

# The Eagle

Published for the men and women of the U.S. Army Space and Missile Defense Command

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## First full FA 40 course graduates

**COLORADO SPRINGS, Colo.**—The Army reached a milestone on the afternoon of August 3 as 14 officers successfully completed the Army's first Space Operations Officer Qualification Course.

"There is only a small cadre of Space Operational officers," said guest speaker Lt. Gen. Joseph M. Cosumano, Jr., commanding general of the U.S. Army Space and Missile Defense Command (SMDC) and U.S. Army Space Command (ARSPACE), before a group of 75 military and civilian personnel during the graduation ceremony in the U.S. Air Force Space Command headquarters on Peterson Air Force Base.

The graduates are trailblazers within

the Army and Department of Defense, Cosumano said.

"You are breaking new ground here," he said. "In many respects we are really late in getting this course for the U.S. Army, but we are here and it is a milestone for us. It is like any trailblazer. There are really no markers for you. But you know you have to go somewhere and there is a destination.

"So we in the Space business in the U.S. Army, and the Army itself, understand the criticality of Space to its future. And so it is an uncharted path; you graduates will go down that path and mark the trail for those who will follow.

"It's really now left up to you to create your destiny, and your role in Space in service of the U.S. Army and its warfighting commanders."

Space will be a key enabler for the force of the 21<sup>st</sup> century, Cosumano said.

"All the products of Space, navigation, communication, warning and intelligence will be key products for the U.S. Army Objective Force, which will be a much more lighter and lethal force. And for it to accomplish this mission, it must be able to see first, understand first, decide first, and then finish decisively. And Space will enable that force to do that."

The Army has been involved in Space from early on, according to Cosumano.

"The Space program that we know, the NASA Space program, even the Space program that the U.S. Air Force has a large investment in, began in the U.S. Army in the 1950s and 1960s," he said.

This legacy continues as the Army moves ahead.

"We have a number of capabilities that the Army requires to perform its warfighting mission that we get—in and through Space," Cosumano continued. "So it is very, very important that we stay part of Space."

"As we look at the 21<sup>st</sup> century, Space-based radars will look deep into areas where aircraft both manned and unmanned will not go," he said. "Space-based communications will enable soldiers anywhere in the world to enter and gather information from the global information grid. The fact is that the Army's objective force must be and will be a Space-based enabled force."

Cosumano advised the graduates of challenges.

"You will be spread thin across the Army and the Office of the Secretary of Defense, various defense agencies and among our warfighting CINCs. They will come to you and ask, where are the Army Space requirements and they will expect you to know.

"When you talk, you will be speaking for the Army. You are the ones who stake out the left and the right limits of the Army's fighting position concerning Space control. You are the ones who get OSD and the services to commit to the battlefield characterization, Space-based Blue Force Tracking, and more tactically responsive relevant Space-based infrared satellite radar systems."

After his address Cosumano presented a diploma to each graduate.

The graduates are: Lt. Col. Robert H. Bruce, assigned to SMDC; Maj. Richard E. Brence, assigned to the 193rd Space Support Battalion, Colorado Army National Guard; Maj. Dennis L. Campbell, assigned to U.S. Space Command; Maj. Steven B. Choi, assigned to III Corps; Maj. Duncan C. Currier, assigned to National Reconnaissance Office (NRO); Maj. Robert R. Fabrizzio II, assigned to NRO; Maj. Robert A. Guerriero, Jr., assigned to NRO; Maj. Thomas L. James, assigned to III Corps; Maj. Robert E. Klingseisen, USSPACECOM; Maj. Patrick M. Marshall, assigned to Eighth U.S. Army; Maj. Jim R. Meisinger, 1<sup>st</sup> Space Battalion, ARSPACE; Maj. Jim D. Patterson, assigned to 1<sup>st</sup> Space Battalion, ARSPACE; Maj. Jim D. Pruneski, assigned to the National Security Space Architecture; and Maj. Sean M. Scally, assigned to NRO.

Colonel (P) Richard V. Geraci, deputy commanding general, ARSPACE and DCG for Operations, SMDC, also awarded each graduate with the U.S. Air Force Space and Missile Badge. Cosumano pointed out that the awarding of the badge was a significant event.

"I think it shows the recognition by our sister service of your excellent qualifications and your contribution to Space," he said.

One of the graduates, Brence, is currently with the COARNG. Upon graduation, he will be assigned to the newly formed 193<sup>rd</sup> Space Support Battalion.

Officials from the SMDC Force Development and Integration Center (FDIC), creators of the Functional Area 40 Space Operations Qualification Course, began the intense seven-week course June 15 in Colorado Springs, Colo. The course is designed to train Army officers to be experts in using Space to support the warfighter.



(Photo by DJ Montoya)

Majors Duncan C. Currier (left) and Robert A. Guerriero, Jr. (right), students in the Army's first Space Operations Officer Qualification Course, update a Space order of battle during a command post exercise.



(Photo by DJ Montoya)

(Left to right) Majors Steven B. Choi, Thomas L. James, and Jim R. Meisinger, students of the Army's first Space Operations Officer Qualification Course, prepare to brief the corps commander on Space Force Enhancements during a command post exercise Aug. 1.

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## Commander's Notes

# Defining the Army's role in Space



Lieutenant General  
Joseph M. Cosumano, Jr.

On August 3, we took a significant step forward in our effort to normalize space when 14 officers graduated from the Army's first Space Operations Officer Qualification Course at Colorado Springs, Colo.

I had the pleasure of congratulating our first Space operations officers at their graduation. They will now move on to assignments throughout the Army, DoD and other government agencies to leverage Space for ground warfighters around the world. Besides SMDC, here are the other organizations who will benefit from our first graduating class: the Colorado Army National Guard, U.S. Space Command, III Corps, National Reconnaissance Office (NRO), National Security Space Architect, and Eighth Army in South Korea.

