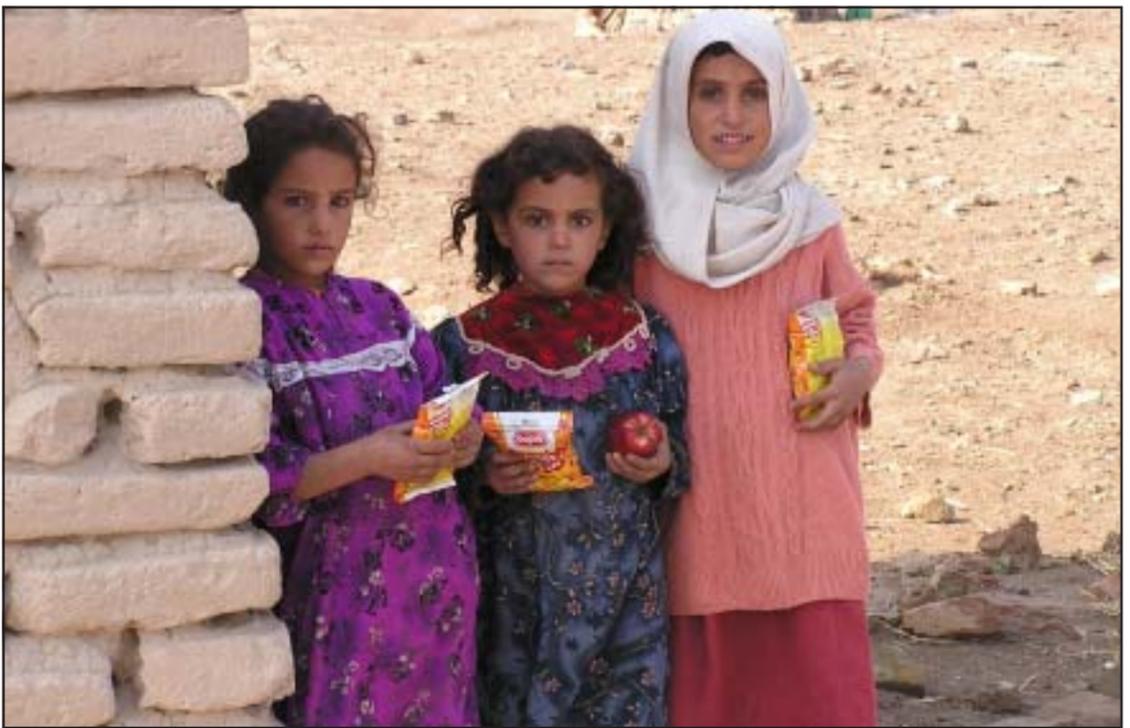


Photo by John Sterenberg

Iraqi schoolgirls gaze shyly at the American photographer. They are symbols of what American and Allied Forces are in Iraq fighting for— freedom for all citizens, and a chance to grow up without terror and oppression.

that our previous analysis was exact and there were significant surface coatings of gypsum all over the suspected grave site, not characteristic of the surrounding area.

While we were doing our geologic analysis, the forensic archeologists were performing their own analysis of the site, consisting of a small trench dug across the suspected grave. Over the last 19 years in the Air Force, I've had a lot of odd jobs in some pretty obscure places, but none of that would prepare me for what I was about to see and do.

Bruce and I volunteered to help dig the trench, at the same time taking detailed notes on the stratigraphy of the backfill to support future analysis. As we got further in depth, we started noticing a definite change in the color of the soil, and a discernable odor ... not stench, just a stale metallic smell possibly caused by the high concentration of localized iron-oxidation.

At that point, the archeologists took over the dig within inches of depth from where we left off; they started uncovering small bones and brightly colored clothing. They were painstakingly meticulous, using small paintbrushes and carefully removing the dirt with their bare hands. It took nearly an hour to clean out a one-square-foot area.

The results of their analysis came out as dry as a reading of the Sunday news, yet as clear as a bell to this day...

“One immature human femur, one immature human pelvis, estimate based on bone length approximately five to six years in age.”

“WHAT?” I had a huge lump in my throat “You mean, a child?”

The answer came back as dry as the last.

“Yes, and based on the clothing, I'd say it's a female.”

My head was spinning ... a little girl, in a bright, purple flowered dress with gold ribbon ... then more unwelcome information ...

“Looks like they had her hands bound,” the archeologist said, holding up what probably used to be her pink hair ribbon, which some ingenious Iraqi soldier had turned into a makeshift binding.

That was it for me ... I had to go for a walk. Luckily, they decided that they wouldn't disturb the site any further and started back filling the trench. I will never forget my feelings, or the scenarios that still run through my head, if I live to be 100 years old.

Second site visit to northern Iraq

We finished up our surveys in the desert and made the return trip to Baghdad. We had a few days to rest, clean the sand out of our gear and prepare for our next trip. This time we would travel to northern Iraq — Kurdish territory, near the city of Irbil. We made the six-hour road trip to Irbil in Toyota Landcruisers, setting up shop in a former Baath party resort hotel.

Northern Iraq is tremendously different, geologically speaking, from southern Iraq. Rolling hills turning into mountains, stream-fed valleys lead to green pastures.

We were on an abbreviated schedule, so we had to investigate as many sites as possible in a seven-day period. That meant, we didn't have time to dig sample trenches at each site. The first few sites we visited held little promise in supporting our spectral analysis; they were in the middle of farmland with very little spectral features. The surrounding land had been tilled so much over the past decades that Bruce classified it as homogeneous.

The remaining sites in the area were better suited for spectral analysis, and contained the gypsum surface coating we were hoping to find. Unfortunately, most of the sites we visited in Northern Iraq had already been tampered with, either by the local populace or inadvertently by the U.S. Soldiers who happened to set up camp near them, which made any post analysis difficult.

With all of the logistical planning involved in the anticipated arrival of a Finnish forensic excavation team, the remainder of the mass grave assessments was put off until late spring/early summer. We felt we had enough background data on the highest priority sites to continue our analysis and could provide ample support to the assessment team from the rear. So, again, I passed on my contact information, assured ongoing SORC support and prepared our equipment for redeployment.

I have a lifetime worth of experiences and memories from this deployment, from the places I've traveled and sites I've seen, to the people I've met and the lasting friendships I'll savor.

The one memory I wish I could forget is that of the pretty little dress with the gold ribbon — buried in one of the many killing fields of Iraq.



Photo by Air Force Master Sgt. Richard Burch

Lt. Gen. C.J. Le Van, inductee into SMDC's 'Hall of Fame'

By Maj. Laura Kenney
SMDC Public Affairs

PETERSON AIR FORCE BASE, Colo. — The portrait of a storied Air Defender now graces the walls of Space and Missile Defense Command – Colorado Springs' "Hall of Fame," the Pioneer Conference Room. The induction Feb. 12 of Lt. Gen. (Ret.) C. J. Le Van into that room dedicated to "honoring those space pioneers who went before us and whose dedication to the dream of the Army in Space made what we do today possible," marks the third induction of a space pioneer into that increasingly hallowed collection.

The above quotation, which adorns and defines the walls of the conference room, also marked the opening narration of the ceremony, hosted by Lt. Gen. Larry J. Dodgen, commanding general, SMDC. The induction was held in the lobby of the command's building here, which doubles as a museum dedicated to the Army's history in space. Appropriate that dangling satellites and rockets, interspersed with photos of Army astronauts and missiles, stood mute witness as the Command honored the achievements of a man who helped lay the groundwork for their very existence.

Le Van, who retired after 36 years in service, had an impressive career centering largely around air defense and anti-ballistic missiles. He devised, conceptually designed, managed and directed the development of weapons systems requirements and Air Defense tactical doctrine. He worked with tactical and strategic air and missile defense, and associated technologies, threat assessment and operational issues.