As our first space "experts," these graduates will be trailblazing uncharted territory.

Achieving this milestone reinforces the fact we in the Army Space business and, in fact, in the overall Army, understand the criticality of Space to our future.

For the Army's Objective Force to become reality, in simple terms ground warfighters must be able to see first,

understand first, decide first and then finish decisively. Space will enable this by providing near real-time navigation, communication, weather, imagery, missile warning and intelligence.

To graduate, each officer had to make it through an intense seven-week course, including visits to places such as the NRO, National Imagery and Mapping Agency, National Security Agency, Fort Bragg, N.C., and SMDC's Army Space Program Office, which is responsible for the Army's Tactical Exploitation of National Capabilities program. This program focuses on exploiting current and future tactical potential of national systems and integrating the capabilities into the Army's tactical decision-making process.

In addition, the students participated in a 43-hour command post exercise designed to evaluate each student's proficiency in 24 individual critical tasks.

Though this first FA 40 graduation is a significant milestone, it is by no means the only Army effort to integrate Space into its operations.

In addition to our new Space officers, we are standing up our Army Space Forces, which consist of three unique battalions.

They are the 1<sup>st</sup> Satellite Control Battalion, the 1<sup>st</sup> Space Battalion, and a new National Guard unit, the 193<sup>rd</sup> Space Support Battalion. A NASA Astronaut Detachment and a Headquarters and Headquarters Company round out the Army Space Forces.

The 1<sup>st</sup> Satellite Control Battalion

controls satellite payloads and networks using the Defense Satellite Communications System (DCSC). The battalion's soldiers point DCSC antennas at users on the ground and control communications network operations to provide critical command-and-control paths for ground-forces communications.

The 1<sup>st</sup> Space Battalion has two missions, missile warning and Army Space support teams. The Missile Warning Company uses Joint Tactical Ground Stations to downlink missile-launch warning and tracking information real time to ground commanders.

Our Space Support Company has five teams, each associated with a different CINC. The teams provide expertise on how to access Space assets for communications, weather forecasting, terrain analysis and mapping.

In addition to our Army Space Forces, ARSPACE provides soldiers for SMDC's Space and Missile Defense Battle Lab. Their job is to find military uses for emerging Space technology and accelerate the fielding of new systems.

As you can see, we are operating on many levels to normalize Space in the Army. Getting to meet our first graduating class of Space operations officers just reinforces my conviction that we are on the right path and marching hard to achieve that goal.

Secure the High Ground!

## Commentary

# Ecstasy use harms health, career, freedom

by Cadets Robert Chamberlain  
and Ben Braasch

**WASHINGTON (Army News Service, Aug. 1, 2000)** — Although overall drug use is dropping in America, recent years have seen a surge in the popularity of the drug Ecstasy.

There is a "widespread growth" in Ecstasy use, according to the testimony before the Senate by Donnie R. Marshall, an administrator for the Drug Enforcement Agency. Since 1995, the number of high school seniors who have tried Ecstasy has doubled to one in 10. Between 1998 and 1999 the number of emergency room admissions involving Ecstasy increased 150 percent.

In 2000 the DEA seized more than three million tablets—three times as many as the previous year. The arrest of several military policemen from Fort Bragg, N.C., for both possession and use of the drug has once again shown that the Army is not immune to trends in American pop culture.

Ecstasy is touted by its proponents as a harmless nirvana. The drug, which is usually put in bottled water or pacifiers to prevent against grinding teeth and heat injury, is mistakenly thought to be as benign as the drinks served from behind the bar. Ecstasy actually poses the risk of long-term brain damage, severe mood swings, substantial fines, and imprisonment.

Ecstasy causes the brain to release

large amounts of serotonin. This chemical causes feelings of euphoria and gives the individual a blissful sensation. Normally, serotonin is released and reabsorbed in a regular cycle by the brain. However, when the serotonin reservoirs are depleted by Ecstasy, adverse side effects occur.

Serotonin is an important part of the body's temperature regulation system. The most immediate effect of Ecstasy use is a rapid rise of body temperature. To counteract the effect, Ecstasy users often dress in baggy clothes and consume large quantities of water. However, combining a hot, crowded dance floor with the elevated body temperatures of Ecstasy increases the chance of permanent brain damage.

When serotonin reserves are depleted, users are often irritable, impulsive, and depressed because the brain can no longer "produce" good moods. This short-term effect usually clears up in a couple of days, but in the process permanent long-term damage can occur.

In a study performed by researchers George Ricaurte, Una McCann, and George Hatzidimitriou at Johns Hopkins University, monkeys given Ecstasy for four days in doses comparable to those consumed by recreational users still had brain damage seven years later. Some users try to protect themselves by taking Prozac. However, Prozac also blocks enzymes that are essential in breaking down Ecstasy, increasing the possibility

both of overdose, and of developing Parkinson's disease.

The neurons that are permanently injured are responsible for memory and critical reasoning. Studies by researchers at Johns Hopkins Medical Center have demonstrated that long-term users of Ecstasy score significantly lower on tests of verbal and visual memory.

In 1985, Ecstasy was reclassified by the Drug Enforcement Agency (DEA) as a Schedule I controlled substance, meaning that the government has determined that it has no legitimate medical uses. Thus, Ecstasy falls under the purview of Article 112a of the Uniform Code of Military Justice. Being caught in possession of any amount of Ecstasy could carry a sentence of up to five years in jail, dishonorable discharge, and forfeiture of pay and allowances.

Recreational drugs have been, are, and will continue to be a fact of modern life. From heroin to chewing tobacco, each drug holds a particular promise and exacts a particular price. It is important that soldiers become aware of the physical and legal costs associated with each drug, and then make wise decisions for their long-term benefit. The choice to use Ecstasy may give the user momentary euphoria, but only at the risk of brain damage, dishonorable discharge, and prison.

(Editor's note: West Point Cadets Chamberlain and Braasch are attached to the Office of the Chief of Public Affairs for training.)

# Kwaj volunteers help distribute vaccine

by **KW Hillis**  
**Kwajalein Atoll**

Cholera hit Ebeye in December, claiming six lives and hospitalizing scores of others.

Although it was quickly eradicated, there is always a possibility that there could be small outbreaks of cholera, said Physician Assistant Bess Buchanan. "They are trying to avoid that possibility."

Dr. Sandra Yao, chief of Ebeye Hospital medical staff, requested help from Kwajalein's

medical personnel with a preventive "mop-up effort" to vaccinate the remaining Ebeye, Carlson and Carlos population over a three-day period. As a result, nine volunteers from Kwajalein traveled to Ebeye July 2 to help distribute 6,000 units of oral cholera vaccine received from the World Health Organization.

The vaccine is 85 percent effective and is good for six months, said Buchanan, who helped coordinate the Kwajalein volunteers.

"Every time I ask for help from Kwaj, I'm really touched by the response I get," Yao said that morning as she stationed the Kwajalein volunteers at the hospital, by the post office and near the dock—three of the 13 strategically located vaccine stations on the island.

Only 3,000 doses of oral vaccine were received on Ebeye last January, Yao said. "The vaccine was distributed to high-risk groups—the elderly, those with chronic disabilities like diabetes, food handlers, sewage workers and all Kwaj workers. This time the vaccine will be distributed to everyone over two who is currently well and not pregnant."

Children milled around the wooden table outside the post office as Yao briefed Dr. Thomas Tesch, Nancy Tesch and Daveadale "Missy" Able on how to mix the refrigerated vaccine with water and gave them some tips on dispensing it.

Since the vaccine tastes like a cross between "Alka-Seltzer and 7-Up," some of the children don't like it and may throw up, Yao said. If that happens, another dose is administered.

Yao set up a small group at the hospital, including Kwajalein nurse and Ebeye resident Henny Lavin and ninth-graders Jessie Brown and Elizabeth Horner. This was not the first

time the high school students volunteered to help on Ebeye. Both said they had taught Sunday school at Queen of Peace.

"I wanted to help my people," Lavin said as she handed a cup to a small child.

While other Ebeye hospital workers set up their stations around the island, Yao helped Cheryl Bowen, Harry and Cheryl Hale and Paige Colcough set up their table near the dock.

One of the few people to visit the dock table was Information Technology technician Labtak Langrus, who said he had received the vaccine in December.

Once it was explained it was time for another dose, he took one and encouraged his friends to take the vaccine. Soon there was a small crowd of adults surrounded by a larger crowd of children staring inquisitively at the foaming mixtures in the small paper cups that the volunteers handed out.

The post office group remained busy all day, surrounded by children, said Nancy Tesch.

"The problem was we needed the parents with the children," she said. "The kids thought it was pop. So we gave them leaflets to take home. It told them that they shouldn't eat two hours before [or] two hours after they received the vaccine."

Bowen, who returned on July 3 to help again, said, "It was well-organized. On Monday, we only handed out about 60 doses [near the dock] because most people had already received the vaccine at other stations."

On July 9, a small group of volunteers also visited Carlson and Carlos to dispense the vaccine, Yao said, adding that more than 3,300 doses were given during the two-day clinic on Ebeye.

"I think things went pretty well," she said.



Ninth-graders, Jessie Brown (left) and Elizabeth Horner mix the refrigerated cholera vaccine with water outside of Ebeye Hospital.

## USAKA teens swim in world championships

Story and photos by **Peter Rejcek**  
**Kwajalein Atoll**

Two young men from the U.S. Army Kwajalein Atoll made history in late July when they competed in the 2001 La Federation Internationale de Natation (FINA) World Swimming Championships in Fukuoka, Japan.

Loren Lindborg, 19, and Carlos Notarianni, 13, were selected to represent the Republic of the Marshall Islands at the international competition. They are the first swimmers from the RMI to swim against this caliber of competition, according to coach Cris Lindborg, Loren's mother. And Notarianni is the first Marshallese native to participate in international competition, which features Olympic swimmers. He was also the youngest participant this year.

"It will be a good experience for the kids," Lindborg said. "It's way beyond our league ... but it's a great opportunity."

Loren said he is nervous and excited about being chosen to compete. His modest goal, "To beat out Burundi."

Competition will be stiff. There are about 3,000 swimmers and

officials from 130 countries competing in the championships. Events include swimming, diving, water polo, synchronized swimming and open water swimming.

The Lindborgs, Notarianni and his mother, Sylvia, went to the games which ran from July 20 to July 29. They only had about three weeks to prepare, as Cris Lindborg said she was belatedly notified that two swimmers from the Marshall Islands had been invited to participate.

Loren Lindborg, who was born on Kwaj, has been on the swim team since the wee age of six, and holds several pool records. Notarianni has been swimming competitively since he moved here about six years ago.

Kwaj swimmers have repeatedly represented the RMI in the Micronesian Cup games since at least 1990. Cris Lindborg said the teams have always done extremely well, generally dominating their opponents. The next games are scheduled at Pohnpei in 2002.

Editor's note: Most of this article is a pre-competition story re-printed from the *Kwajalein Hourglass*. Both swimmers posted personal best times and Lindborg did beat Burundi.



Carlos Notarianni, 13, practices at the Millican Family Pool for his trip to the world swimming championships in Fukuoka, Japan, where he competed in the 50 and 100 meter races, and the freestyle, backstroke and breaststroke races.



Loren Lindborg, 19, practices his butterfly stroke at the USAKA swimming pool. He competed in several swimming events, including the freestyle, butterfly and backstroke at the 2001 FINA World Swimming Championships in Fukuoka, Japan. Lindborg holds several local pool records.

# Bringing Space to the

## *Space soldiers serving soldier Space needs*

by Dan Coberly  
Huntsville, Ala.