Perhaps Le Van's path was set early on — beginning with his World War II service in the New Guinea campaign. That cemented the love of the Army that exists to this day. After the war, he assisted and worked with the famed German Rocket Scientist group — including Wernher von Braun — at Fort Bliss, Texas, as the brilliant scientists began their many years of helping America develop its rocketry and missile programs.

Le Van commanded at every level of Air Defense, ranging from that of an Air Defense Battery during the Korean War through command of the 32nd Air Defense Command in Europe (he designed the unit patch) to command of the U.S. Army Air Defense Center and commandant of the

Air Defense School at Fort Bliss. Between commands, he taught atomic weapons and nuclear design to classes especially for senior people, to include general officers and congressmen. Later he served as the chief, Zeus Office, Department of the Army, Office of Research and Development, during the developmental phase of that missile system. He also served as Assistant for Anti-Ballistic Missile, Office of the Assistant Secretary of the Army, Research and Development, and as Director, Air Defense, Office of Assistant Chief of Staff for Force Development. His culminating assignment was as Director for Operations, Joint Chiefs of Staff. In that capacity, he planned and assisted in the conduct of all current major operations.

Substantial achievements all, and in each, Le Van helped shape the future of the Army in space — in at the ground level of far reaching exploratory systems that helped cement America's pre-eminence in space. Along the way, his strong and charismatic personality, coupled with his expertise, had him meeting with President John F. Kennedy and other great leaders of those times. He also survived three plane crashes — which, he said, only convinced him he needed to learn to fly himself. So he did.

Dodgen touched on both the singular contributions and the colorful characteristics that have made Le Van a living legend.

"As Lt. Dodgen, I arrived at Fort Bliss when Gen. Le Van was the commander. He was my first military role model. In fact, he has mentored every air defender I know," said ADA basic-branched Dodgen.

"And what a role model he is — a warrior in World War II and Korea, then a technologist helping to field vital systems like Nike, Zeus, Patriot. As a commander of the 32nd AADCOM during the Cold War, no one carried a greater alert burden than he and his Soldiers. Gen. Le Van instilled in them a pride and readiness that served us all well. He is a fit pioneer to follow Generals John Medaris and Robert Stewart.... The first, who helped to build rockets, the second, who rode them ... and now Gen. Le Van, who helped set the standards for defending our nation by air. It is a privilege to induct him into our Pioneer Conference Room."

Le Van, a vigorous 81-year-old who scorns elevators for stairs, no matter how steep, still serves as president of the



Photo by Dennis Plummer

Lt. Gen. (Ret.) C.J. Le Van, left, and SMDC Commanding General Lt. Gen. Larry Dodgen unveil his portrait.

corporation he built after retiring from the Army. He took the podium and began with a wry reminiscence.

"It's very appropriate to be here in February, and receiving this signal honor, because it was in a February, 62 years ago, that I entered this great Army at the bold rank of private. And it is the younger Soldiers and NCOs that I primarily want to commend today — those who stood on alert, watching the skies, keeping America safe, back then, and now.

I find it especially fascinating how Ground-based Missile Defense is developing and expanding these days. I can still remember how Ike (34th President Dwight D. Eisenhower) turned down proposals from us because he believed we couldn't hit a bullet with a bullet, which is what the GMD units will be able to do today. I know that today's defenders of the skies will carry on as superbly as their predecessors did. It was my privilege to be a part of an exciting period of America's history, and I know that the future will be equally exciting. It is all of you standing here who will work to keep it safe."

With that, Dodgen and Le Van moved in sync to the veiled portrait of Le Van that would hang in the Pioneer Conference Room. The unveiling revealed a stern-eyed younger version of a still-remarkable man — who truly helped make possible the future of the Army in space.



Photo by D.J. Montoya

Sgt. Jennifer Meadows, center, from the Operations Office, U.S. Army Space and Missile Defense Command, Colorado Springs, takes her turn lighting a candle as part of the Model of Hope Recitals ceremony.

Lighting a candle as a Model of Hope

As part of SMDC's Women History Month observance, SMDC-Colorado Springs celebrated with a Model of Hope Recitals ceremony. The audience of more than 70 women and men, included guest speaker Commissioner Loretta Kennedy from Pueblo, Colo. DA civilian Melva Tillar from the Legal Office read a poem entitled "Phenomenally Woman," by Maya Angelou. Rounding out the ceremony was the presentation of the SMDC-Colorado Springs Women of the Year Award. Three awards were presented to members of the command: Lt. Col. Mearen Bethea, commander, 1st Satellite Control Battalion, military category; Bettina Bailem, spouse, civilian family member category; and Karol Boutwell from the Operations Office, DA civilian category.

Awards/Promotions

Civilian Promotions

Thomas D. Barnes, GS-13, Arlington, Operations and Plans, G-3, Current Operations Branch
Jack Boswell, GS-14, Huntsville, Engineer, Environmental Policy Compliance and Remediation Branch
Charles D. Crawford, GS-14, Huntsville, Technical Center, Data Analysis and Exploitation Directorate Matrix
Kerrin E. Denham, GS-13, Colorado Springs, Intelligence, G-2
Darren D. Horton, GS-5, Huntsville, Battle Lab, Simulations Directorate, Computer Resources Division
Kathleen Leonard, GS-14, Huntsville, Technical Center, Information Science and Technology Directorate Core
Stillman B. Maxwell, GS-9, Colorado Springs, Operations, G-3
Robert E. Pistorius, GS-13, Huntsville, Logistics, G-4, Logistics Support Division
Joanna B. Southerland, GS-8, USAKA, Office of the Deputy Garrison Commander
James M. Williams, GS-13, Colorado Springs, Intelligence, G-2

On-the-Spot Cash Awards

Yolanda Y. Alexander, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, Requirements Analysis Division Matrix
M.D. Batts, Huntsville, Office of PARC/Contracting and Acquisition Management, Branch N
Rhonda L. Brock, Huntsville, Office of PARC/Contracting and Acquisition Management, Policy and Pricing Branch
Edith J. Coleman, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, Configuration Management Division Matrix
Jeffrey T. Craver, Huntsville, Technical Center, Tech Center Operations
Michael T. Davis, Huntsville, Battle Lab, Simulations Directorate, Simulation Development Division
James D. Deaton, Huntsville, MDA, THAAD Project Office, Missile Directorate, Hardware Division Matrix
Clyde N. Elliott, Huntsville, Technical Center, Systems Directorate Core
Paul L. Hester, Huntsville, Kwajalein Support Directorate, Program Support Division
Douglas B. Hoskins, Huntsville, Reagan Test Site Command and Staff, Test Support Division
Lillie V. Jackson, Arlington, Office of PARC/Contracting and Acquisition

Management

William E. Jordan, Huntsville, Battle Lab, Simulations Directorate, Simulation Development Division
Joseph K. Latham, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, System Software Engineering Division Matrix
John T. Lindley, Huntsville, MDA, THAAD Project Office, Missile Directorate, Hardware Division Matrix
Donald D. Marsh, Huntsville, Program Executive Office for Air, Space and Missile Defense, JLENS Office
David V. Mayo, Huntsville, Program Executive Office for Air, Space and Missile Defense, JLENS Office
Elizabeth H. Moulder, Huntsville, Office of PARC/Contracting and Acquisition Management, Branch K
James W. Penley, Huntsville, Office of Legal Counsel
Coy D. Perry, Huntsville, Battle Lab, Simulations Directorate, Testbed Product Office
Robbie H. Phifer, Huntsville, Office of PARC/Contracting and Acquisition Management, Branch K
Jane B. Price, Huntsville, Technical Center, Kinetic Energy Interceptor Directorate Core
Kenneth H. Shipman, Huntsville, Program Executive Office for Air, Space and Missile Defense, JLENS Office
Shad A. Tritt, USAKA, Office of Garrison Commander, Command Safety Directorate
Katherine D. Williams, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, Configuration Management Division Matrix
Roger E. Williams, Huntsville, MDA, THAAD Project Office