If a sneak attack like Pearl Harbor ever happens in Space, it could be the day the Earth stands still for America and its allies.

Space satellites might take a licking and keep on ticking. If they don't, life could get chaotic on the planet Earth.

Millions of people would suddenly learn how much they personally rely upon Space technology. Cellular phones, credit cards, debit cards, ATM cards, e-mail, and personal data assistants might as well not exist. Banking, shipping, telemedicine care and other speedy electronic commerce could be interrupted worldwide. We'd return to the golden days of radio. And not much else.

Soldiers on the ground and pilots in the sky would find the situation a lot more serious. Invisible beams of information used by Global Positioning Systems (GPS), weather reports, and communications would vanish. At that moment, we could lose much of our early capability for spotting missile launches aimed at our nation.

Citizens and soldiers alike tend to appreciate advance warning that a SCUD or a cruise missile is heading their way. Aspiring artillerymen aim for their rounds to land on intended targets. Inquiring infantrymen want to know exactly where they are, where their buddies are, and where the enemy is lurking on the battlefield. To them, the ultimate computer crash would be more than just frustrating. It would be deadly.

The U.S. Army Space and Missile Defense Command (SMDC) has eyes in the sky and feet on the ground to make sure something like "Space Harbor" never happens.

As one of the Army's 15 major commands, SMDC's soldiers are keenly aware that Space has extended the boundaries of future

battlefields. SMDC serves as the Army's advocate for Space and missile defense and is the Army's integrator for theater missile defense. The Space and Missile Defense Command also helps Army warfighters gain access to Space assets and products. The command maintains the Army's portion of what is fast becoming a vital missile defense program used to protect the nation and our allies. The Army is the lead for land-based missile defense systems. Thus far, the Army is the only military service to achieve real-world success with hit-to-kill missile technology, scoring a "GO" in 11 out of 14 recent attempts.

Today, some of what SMDC's "Space" soldiers now accomplish for our ground forces has a hint of what the Starship *Enterprise* has portrayed for us on television since the 1960s. Young Army Space specialists and noncommissioned officers already control satellite payloads, warn of impending missile launches, and maintain vital Space communications. A small cadre of new Space Operations officers (FA 40) are joining headquarters and battle staffs as Space Liaison officers. Soon, they may help other soldiers use lasers and sensors or other Space-based technology to accomplish missions that only a few years ago were in the make-believe world of Hollywood's Star Fleet officers.

Warfare is forever changing. The Army forever adapts, or takes the point and leads the change. The current trend in warfare is to fight at a distance; to attack and to defend at a distance. If the soldiers and civilians will use SMDC have their way, infantrymen will use Space technology to become a more effective fighting force to be able to do just that.

SMDC's soldiers see Space as the high ground for terrestrial success, not just the final frontier. To them, Space holds as much promise as it does danger.

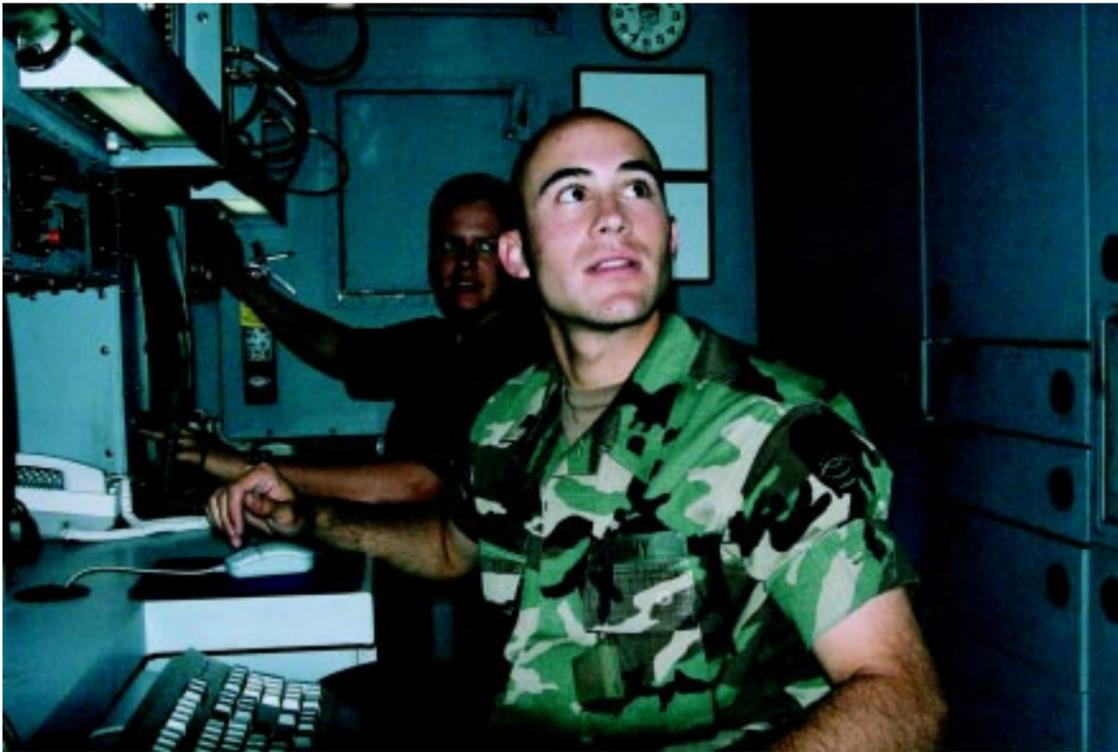


Specialist Brandon S. Krumwiede (left) and Sgt. Dennis Shay (right) work on the Joint Tactical Ground Station (JTACS) in Colorado Springs, Colo. The JTACS is used to detect and track theater missile threats for deployed commanders-in-chief and the joint force.



Sergeant Frederick Mack, Theater Missile Support Company, 1st Space Battalion, sets up a Joint Tactical Ground Station at Colorado Springs.

(Right) Sgt. Melissa E. Copeland, Company B, 1st Satellite Control (SATCON) Battalion at Fort Meade, Md., monitors and analyzes the signals passing through the Defense Satellite Control System satellite. SATCON soldiers look for proper bandwidth allocation, spectral shape, and power requirements to ensure that the user requirements are adequate for a successful mission, while ensuring that the health and welfare of the satellite are met.



(Photo by Dan Coberly)

Sergeant Dennis Shay (rear) and Spec. Brandon S. Krumwiede (front), both from the Theater Missile Warning Company, 1st Space Battalion, verify settings on a Joint Tactical Ground Station unit.

# Army



(Photo by Dan Coberly)

... align a TACSTAR antenna during set up of a Joint TAGS detachments provide in theater warnings of joint forces under their command.



(Photo by DJ Montoya)

... Space Battalion, shoulders a shelter support post as ... s, Colo.



(Photo by Keith A. Ramsey)



(Photo by Dan Coberly)

Specialist Keith Barnhart, HHC, 1st Satellite Control Battalion, uses specialized test equipment to check satellite communications equipment for proper operation.

## Commander touts soldiers' skills

"If you depend so much on Space, you are going to have to protect your Space assets so the enemy can't take them away from you," said Col. William J. Partridge, commander, Army Space Forces, Army Space Command, U.S. Army Space and Missile Defense Command.

"Ensuring that we have the ability to access all the information that our forces need to get from Space, and having the potential to deny the enemy from having the same access is a mission with a future here at the Army Space Command."

Partridge commands a growing brigade-sized unit charged with providing day-to-day Space support for the Army. His Space forces include three unique battalions, the 1st Satellite Control (SATCON) Battalion; the 1st Space Battalion, and a new National Guard unit, the 193rd Space Support Battalion. A NASA Astronaut Detachment and a Headquarters and Headquarters Company round out the unit. Several Army astronauts have orbited Earth aboard the *International Space Station*.

Everyday, soldiers involved in peacekeeping operations and exercises probably don't realize they are using Space and Space technology information provided by the Army's Space forces.

That's because units like the 1st SATCON silently do their job in the background, controlling satellite payloads and networks using the Defense Satellite Communications System (DSCS).

"It's impressive when you visit the centers and see privates, privates first class and specialists,

with a sergeant or staff sergeant in charge, performing very high-tech functions," Partridge said. "Our young soldiers are located around the world from Japan to California, from Colorado Springs to Germany and they are supporting DoD users, not just the Army."

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**'We are always there, watching the sky, so the rest of the Army can get its job done a lot quicker and safer'**

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-- Sgt. Dennis Shay

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According to Partridge, the Army's use of the Global Positioning System (GPS) began when the Army applied a Space-based navigation system that the Air Force was developing for their pilots.

It was fielded initially to Army units during the Gulf War and now it's there and the Army accepts it as always being there. It's also now a \$3 trillion a year business around the world. And it was an Army guy, pulling together segments of warfighter utility that made it happen. That's the

See 'soldiers' next page

# Forrester takes rookie Space flight

His rookie space flight will be memorable in many ways for Astronaut Patrick Forrester, an Army lieutenant colonel assigned to the Army Astronaut Detachment, U.S. Army Space Command. Forrester, a mission specialist aboard the Space Shuttle *Discovery*, will open the hatch between *Discovery* and the *International Space Station* and greet the man who was instrumental in bringing him to NASA, retired Army Col. James Voss. Voss has been aboard the space station for more than 168 days. He will return to earth this week with Forrester and the crew of *Discovery*. The shuttle is scheduled to land at the Kennedy Space Center Aug. 22.

Forrester, part of a four-man crew, delivered 7,000 pounds of supplies, food, and science experiments to the space station. The shuttle also delivered the Expedition Three crew who will spend the next several months on the space station. Voss, a flight engineer with the Expedition Two crew, arrived at the space station March 18 to study the human body in space, space radiation, observations of the Earth, crystal growth in weightlessness and plant growth in space.

While the shuttle was docked at the space station, Forrester and another mission specialist, Dan Barry, performed two space walks.

NASA selected Forrester as an astronaut candidate in May 1996. He completed two years of training and evaluation, and is

qualified for flight assignment as a mission specialist.

Before his flight, Forrester spoke about the mission and his mentor.

"As a rookie, I just can't imagine what it's going to be like to go to Space the first time. It's a unique opportunity because one of the Expedition crewmembers, Jim Voss, was instrumental in bringing me down here. Eight years ago, when I came to work at Houston as an engineer before being selected as an astronaut he was my boss. I owe a lot to him, just the fact that I was selected. If you'd told me eight years ago that I would eventually be on the shuttle, going up to bring him back from his stay on the space station, I just couldn't have imagined it."

Forrester grew up in an Army family and went to West Point after high school. He was commissioned as an infantry officer and was an airborne Ranger. He says he learned early on where his real interests were after spending several days in the mountains with little food and not a lot of sleep. A helicopter picked him up.

"I looked up front because he [the pilot] was up there eating fried chicken. I decided right then that's what I wanted to do. I wanted to learn to fly. So, I spent the rest of my military career flying."

While in Hawaii, Forrester read about an Army aviator who was also an astronaut.



"I'd always been interested in the Space program, but I wanted to be in the Army and be an Army officer. For the first time I realized I could do two things that I love—serve my country in the military and perhaps become an astronaut. Probably about 11 years and five applications later I was finally selected in 1996."

In addition to Forrester, there are four other active-duty Army astronauts: Lt. Col. Jeff Williams, Lt. Col. Nancy Currie, Lt. Col. Tim Creamer, Lt. Col. Doug Wheelock and an astronaut candidate, Maj. Timothy Kopra.

## soldiers—

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kind of stuff our Battle Lab looks at today.