Special Act Awards

James S. Brazzell, Huntsville, MDA, THAAD Project Office, Missile Directorate, Hardware Division Matrix
Carolyn F. Cantrell, Huntsville, MDA, THAAD Project Office, C2/BM Product Office Matrix
John F. Crawford, Huntsville, GMD Joint Project Office
James D. Deaton, Huntsville, MDA, THAAD Project Office, Missile Directorate, Hardware Division Matrix
Douglas E. Engle, Huntsville, Kinetic Energy Interceptor Directorate Core
Jonathan C. Fleming, Huntsville, Program Executive Office for Air, Space and Missile Defense, JLENS Office
Mario Flores, Huntsville, MDA, THAAD

Project Office, Test and Evaluation Directorate, Flight Test Division Matrix
Vernon L. Frazier, Huntsville, MDA, THAAD Project Office, Radar Product Office Matrix
Helga M. Hayes, Huntsville, MDA, THAAD Project Office, Launcher Product Office Matrix
Russell C. Hutcherson, Huntsville, GMD Joint Project Office
Gregory W. Jernigan, Huntsville, Information Management, G-6, Plans and Operations Support Division
Ralph C. Jones, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, System Integration and Verification Division
Kenneth H. Jordan, Huntsville, MDA, THAAD Project Office, Systems Engineering Directorate, System Integration and Verification Division
John T. Marrs, Colorado Springs, Deputy Commanding General, Operations, Technical Support Office
Randal K. Norton, Huntsville, GMD Joint Project Office
Kari A. Powers, Huntsville, Technical Center, Kinetic Energy Interceptor Directorate Core
Deloise J. Ragland, Huntsville, MDA, THAAD Project Office, Launcher Product Office Matrix

Time-Off Awards

Chad L. Daly, Huntsville, Battle Lab, Analysis and Operations Directorate, Studies and Analysis Division
Franklin R. Bowles, Huntsville, Technical Center, Data Analysis and Exploitation Directorate
Amy H. Greer, Huntsville, Office of PARC/Contracting and Acquisition Management, Command Support Services Branch
Paul A. Page, Huntsville, Battle Lab, Analysis and Operations Directorate, Studies and Analysis Division
Albert L. Pardue, Huntsville, Technical Center, Data Analysis and Exploitation Directorate
Donald Powers, Colorado Springs, Directorate of Public Works
Deborah Vaughn Teague, Huntsville, Office of PARC/Contracting and Acquisition Management, Branch K

Meritorious Civilian Service Award

Thomas W. DeLong, Huntsville, Technical Center, Systems Directorate Core



Photo by Debra Valine

MDA deputy director visits Huntsville

Col. Jeff Smith, right, U.S. Army Space and Missile Defense Command engineer, briefs Air Force Maj. Gen. Trey Obering, center, deputy director Missile Defense Agency, and Lt. Gen. Larry Dodgen, SMDC commanding general, on the construction of the Wernher Von Braun Complex during Obering's visit to Huntsville, Ala., March 17-18. MDA is expected to be housed in a later phase of the complex. Highlights of Obering's visit included a briefing to Huntsville leaders at the Chamber of Commerce, an aerial tour of Redstone Arsenal, a luncheon with members of the Army Space and Missile Defense Association, a visit with U.S. Army Aviation and Missile Command's Commanding General Brig. Gen. (P) James Pillsbury, and tours of SMDC's Simulation Center, the Aviation and Missile Research, Development, and Engineering Center, the Advanced Research Center and the Missile and Space Intelligence Agency. Obering has been nominated for his third star and has been named as the new director of MDA.

New Web site offers Soldiers a professional development tool

By Debra Valine
Editor, *The Eagle*

There is a wealth of information on SMDC's Web site. You can find information about leaders, calendars, upcoming events, fact sheets, *The Eagle* newspaper and links to many other topics.

The Web site will also be a place where NCOs and Soldiers can go for professional development. Command Sgt. Maj. David Lady has introduced a professional development link that will provide NCOs and Soldiers with SMDC-specific information and links to other sources for information.

"We are going to hang an NCO professional development link on the SMDC Web page," Lady said. "Some might call it my Web page, but it's really a link that I want to be useful to all the NCOs and Soldiers in the command. It is a place I want my NCOs to go to find out about the command, but also find links to other sites, such as the Sergeant Major of the Army Web site and links to the NCO and Soldier handbooks and the NCO Journal."

From the Web site, Soldiers will be able to reproduce the SMDC Soldier's Creed and learn about the Sgt. Audie Murphy Club and NCO and Soldier of the Year competitions, among other topics.

"The Web page will be my tool to regularly communicate with troops in my Sergeant to Sergeant essays," Lady said. "These essays will not be reprints of my *Eagle* columns. The essays will be researched articles on how to deal with Soldier problems or how to play the proper role in a certain leadership situation."

The first Sergeant to Sergeant topic explains the role of the first-line leader when a Soldier is placed on a temporary or permanent physical profile. The second in the series outlines the role of sergeants major when they are members of Military Medical Review Boards. Another addresses physical profiles when attending the Primary Leadership Development Course.

"I want to keep Soldiers as up to date as possible on Army policies and procedures as we transform the future force," Lady said.

The Web site also will be used to showcase photographs of SMDC personnel — Soldiers and civilians — carrying out their missions.

"I want to show the Soldiers and civilians in action," Lady said. "I am relying on the unit reporters to take the lead on taking the photos, but anyone can submit photos for the Web site. I want the page to appeal to the Soldiers of SMDC."

Photos should be routed through the Public Affairs Office (webmaster@smdc.army.mil) and include complete captions that identify the people in the photo and the activity in which they are engaged.



Photo by Debra Valine

Inaugural Women in Defense Conference

Kay Ward, left, director of SMDC's Research, Development and Acquisition Staff, Maj. Gen. John M. Urias, deputy commanding general for RDA, SMDC, and Lisa Gilbert, supervisory operations research analyst, RDA staff, discuss events scheduled for the first-ever Women in Defense Conference, chaired by Ward, during TEAMS Week in Huntsville, Ala. The Women in Defense Conference promotes development of women as leaders in each sector of the defense community. TEAMS (Technological Excellence in Aviation, Missiles and Space) is a three-day event that brings together the technology community to talk about technology, the importance of work force development and education to support future capabilities in our technology and the Southeast Region community.

Seventeen Focus Areas outlined by Army Chief of Staff

The Senior Leadership of the Army has established the following immediate focus areas to channel Army efforts on winning the Global War of Terrorism and increasing the relevance and readiness of the Army. Each week one focus area is highlighted. For the related story about each area, go to <http://www.army.mil/thewayahead/focus.html>.