"When the Army studied the impact of future Space operations, we found that we were already using other data from Space besides GPS," said Partridge. And the logical extension of that is to organize units to handle it. So we started developing capabilities, programs, and products to support the warfighter."

Today, the 1<sup>st</sup> Space Battalion has two primary missions, missile warning and Army Space support teams. The Missile Warning Company provides direct downlink capabilities from infrared warning satellites that pick up launches of missiles. Soldiers in missile warning detachments are located in Korea, Germany, and Colorado Springs.

"Our Space Support Company has teams associated with each Army Corps," Partridge said. "Those guys go out on exercises and provide expertise about Space systems during real world operations. They were deployed with Task Force Hawk to Albania during the Kosovo crisis. Our Headquarters and Headquarters Company assists the regional SATCOM Support Centers. The centers are joint operations where Theater CINCs can go one-stop shopping to get satellite communications. We also keep track of where all our Space forces are, and the status of their missions and equipment."

"The Air Force builds satellites, launches satellites, and operates satellites, but the Army is the biggest user of Space information and data," he said. "There is definitely a ground focus for what we do, but Space is inherently joint in the way we operate our Space-based systems. The Air Force plays a very important role in launching the satellites and making sure they stay in the right orbit so the Army and Navy can use them.

"Just about everything on the battlefield of the future is going to depend on Space-based navigation capabilities. When we look at the future, from the legacy force through the transformation process all the way out there to the objective force, I think it's pretty well recognized that Space is going to be a critical part of those capabilities," Partridge said.



AST Field Office chief, Al Gurevich (left) and Phil Van Valen, Boeing engineer, take a break from pretesting the modified 767 equipment used in support of IFT-6.

## AST 767 supports IFT-6

by KW Hillis  
Kwajalein Atoll

Their call sign is simply "Boeing 767" and it was the first 767 built. Originally used to get Federal Aviation Administration certification for 767s, it now follows a different flight path from all others of its class.

As the Airborne Surveillance Testbed (AST), managed by the Army Space and Missile Defense Technical Center, the plane contains a modified 86-foot-long cupola, or hump, on the back of the plane. The AST operated out of the U.S. Army at Kwajalein Atoll (USAKA) airfield in support of Integrated Flight Test-6 (IFT-6) in mid-July.

The cupola is divided into two mod-

ules, both containing infrared telescopes, said Kerry Koenig, AST System Safety engineer. The forward module weighs 5,000 pounds and is the size of a Volkswagen.

"[It is] to the best of our knowledge, the largest long-wave airborne infrared telescope in the world," said Al Gurevich, SMDC's representative in Seattle. The aft module contains a Navy Theater Wide sensor for data collection for the Navy.

During IFT-6 the aircraft flew at approximately 45,000 feet to image the intercept, Koenig said.

High-quality infrared data was collected on the intercept, Gurevich said. It will be used to analyze the test.

## Army/Tricare News

# New program helps save Army families

by Staff Sgt. Marcia Triggs

**WASHINGTON (Army News Service, July 12, 2001)** - A program being tested in 17 brigades Armywide offers junior enlisted soldiers the chance to improve their marriages while gaining promotion points.

The new initiative, "Building Strong and Ready Families," was pioneered in Hawaii. It's now running at three brigades at Fort Bragg, N.C.; three brigades at Fort Hood, Texas; two brigades at Fort Drum, N.Y.; one brigade at Fort Wainwright and Fort Richardson, Alaska, one brigade at Giebelstadt and Schweinfurt, Germany; and five brigades at Schofield Barracks, Hawaii.

Brigades started the trial program in May and the trial will last until the end of fiscal year 2003. Hopefully by 2004 or 2005 the program will be established in 185 to 215 brigades throughout the Army, said Chaplain (Lt. Col.) Glen Bloomstrom, the family ministry officer at the Office of Chief of Army Chaplains.

"Statistics show that about 40 percent of Army couples get a divorce," said Bloomstrom. "Many in the 60 percent are stable but unhappy. Adults and children are at an increased risk for mental and physical problems due to marital distress, and conflicts at home lead to decreased work productivity."

"Building Strong and Ready Families" supports the Army Chief of Staff, Gen. Eric Shinseki's, goal of intertwining the soldier's needs with the Army's needs, Bloomstrom said.

"Soldiers come into the military to achieve something. They want to go to school. They want to travel," Bloomstrom said. "They want to serve their country. They aspire to make their marriages work. They don't come in the Army wanting to get a divorce."

### Pioneers of the program

The program was started to help commanders be proactive to family needs instead of reactive, said Chaplain (Maj.) Jonathan McGraw, chief of personnel and research management

in the Army's Pacific Chaplains Office.

Building Strong and Ready Families is a commander's program, McGraw said. The commander has to put it in his organization, he owns it, resources it and gets the soldiers there, he said.

"The commander's interest in a soldier's personal life is a morale builder," Bloomstrom added. "It says to soldiers that, 'you mean something to us.'"

McGraw was one of the chaplains in the Division Artillery, 25th Infantry Division, Schofield Barracks, Hawaii, who was tasked by the then DIVARTY Commander Col. Jose Riojas to develop such a program. It was designed with the assistance of Community Health nurses and it encompasses marital training, mental and physical health, referral services and community resources such as Army Family Team Building.

"Our goal is to increase readiness, retention and recruitment," Bloomstrom said. "What we're offering soldiers is ways to enrich their personal lives, a sense of belonging and pride."

### How the program works

The program has three levels. The first is a duty day of marital training and health assessment usually at an off-post location. The marital training is based on a Prevention and Relationship Enhancement Program (PREP), which focuses on communication skills, problem solving and recognizing danger signs, Bloomstrom said.

"PREP is the heart of our marital skills training, and it is discussed at all three levels. We didn't take something out of the air and say let's show a couple of videos and talk about communication. This program is scientifically based," Bloomstrom said.