The Focus Areas are:

- **The Soldier** — Develop flexible, adaptive and competent Soldiers with a Warrior Ethos.
- **The Bench** — Prepare future generations of senior leaders. Identify and prepare select Army leaders for key positions within Joint, interagency multinational and Service organizations.
- **Combat Training Centers/Battle Command Training Program** — Focus training at CTC and BCTP to meet requirements of current security context, and Joint and Expeditionary teams.
- **Leader Development and Education** — Train and educate Army members of the Joint Team.
- **Army Aviation** — Conduct a holistic review of Army aviation and its role on the Joint battlefield.
- **Current to Future Force** — Accelerate fielding of select Future Force capabilities to enhance effectiveness of Current Force. Army transformation is part of constant change.
- **The Network** — Leverage and enable interdependent, network-centric warfare.
- **Modularity** — Create modular, capabilities-based unit designs.
- **Joint Expeditionary Army with a Campaign-Quality Capability** — Retain our campaign qualities while developing a Joint and Expeditionary Mindset.
- **Active Component/Reserve Component Balance** — Redesign the force to optimize the active and reserve component (AC/RC) mix across the defense strategy.
- **Force Stabilization** — Ensure unit stability and continuity, and provide predictability to Soldiers and their families.
- **Actionable Intelligence** — Provide situational understanding to commanders and Soldiers with the speed, accuracy and confidence to impact current and future operations.
- **Installations as Flagships** — Enhance installation ability to project power and support families.
- **Authorities, Responsibilities and Accountability** — Clarify roles and enable agile decision-making.
- **Resource Processes** — Redesign resource processes to be flexible, responsive and timely.
- **Strategic Communications** — Tell the Army Story so that the Army's relevance and direction are clearly understood and supported.
- **Logistics** — Provide combatant commanders joint and expeditionary logistics for a campaign quality force.



Civilian News

2003 FSA expenses due May 2

Federal employees who took advantage of the Flexible Savings Account program must turn in all eligible expenses incurred during 2003 soon. They have to be postmarked or faxed by May 2 in order to be reimbursed. Participants experiencing difficulty accessing their accounts online should contact a Benefits Counselor at 1-877-FSAFEDS (372-3337) Monday - Friday from 9 a.m. to 9 p.m. EST or e-mail FSAFEDS@shps.net. Office of Personnel Management statistics from January showed 121,342 current federal employees elected to open a flexible spending account for 2004 to help pay their out-of-pocket medical bills or the costs of dependent care. That is a four-fold increase over the number of FSA account holders in 2003. Under the FSAFEDS Program, sponsored by OPM, 116,281 federal employees elected to fund a health-care FSA by the Dec. 15 close of the open season for 2004 enrollment; 18,003 employees elected dependent-care FSAs. More than 12,871 employees will fund both a health-care and dependent-care account.

ASMDA Space Camp scholarships available

The U.S. Army Space and Missile Defense Association (ASMDA) is offering 10 scholarships for selected children to attend a one-week Space Camp June 27 - July 2, 2004, at the U.S. Space and Rocket Center in Huntsville, Ala. Any child, aged 9-11, of a parent or guardian currently assigned to SMDC, PEO-ASMD or GMD JPO (Huntsville), including matrix personnel, is eligible. The deadline to apply is May 7. Applications are available online at www.smdc.army.mil.

DFAS begins processing retroactive pay increase

On March 13 the Defense Finance and Accounting Service began processing the retroactive pay increase for federal employees. President Bush signed an executive order authorizing the pay increase on March 3. The retroactive pay increase is effective Jan. 11, 2004. DFAS will process the pay increases during its routine nightly civilian pay system personnel updates. DFAS has a schedule for processing the retroactive pay for several specific groups of federal employees; the schedule can be found at www.dfas.mil. The schedule depends on when DFAS receives authorization and processes the civilian personnel actions. For employees who had personnel actions during the retroactive period, the payroll process will calculate and pay from Jan. 11, and stop at the date of the intervening personnel action. DFAS is the world's largest finance and accounting operation. In fiscal year 2003, DFAS paid about 5.9 million people, processed more than 12.3 million invoices from defense contractors, disbursed more than \$416 billion and managed more than \$197.4 billion in military trust funds.

New drug testing for feds on the way

The Defense Department and other federal agencies may soon be able to implement new drug testing for federal employees that will include testing hair, sweat and saliva to detect drug use. The new procedures will be permitted once the Department of Health and Human Services (HHS) approves proposed guidelines and DoD completes an internal approval process. The guidelines awaiting HHS approval will outline standards for new types of drug tests, specifically testing hair, oral fluid, sweat and urine, using point-of-collection tests. The guidelines will not be promulgated anytime soon, according to Army Col. Mick Smith, senior staff officer for drug demand reduction at DoD's counter-narcotics office. He said the process for implementing the new testing measures will first have to be published in the Federal Register and then must go through a 90-day comment period. Smith said once the guidelines are put into effect, "each branch of the federal government will be permitted to use the new types of drug test."

Thrift Savings Plan open season begins in April

The open season for the Thrift Savings Plan begins April 15 and continues to June 15. This is the time to enroll or make changes. You must give the Personnel Office a completed TSP Election Form — TSP-1 or a TSP-U-1 if you are a member of the uniformed services. For information relevant to both civilian employees and uniformed service members go to www.tsp.gov or contact the Personnel Office.

Military News

Awarding veterans just became easier

Army veterans and their families can have an easier time tracking and receiving medals and decorations thanks to an automated system used by the Clothing and Heraldry Product Support Integration Directorate (PSID). The Web-based system eliminates extensive paperwork, reduces processing time and has capabilities such as allowing each veteran the opportunity to find out the status of his or her request or make address changes online. These types of inquiries that used to be handled telephonically or by letter can be entered online at <http://veteranmedals.army.mil>. Award criteria and background for the different service medals can also be found on the Web site. Requests for medals are initiated through the National Personnel Records Center in St. Louis. Eligible veterans or the next-of-kin of a deceased veteran can request medals from NPRC at <http://vetrecs.archives.gov/>. For more on medals and awards, see <http://military.usmedals.com>.

Savings plan for deployed service members

Deployed uniformed service members have the chance to earn a guaranteed 10 percent interest on their savings annually. DFAS in accordance with DoD implemented the Savings Deposit Program in August 1990 for members who were serving in the Persian Gulf Conflict. The Act progressively changed to include troops assigned to areas of operation outside the United States on ships or mobile units. This program includes OPERATION IRAQI FREEDOM service members assigned to a combat zone or in direct support of a combat zone. A service member can contribute up to \$10,000, but interest of 10 percent will not accrue after that amount. A member can participate in the program if the member is serving outside the United States or its possessions in support of OPERATION ENDURING FREEDOM and has served at least 30 consecutive days in an area that has been designated as a combat zone or in direct support of a combat zone. Also, members serving on permanent duty assignment outside the United States or its possessions in support of contingency operations and serving on active duty in the designated area for more than 30 days. To make a deposit into the fund, troops are asked to contact their financial office. Withdrawing the money before leaving the combat zone is not authorized, unless there is an emergency. The last day to make a deposit into the fund is the date of departure from the assignment; however, interest will accrue up to 90 days after return from deployment. DFAS will post the savings deposit balance of active-component members to their leave and earnings statement.

Free guide helps deployed families

A new, free guide being offered by the National Fatherhood Initiative is designed to help service members maintain their important role in their children's lives during military deployments. "The Deployed Fathers and Families Guide," released in January, offers tips to help families cope with the practical as well as emotional aspects of family separations caused by deployments. The guide expands upon the institute's popular brochure, "10 Ways to Stay Involved With Your Children During Deployment." The new guide builds on tips in the brochure to help families prepare to handle the many issues within households typically handled by the service member who is about to deploy. The guide also addresses the emotional challenges families face during deployments, particularly those to dangerous regions of the world. For a free guide or brochure, an electronic request form is on the institute's Web site. The site also allows military children to post an online message to their deployed fathers. The brochure and guide also are available by calling (301) 948-0599 or writing to National Fatherhood Institute, 101 Lake Forest Blvd., Gaithersburg, Md., 20877. For more information go to <http://www.fatherhood.org/>.