During health assessment, soldiers construct a genealogical gram that looks to see if there is a family history of tobacco and alcohol abuse, stress or family violence. The "genogram" also looks for a pattern of spirituality, exercise and nutritional habits.

Level two is another day of training focused on PREP, and couples learn more about preventive medicine. Couples have their height and weight taken and they learn how to perform breast and testicular self-examinations.

The session ends with an interview with a community health nurse and they discuss their genograms, Bloomstrom said. If couples want to talk to someone at the Alcohol and Drug Abuse Prevention Center (ADAPC) because of information revealed on their genogram it's their choice, he said.

"If a soldier is referred to ADAPC or a check-writing class by his commander it seems punitive. However, if a soldier realizes on his own that this is what he needs, it's his choice, not the commander's," Bloomstrom said.

The second part of level two is Army Family Team Building (AFTB) classes. AFTB is great, but a lot of young people are not interested in attending classes, Bloomstrom said. So, soldiers who complete AFTB and all three levels will get four promotion points, he said.

The final level is a 36-hour weekend retreat that focuses on spiritual growth, commitment, sexuality and friendship.

Soldiers volunteer to participate in the program and their eagerness to participate will come from word-of-mouth, he said.

Bloomstrom said it would severely hurt the program to force soldiers to attend. About 150 couples per brigade will have the opportunity to participate in the program a year. It's appealing to people when not everyone can attend, Bloomstrom said.

## Training on Tricare available on-line

TRICARE University, an on-line version of the TRICARE Basic Student Course is now available to anyone who wants to improve their understanding of the TRICARE benefit. This includes individuals whose job it is to provide advice on the military health care program for those seeking in-depth knowledge of the benefit. TRICARE University introduces its students to the health care benefits available for uniformed services beneficiaries and family members. In addition, this course provides customer service guidance and an overview of TRICARE administration.

TRICARE University consists of 13 lessons, practice questions and non-graded examinations that are accessible at the end of each lesson. The questions reinforce lesson content and promote learning with immediate feedback and, if necessary, guided review.

### FA 40s—

Continued from Page 1

Course instructions were divided into three segments beginning with 25 days of classroom instruction. A week was then devoted to off-site visits to the NRO, the National Imagery and Mapping Agency in Washington, D.C., and Fort Bragg, N.C. This included hands-on training with the Army Space Program Office, which has developed the Tactical Exploitation of National Capabilities Space support systems used by Army

A "Course Objectives" button takes students through information related to objectives, prerequisites, and requirements. Those new to the TRICARE University's web-based learning environment can use the "Navigation Tutorial" section to learn how to navigate through the various features and functions available in the course.

At the end of this course, the student will be able to recall the basic benefits of TRICARE options, pharmacy and dental programs, to match available health benefit options with beneficiary eligibility status and category, calculate costs, and file claim forms. They will also be able to find a list of resources available on the Internet and from TRICARE Management Activity if they need further information.

TRICARE University can be found on the TRICARE Web site at <http://199.211.83.208/public>.

warfighters.

The course also included a 43-hour command post exercise designed to test each student's proficiency in 24 individual critical tasks culminating in graduation and assignment to operational staffs and Space systems program offices.

Plans are under way for the next two FA 40 classes that are slated for January and June 2002.

## Recognitions

### Civilian Awards

Lane	Maryanne	P	AC-K-ZA	AMCS
Arbaugh	John	M	LG-L	OTSCA
Broussard	John	F	BL-ME	OTSCA
Correa	Alice	G	AC-K-ZS	OTSCA
Goudy	Mildred	C	IM-C	OTSCA
Long	Ruth Karen	M	LG-L	OTSCA
Miller	Curtis	D	BL-ME	OTSCA
Adams	Gary	M	AC-T-I	PA
Adams	Gilbert	E	SP-AE	PA
Alspach	Elaine	P	AC-T-T	PA
Barnett	Ginger	E	AC-J	PA
Barrineau	Richard	D	EN-V	PA
Belcher	Thomas	M	OP-O	PA
Bell	Patricia	I	AC-K-ZP	PA
Burnham	Brian	D	AC-K-ZR	PA
Duvall	Joan	L	TC-MT	PA
Ennis	Douglas	H	TC-BE	PA
McCluer	Shirley	A	AC-K-RP	PA
Montano	Norman	C	AC-T-A	PA
Pence	Clarissa	M	AC-J-A	PA
Phillips	John	F	AC-T-S	PA
Smith	Waydene	J	TC-MT-D	PA
Trammell	Walter	L	I	PA
Ward	Ross	O	AC-T-I	PA
Hammonds	Stephen	L	AC-J-E	QSI
Oreilly	George	A	AC-J-A	QSI
Wise	Joel	W	AC-J-T	QSI
Erekson	Gwyne	C	AC-K-ZM	SA