Service members, veterans may have college credit

More than 50 percent of GI Bill benefits are not used within the 10-year span of eligibility after separation. Many service members and veterans do not realize they have likely earned college credit through their military training, coursework, and occupational specialty. These credits will reduce the amount of time it will take to complete a degree and save tuition dollars. Service members and veterans who are interested in receiving credit for their service can get tips on doing so, as well as find schools that award credit for military service, at www.Military.com. Go to the College Credit section.

New 'Space Age' Operations Center open for business

By Maj. Laura Kenney
SMDC Public Affairs

COLORADO SPRINGS, Colo. — Boasting a Star Trek style "bridge" and state-of-the-art technology, the newly remodeled Operations Center here hosted an open house March 17 to mark its transition and symbolically open its doors for business.

The old Operations Center is barely discernible. The new center includes a massively larger and more sophisticated computer server system — two terabytes from a mere megabyte system, new modem-

type consoles, new video cards that display faster and more complex graphics and stainless steel soundproofing panels decorated with starbursts. To date, the facility is 90 percent overhauled.

The goal, according to Deputy Operations Center Director Anthony Hodgkins, is to transform what was already the hub of situational awareness for the U.S. Army Space and Missile Defense Command into a comprehensive center for every aspect of the new missions assigned to the command.

"We're essentially building a one-stop shopping center as far as a database for SMDC is concerned. The new facility represents a 400-fold increase from what we had available to us in the quarters we occupied prior to moving to Peterson Air Force Base and our new building," Hodgkins said.

The "Star Trek bridge" centers around a raised dais with a horseshoe shaped master console which places every capability of the Center at the fingertips of the officer-in-charge, with just a spin of the chair. Eight video screens relay situation updates in real time, or capture breaking news on major news channels.

Stainless steel panels soundproof the room from the necessary air conditioning. An electronic sign-in computer greets visitors in the anterior lobby to the complex.

The Crisis Action Conference room presents the perfect picture of "wired" with multiple laptop computers connected to electronic white boards, and continual video feed from the Center. Not so visible, but a substantial improvement nonetheless is found in the automatic

telephonic recall system, which quickly and efficiently enables alerts, 100 percent accountability, bad weather warnings, and the obnoxious but necessary "report for urinalysis" call.

"We still have improvements in the works, namely, building a terminal for the 100th Missile Defense Brigade (Ground-based Midcourse Defense) to allow them to maintain situational awareness from this site, and further linkages we're developing, but this is a state of the art, fully functioning Operations Center now," Hodgkins said.

"We can maintain 100 percent awareness of the status of our forces, wherever they're deployed. We've got connectivity to Northern Command, Cheyenne Mountain, U.S. Strategic Command, our own internal command and operations structures, and numerous other commands. In the future we plan to expand to even more databases, and get to the point of all incoming information automatically updating pertinent reports in near-real time."



Photo by Budd Butcher

Sgt. Antonio Anderson checks with the shift officer-in-charge, Maj. Ralph Henning, in the newly modernized and refurbished SMDC/ARSTRAT Operations Center.

Employees should submit issues, recommendations by May 10

Army Family Action Plan Conference set for Aug. 3 - 6

ARLINGTON, Va. — The U.S. Army Space and Missile Defense Command 2004 Army Family Action Plan (AFAP) Conference will reportedly top those in years past.

"This is the fifth year SMDC has sponsored a Family Action Plan Conference and it is going to be bigger and better than ever," said Portia Davidson, SMDC's AFAP coordinator. This year's event is scheduled for Aug. 3 - 6 at the Crystal City Marriott Hotel in Arlington, Va.

"For the first time the command is sponsoring the Great American Family Award Competition. This award recognizes the accomplishments and contributions of our families and will be presented at the report out session by our commanding general," Davidson said.

Soldier, family member and civilian command representatives will participate as delegates to this conference. Sixteen other individuals will serve as facilitators, recorders, transcribers, issue support personnel and workgroup coordinators. Guest speakers and numerous national-level exhibitors also will participate.

"AFAP is a grassroots level process that identifies issues of concern that affect SMDC and the Army community," Davidson said. "AFAP is a 'change management' process that lets everyone in SMDC influence his or her own well-being and standard of living, as well as potential Army-wide impact."

To make this conference as successful as possible, SMDC is accepting issues and recommendations for review by the delegates attending the conference.

Information on "How to Develop Successful Issues" that warrant attention at Headquarters, Department of the Army, is available on the Web at <http://www.smhc.army.mil/FamilyPrograms>. Click on Issue Development Training. Please review the slides carefully before

submitting ideas. Deadline for submission is May 10.

"Please ensure you carefully research recommendations before submitting issues to avoid duplicating issues that are currently active in the Army AFAP," Davidson said. "Issues you submit within SMDC must go through supervisors to the command representative for review. Local AFAP coordinators will endorse issues before submission."

When submitting issue papers to be reviewed at the conference, Davidson suggests authors remember the following guidelines:

- Submit only one issue per form. There are no limitations to the number of issues you may submit for consideration.
- The document will be no more than one typewritten page in length.
- Write a brief statement summarizing the issue.
- Describe the problem or concern in paragraph form. Include enough information to ensure people unfamiliar with the issue will understand.
- Reference any laws, regulations or policies that impact an issue.
- Make recommendations clear and specific.
- Prioritize recommendations if you are submitting more than one per issue paper.
- Answer the following questions:
 1. What am I trying to change?
 2. What approach should we use?

3. How much time will it take?
4. What is the best possible method?
5. What are some alternative methods?
6. How many people are needed?
7. How much money or resources will it require?

If you have questions, please call your local AFAP representative.

"Our AFAP conferences are unique because we actively engage our youth delegation to create artistic murals and art projects that receive national level visibility and attention," Davidson said. "Involving our SMDC youth in creative arts projects proved to showcase the important role our SMDC youth and the arts can play in building self esteem, promoting peer-based learning and nurturing creativity."

Last year, the youth delegation designed and built a life-size Totem Pole "Peace Through Art" project. The totem pole was exhibited on the National Mall last September as part of 2003 International Child Art Festival (ICAF). It will also be displayed in the Pentagon April 15-30.

This year the youth will build a silk mobile in the structure of a space shuttle detailing the first 100 years of flight.

For more information contact Portia Davidson, Chief Community and Family Programs, (703) 607-2605 or Dene Jackson, MACOM Outreach Coordinator, (703) 602-4336. The fax number is (703) 607-3113.

The following is a list of SMDC AFAP coordinators at your location and their telephone number:

Name	Unit	Location	Telephone
Greg Piper	ARSTRAT	Colorado Springs	(719) 554-1970
Gloria Flowers	SMDC	Huntsville, Ala.	(256) 955-1696
Darlene Bassford	HELSTF	WSMR, New Mexico	(505) 679-5902
Harriet Mathews	FDIC	Arlington, Va.	(703) 602-1451
Dene Jackson	HQ, SMDC	Arlington, Va.	(703) 602-4336
Portia Davidson	HQ, SMDC	Arlington, Va.	(703) 607-2605
Cris Foster	USAKA	Kwajalein Atoll	DSN 254-4417

Recipients of \$1.3 million in research grants announced during TEAMS 2004 conference

By Kim Gillespie
SMDC Public Affairs

HUNTSVILLE, Ala. — The Technological Excellence in Aviation, Missile and Space (TEAMS) Technology Dinner on March 29, signaled the start of an exciting TEAMS 2004 conference week with the announcement of \$1.3 million in research grants from government agencies in Huntsville to seven U.S. colleges.

Topic areas

The 2004 grants were awarded based on proposals received earlier in the year for research in the three topic areas: SMART Systems; High Energy Density Materials for Propulsion and Power Generation; Application of Micro Electrical Mechanical Systems (MEMS) and Nano-Technology to Sensors, Advanced Materials, Propulsion and Structures.

The grants are made possible by an interagency project that includes the U.S. Army Space and Missile Defense Command; the Program Executive Office for Air, Space and Missile Defense; the Aviation and Missile, Research Development and Engineering Center; the Ground-based Midcourse Defense Joint Program Office; and NASA at Marshall Space Flight Center.

Grant recipients

More than 40 proposals were received for the 2004 grant awards. Mark Lumer, contracting executive for SMDC, made the grant presentations to the following 2004 recipients:

- Alabama A&M University for "Measurement of Cloud-Cover Mitigation of Optical Turbulence."
- Auburn University for its SMART Systems proposal, "Built-in Self-Test, Diagnosis, and Fault-Tolerance in Programmable Signal and Data Processors," and its MEMS proposal, "Self-Lubricating Films for Rotating MEMS Gyroscopes."
- Harvard University for "Metallic

Hydrogen: A Next-Generation Propulsion Fuel."

- Louisiana State University for "Carbon-Composite Reinforced Superconducting Micro Fibers for Flight-Weight, High-Field Strength Magnets."
- Ohio State University for "Ultra Sensitive Micromechanical Accelerometer/Force Detector with Integrated Displacement Readout."
- University of Florida for "A Pulsed Magnetic Field Driven Fission Power Concept for High Energy Space Power and Propulsion Applications."
- Vanderbilt University for "Diamond Nano-tip Emitter Mico-vacuum (DNEM) RF Power Amplifier."

The grants announcement was released Feb. 5, and proposals were received through March 8. According to Gisele Wilson, SMDC's director of the Sensors Directorate and the grants monitor, the topics selected are for technologies that are of common interest to the government agencies that provide funding for the grants. The interests of the agencies are advanced by the consolidated grants to colleges and universities because these institutions have exceptional expertise in or understanding of one or more of the technical areas as they relate to the missions of the agencies. The grants proposals are also expected to propose new ideas and innovative concepts.

Grant Process

According to Jan Burke, SMDC grants officer, evaluations of the proposals were performed by the Scientific Evaluation Team (SET) and a designated technical source advisors representative from the participating government organizations.

"Evaluation results were stated as a narrative discussion of the value of each proposal in terms of technology area and its advantages and disadvantages, its deficiencies and the relationship of these elements to the missions of the participating government organizations, and how the proposal contributes to balancing the overall 2004 E2 TEAMS consolidated grants initiative," explained

Burke. "The SET recommended the grant awardees to the Source Selection Authority, Mr. Bill Schick." Burke awarded the grants and Lumer formally recognized each of the selected universities at the TEAMS kick-off dinner.

Lumer is enthusiastic about the benefits of the grants, which he views as a long-term investment.

Grant benefits

"While it is still too early to see a direct benefit, we are hopeful that these grants will lead to improvements in a wide variety of civilian and military applications in several technical areas," Lumer said. He also noted that the grant awards are getting more competitive. "We received more than twice the number of grant proposals this year than we received in 2003," Lumer said.

The dollar amount for each grant is based on the cost estimated by the university's individual proposal so each award amount varies. However, no individual grant can exceed \$200,000.

The universities selected for this year's grants represent a wide range of academic diversity — state colleges, a private school and a Historically Black College. In addition to research, the grants also serve as a way of encouraging students to continue their research for the participating government agencies once they graduate — making the grants a potential knowledge base and a recruiting tool.

"These schools have graduate students who demonstrate outstanding technical potential, along with their faculty sponsors who are proven leaders in their academic disciplines," Lumer said.

"I do not believe it is a coincidence that the Tennessee Valley is so well represented in receiving these grants — the local communities and their elected leaders combined with the resident government agencies, our contractors, other technical companies, and our schools foster a climate of learning and opportunity for growth that are second to none in the country, in my opinion."

Chief Warrant Officer 5 retires



Photo by Billy Lindsay

Chief Warrant Officer 5 John P. McCravey, right, and his wife Rachida, display their U.S. Army Space and Missile Defense Command commanding general's coin letters shortly after an award and retirement ceremony hosted by Lt. Gen. Larry J. Dodgen, left, commanding general SMDC, Feb. 26 in the command's conference room in Arlington, Va. McCravey, who served honorably in the U.S. Army for more than 33 years, was also awarded the Legion of Merit (LOM) medal for "exceptionally meritorious service in the U.S. Army from March 1994 to March 2004, while serving in positions of increasing responsibility, culminating as the Deployment and Sustainment Division Chief in the Office of the Training and Doctrine System Manager for the Ground-based Midcourse Defense Program." The LOM citation also stated that McCravey's "leadership, technical and tactical abilities were key to mission success throughout a career that included Battery and Battalion Missile Maintenance Officer, Technical Advisor to the Royal Moroccan Air Defense Center, Training Advisor to the royal Thailand Air Defense Center, Missile Maintenance Shop Officer, Divisional Command Maintenance Evaluation Team Chief, and U.S. Army Personnel Command Joint Assignments officer." Rachida McCravey was presented the Outstanding Civilian Service Medal for "exceptionally meritorious service in support of the U.S. Army Space and Missile Defense Command, the U.S. Army, the Department of Defense, and the Nation, from Sept. 24, 1984 through March 30, 2004.

Soldier reflects on OPERATION IRAQI FREEDOM one year later

By Debra Valine
Editor, *The Eagle*

"Every day I wake up and think about what I did this day one year ago. I wake up and I know exactly where I was and what I was doing."

Capt. Jason Conroy, a member of the Space and Missile Defense Battle Lab in Huntsville, Ala., commanded one of the tank companies from the 1st Battalion, 64th Armored Regiment, 3rd Infantry Division (Mechanized), as it pressed through Iraq to Baghdad in the opening days of OPERATION IRAQI FREEDOM.

Remembering the war and the operations that took place there lends critical insight into developing technologies and fine tuning procedures for future warfighters.

"My job is important in that I can convey some of the problems I encountered during the operation," Conroy said. "In the middle of a major operation into Baghdad, we had to conduct a major armor reconnaissance downtown. As a commander, it was frustrating to not have the intelligence we needed to have before going into an area. We had little imagery support.

"We were lucky," he continued. "We did not have imagery for the Thunder Run on March 5. We were actually sent into Baghdad to gather intelligence."



Charlie Company soldiers rush a badly wounded Pvt. 1st Class Chris Shipley to a waiting helicopter for medical evacuation. Shipley was wounded in the left arm and head, losing his right eye, during the unit's thunder run in to Baghdad April 5, 2003. Capt. Jason Conroy is middle left.

Conroy, who is scheduled to attend the Space Officer Qualification Course in the future, said not having timely images of the battlefield caused quite a bit of frustration for him and his Charlie Company Soldiers. He cited an instance of maneuvering into what was supposed to be a clear area where needed repairs and rest would take place only to find the Iraqi resistance dug in and willing to fight. He was also challenged by having trained for six months in Kuwait on open desert tank warfare to be sent into downtown Baghdad without the knowledge that Iraqi tanks were hiding in garages and small alleys, waiting to take shots at them.

"With the technology we have today, we should have been able to have near real-time imagery and intelligence that would have prepared us for what we would find," Conroy said.

SMDC has developed and tested that technology, and it is in place in Iraq, but for some reason, the information that could be provided did not reach the frontline commanders. In his assignment with the Battle Lab, Conroy is working to change that.

One Year Ago

"We had been in Kuwait for about six

months prior to the invasion, training to engage enemy tanks in open desert terrain," Conroy said. The training was important, he said, because his Soldiers came together as a team and they learned a lot about living and fighting in the desert. However, when the unit engaged the enemy, it was an urban environment and tactics had to be different.

"We were told in training that we would not take tanks into the city," Conroy said, "but we did. It is the first time since World War II that tanks have gone into an urban environment to fight. It was an armored recon with limited dismounted Soldiers." Conroy said March 22 was the first day his company started encountering Iraqi combatants.

"Going into Najaf, we were still south of Baghdad, Intel had told us that we could stop in an open area to make repairs to our tanks and rest before heading north," Conroy said. "When we got there, Saddam's *Fedayeen* was there all dug in. Not having accurate intelligence was really frustrating.

"Thinking back to the early days of the operation, I can't believe how naïve we were to what would actually take place," Conroy said. "There

was supposed to be this mass of capitulating forces. We were expecting Iraqis who were not willing to give up their lives for the chance to fight with us. That first encounter sort of woke us up.

"Going into Iraq, our conscience was clear," he said. "It felt right. We were liberating oppressed people, but we were also fighting for ourselves — to protect the guys on the left and right of us.

"Every time I think about what

happened to us there, I think about those young Soldiers and the professionalism and skills they demonstrated as they dealt with the issues that were going on around us," Conroy said.

"To watch an 18- or 19-year-old Soldier go out there and risk his life for an Iraqi civilian while under fire ... The compassion, how adaptive they were in the



Photos courtesy of Brant Sanderlin/Atlanta Journal Constitution

Capt. Jason Conroy kicks down a locked door during a search of an Iraqi government building in downtown Baghdad on April 9, 2003. Soldiers from Task Force 1-64 spent most of the day clearing buildings, looking for weapons and documents.

situations that they were put in," Conroy said. "I am very proud of how my Soldiers performed. They were very professional during the war."

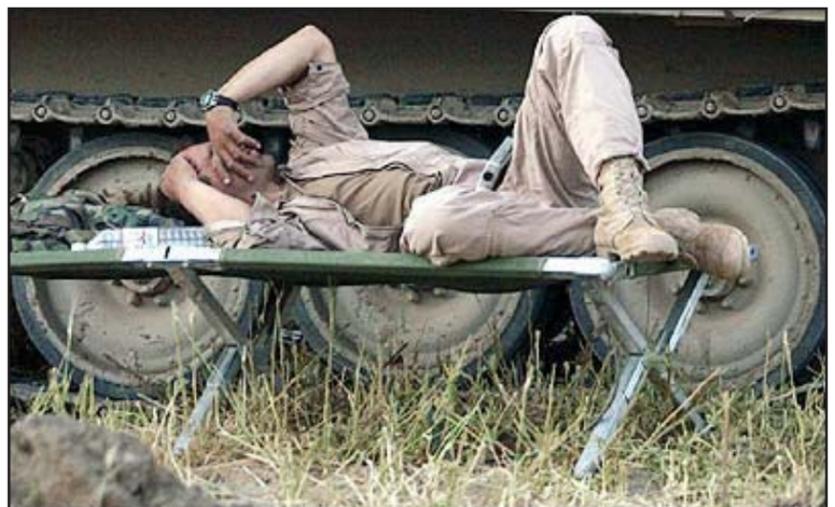
The fighting isn't all Conroy remembers. He told of how it felt to liberate the Iraqi people.

"The local population welcomed us and you could see on their faces that they were happy about what we were doing. We were there to give them their freedom. At the time, I do not think they knew what that meant. The majority of the population was glad we were there. A lot of people thanked us.

He said while his company was in Fallujah it was like a parade every day. Kids without shoes would run out to greet the tanks, waving and smiling. It reminded him of the parades through the streets of Europe following World War II, but on a smaller scale.

"We do not see all the good the American Soldiers are doing," Conroy said. "We built soccer fields and gave the kids soccer balls. Another time we gave out canned meat and frozen chickens. The guys wanted to have a shoe drive because all the kids who came out to greet the tanks were barefoot. Soldiers shared their Meals, Ready to Eat with the Iraqis, and went fishing for carp with the locals after repairing a dam site. We were building a relationship with the people."

Conroy said he still cannot comprehend the historical significance of what really happened. "We drove 40 vehicles into a populace of 5 million people. Using the chaos and mass confusion to our advantage was a brilliant plan."



Capt. Jason Conroy catches a few minutes rest on a cot in the middle of a potato field south of Baghdad following Charlie Company's drive south of the capital to destroy remnants of the Medina division April 4, 2003.

JTAGS initial training lays space groundwork

By Chief Warrant Officer
Jeffrey Robinson

FORT BLISS, Texas — The Joint Tactical Ground Station-Initial Qualification Training Course (JTAGS-IQT) is the first station a Soldier, Sailor or Airman has to negotiate in order to operate in a Theater Event System (TES) environment.

"The IQT course is an important part of the space community because it prepares JTAGS operators to disseminate warning, alerting and cueing information of tactical ballistic missiles and other tactical events of interest using existing communications networks in support of the TES and the theater commanders' missions," said Sgt. 1st Class Ricardo Bonilla, the NCOIC for JTAGS-IQT.

The JTAGS-IQT is headquartered at Peterson Air Force Base, Colo., but the schoolhouse is located here. The IQT is a seven-week, comprehensive curriculum that includes instruction pertaining to geography, space fundamentals, shelter subsystems, communication systems, preventive maintenance checks and services, and a battery of qualification tests all

culminating in a well-earned, all-American-style graduation.

The JTAGS-IQT provides the "strength" for forward-deployed JTAGS detachments located in Europe, Korea and Southwest Asia, as well as deployable detachments in Colorado Springs and Texas. The IQT is primed to provide up to 60 operators per fiscal year for use within the JTAGS community.

The JTAGS-IQT has access to all of the actual systems used in a forward-deployed site, because it resides within the JTAGS-Texas contingency section. This access provides students with the ability to apply information learned in lecture to a practical training environment. Spc. Daniel Marin said he benefits more from instruction that allows him to expeditiously apply the training to the actual equipment.

"I'm a hands-on type of soldier," Marin said. "Being able to apply the amount of knowledge I've learned from classroom instruction was vital to my success in completing IQT. Furthermore, actual systems training gave me the proficiency and confidence I needed to provide successful in-theater, tactical ballistic missile early warning while I was forward deployed to Southwest Asia in support of

OPERATIONS ENDURING FREEDOM and IRAQI FREEDOM."

A JTAGS operator immediately finds out the importance of the JTAGS-IQT when he or she becomes part of a certified crew standing watch at a forward-deployed JTAGS site.

Staff Sgt. William Daley, a JTAGS-IQT instructor and former crew chief at JTAGS-Southwest Asia, recalls early warning during the Gulf War to be relatively non-existent.

"I'm glad this is not the case today. With JTAGS operators monitoring the theaters of operations around the clock, the warfighter has the early warning needed to accomplish the mission safely," Daley said.

"The JTAGS-IQT provides trained operators for the theater to staff the JTAGS systems, which provide the essential missile early warning for everyone in the theater, regardless of the branch of service, thus increasing survivability for all."

Spc. David Nussbacher, a JTAGS-IQT honor graduate and JTAGS operator with operational experience in Southwest Asia, believes that the school is important because it provides a basis for understanding the space community.

"The JTAGS schoolhouse

and its cadre of instructors were instrumental in developing my knowledge of the space community," Nussbacher said.

"After graduating from the class, I realized that the experience gained became the foundation of my tactical and technical proficiency. This was crucial, because without a strong comprehension of space elements any further education in the field would be markedly difficult to apply," he said.

The JTAGS-IQT is also important because it is strategically located — at the home of the Air Defense Artillery. The IQT plays an integral role in educating the Air Defense community about the space environment, its capabilities, its limitations and how the warfighter on the ground can maximize the use of space assets to accomplish the unit's wartime mission.

The JTAGS-IQT personnel throughout the year conduct various JTAGS overviews to unit leaders on the Fort Bliss installation.

The JTAGS-IQT additionally sponsors unit professional development classes for NCOs and officers, and conducts informational briefs to every Fort Bliss Captains' Career Course class.

SATCON soldier deploys to Honduras with Joint Forces

By Spc. Alicia Brogden
Unit reporter

FORT MEADE, Md. — Spc. Neil Huntemann of Bravo Company, 1st Satellite Control Battalion, recently deployed to Honduras with the Joint Communications Support Element (JCSE) in support of EXERCISE BLUE ADVANCE. The exercise, held Jan. 12 through Feb. 10, gave the Ground Mobile Forces Network Controller an unusual opportunity to participate in a high-level Joint communication exercise.

BLUE ADVANCE is a command and control exercise that provides training on how to establish a Joint Task Force for Southern Command's area of responsibility. Southern Command personnel simulated command operations in reaction to

theoretical scenarios. Although it can be said that this is "just" a training exercise, the scope and importance of a theater-wide operation is substantial.

The troops of the JCSE, with whom Huntemann deployed, have a well-deserved motto, by which they are known — "The Voice Heard Around The World." Based out of MacDill Air Force Base, Fla., the Soldiers, Marines, Sailors and Airmen of JCSE directly support the Joint Staff in missions around the globe. Widely considered one of the most respected communications organizations in today's military, JCSE is comprised of two active squadrons, the 1st and 2nd Joint Communications Support squadrons; two Air National Guard squadrons and the 224th and 290th Joint Communications Service Support squadrons.

The 1st JCS deployed to Soto Cano Air Base, Honduras, to provide communications in support of BLUE ADVANCE for Southern Command. Huntemann was glad of the chance to garner hands-on experience as a Ground Mobile Forces operator.

The crew of 36 arrived at Soto Cano Air Base a few weeks ahead of the majority of the Southern Command personnel. The tents were pitched, the equipment was set up and the services were installed. The next part was just waiting for the users to show up and carry out their mission.



Photo by Spc. Neil Huntemann

1st Joint Communications Support Squadron's Ground Mobile Forces Terminal (AN/USC-60A) — with just one antenna — more than doubled the communication capabilities of Soto Cano Air Base in Honduras during EXERCISE BLUE ADVANCE.

Although the 1st JCS tried to provide services as transparently as possible, it was hard not to notice the significant impact their support made. Equipped with only their single AN/USC-60A antenna, 1st JCS more than doubled the communications capabilities of the local Soto Cano Air Base telephone switches, NIPR, and SIPR services, as well as providing the Southern Command staff dedicated video telecommunications conference circuits.

"Communications are the first thing to go up, hopefully the last thing to go down, and the most critical single point of possible mission failure," Huntemann said.

"Even though planning goes into redundancy and contingency operations, there is no way to conduct a successful mission without being able to establish and maintain communications. I know that, personally, the experience I gained helps me to better accomplish my mission of assisting warfighters."



U.S. Army photo

Spc. Neil Huntemann of B Company, 1st SATCON Battalion poses in front of a CH-46 helicopter during his recent deployment to Honduras with the Joint Communications Support Element in support of EXERCISE BLUE ADVANCE.

Terrain brutal, unforgiving to Soldiers training Common Task Testing at Camp Roberts never boring

By Spc. Joshua Plyler
Unit reporter

CAMP ROBERTS, Calif. — The air was crisp and cold. The sun was beginning to break through the thick morning fog that covered the long tall hills that would soon be crawling with activity.

The parking lots of the remote satellite communications station, affectionately known as "The Roc," began filling up as the Soldiers of Delta Company, 1st Satellite Control Battalion, made their way up the long winding road, silently preparing their bodies and their minds for the rigorous training awaiting them.

As final preparations were made, and last minute checks of equipment and personnel were executed with skill and precision, the sun claimed final victory over the fog and began bringing much-needed warmth to the area.

With all equipment accounted for, and all personnel present, the Soldiers of Delta Company were off to begin their annual

training for Common Task Testing (CTT). Each year, the Soldiers of Delta Co. trudge up and down the hills and valleys of the post, learning and using the common skills that every Soldier in the U.S. Army needs to know.

Little do the "new guys" realize how brutal and unforgiving the terrain can be here, and how the much needed warmth of the sun in the early morning quickly becomes a blazing inferno of heat that makes the tall steep hills seem that much taller and that much steeper. This day was turning out to be a little different though. There was a pleasant spring breeze wafting through the trees and the



Photos by Sgt. 1st Class David Ball

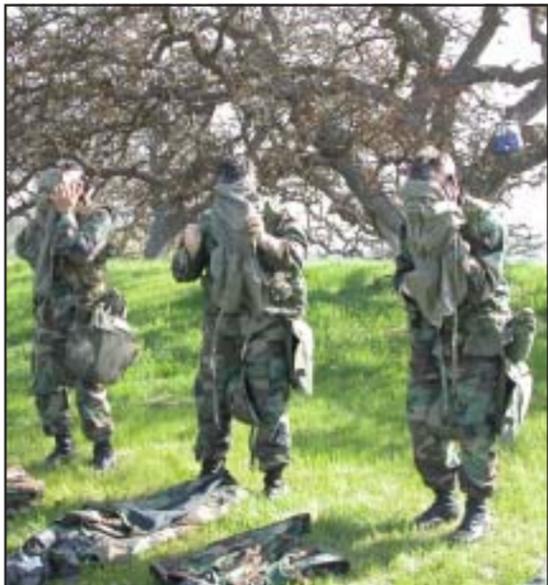
Spc. Mike Griffin, left, digs a found mine out of the ground as Spc. Matt Hagen evaluates his efforts.



Spc. Josh Wilson and Spc. Matt Hagen probe the ground for mines during D Company, 1st SATCON's CTT training.



Spc. Sheldon Fogarty checks his stopwatch, looking to see if D Company, 1st SATCON Battalion Soldiers donned their NBC gear in the time allotted.



Staff Sgt. Khemmony Kong, left, Pfc. Curtis Pouliot, center, and Spc. George Maille rush to put on their protective masks.



Sgt. Mike Feddema launches a grenade into a nearby bunker.

sun was decidedly gentle to all the young men and women in green, who were collectively grateful for the cool spring weather.

The day started out with a safety briefing that included the "panic azimuth," or the direction to travel in the event of an emergency, and the risk assessment of the day's events. The Soldiers of Delta Co. were then split into their respective teams and headed to their assigned starting points.

Each one of the four-person teams was assigned to a different starting locale, along with a different order of waypoints where their training was to be conducted. In most cases, the points were only a thousand or so yards away from each other, but with the sloping hills of the post, that thousand felt measured in miles, rather than yards.

At each point, Soldiers tested in many tasks which included land navigation via terrain association, nuclear, chemical and biological tasks, employing hand grenades, self extraction from a mine field, communications via tactical radio over a secure net, reacting to unexploded

ordnance, evaluating a casualty, risk management planning, and medical evacuation training. The training was extremely successful and productive.

"It isn't quite a day at the beach, but it's nice to get outside and enjoy the sunshine — some variety from the daily grind," said Pfc. Curtis Pouliot. "The training was also excellent. Even though I had serious difficulty staying on a straight line, I was able to find all my points and learned a lot along the way!"

By the time the sun was on its downward descent in the sky, all Delta Co. Soldiers and cadre returned to "The Roc," exhausted, yet proud of their accomplishments.



Sgt. Todd Ricard, right, and Sgt. Richard Walraven, center, map out their next point while Spc. Daniel Alvarez calls in their location on the radio.