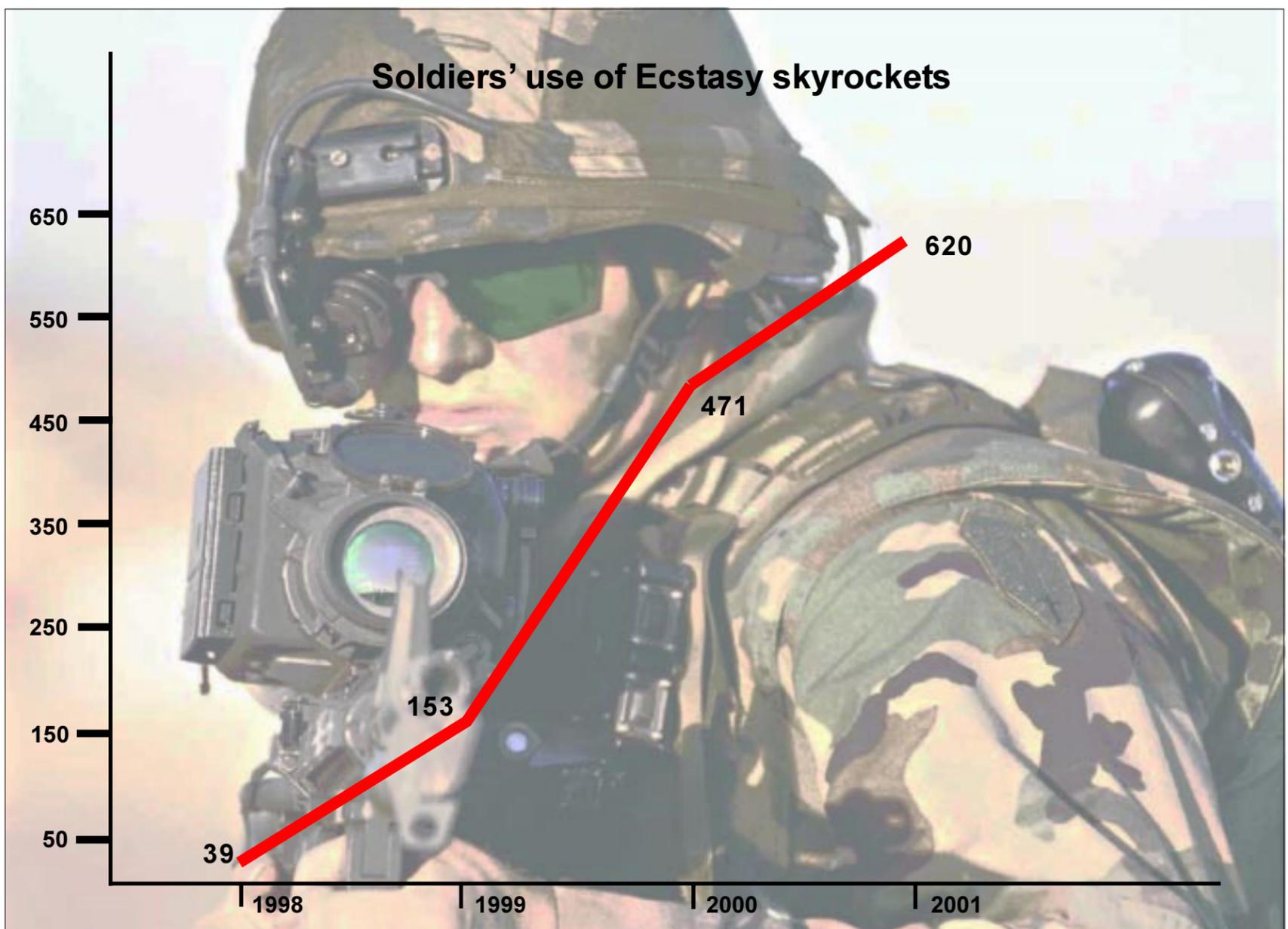
AMCS - Achievement Medal for Civilian Service

OTSCA - On -the-Spot Cash Award

PA - Performance Award

QSI - Quality Step Increase

SA - Special Act Award



## Army campaigns against Ecstasy use

by Joe Burlas

**WASHINGTON (Army News Service, Aug. 7, 2001)**—Army leaders plan to combat the increasing soldier use of the “club drug” Ecstasy with education, hard cold facts and aggressive random drug testing, said Dr. George Chagalis, director of the Army Center for Substance Abuse Programs.

The center will release a computer slide briefing, complete with “Techno” music, later this month for commanders to train their units on the potential dangers of Ecstasy.

“This drug directly affects the combat readiness of the Army—that’s why we are serious about getting the word out on it,” Chagalis said. “Young people today have a feeling of invincibility. They say, ‘It won’t happen to me,’ but the fact is that it does happen to young people.”

One myth the briefing should dispel is that Ecstasy clears the system and cannot be detected after 24 hours of use. The fact is it can be detected up to 72 hours after use and its side effects of depression, mood swings and erratic behavior last even longer, said Edwin Fisher, chief of ACSAP’s prevention and training branch.

While there is still a lot of research to be done on Ecstasy, scientists do know that it affects the brain by drawing out large

amounts of the naturally occurring chemical serotonin. This chemical causes feelings of euphoria and a sense of well-being. However, Ecstasy can cause short-term or even permanent depletion of the brain’s serotonin reservoir.

“Without serotonin, you no longer have joy in your life,” Chagalis said. “Can you imagine a life without a natural sense of joy in it? You would have to be medicated for the rest of your life just for a sense of normalcy.”

And like most drugs, you can become addicted to Ecstasy or die of an overdose—even from a single use, Fisher said.

While the potential adverse effects of Ecstasy are bad enough, Fisher said, throw in the fact most Ecstasy sold on the street is not the real thing, but a mix of other amphetamines and drugs. The sterility of the lab that made the drug is an unknown, he said, and, if Ecstasy is present, you don’t know its potency nor what drug or substance it has been cut with.

One common Ecstasy filler is a drug known as PMA. It directly impacts the hormones that regulate body temperature. Users can suffer hyperthermia, an abnormal heating of the body core temperature. In closed, crowded environments like those found at most Rave parties, the effects can be a body temperature of 104 degrees or more

and severe dehydration.

“This drug’s effect on the body is like a car engine overheating and blowing the radiator,” Fisher said. “There are cases where people have died using Ecstasy laced with PMA and their bodies still had a temperature of 107 degrees hours later.”

ACSAP statistics showed 39 soldiers came up hot for Ecstasy out of 631,918 urinalysis tests conducted in 1998. Positive tests jumped to 153 out of 627,888 in 1999 and 471 out of 679,640 in 2000. Through the end of June, with one more quarter to go in the fiscal year, more than 620 troops have already been identified through urinalysis tests as having used Ecstasy.

All urinalysis samples sent to Department of Defense labs are tested for THC, cocaine, amphetamines and at least one other drug. The additional tests may be for barbiturates, opiates, PCP or LSD. Ecstasy is an amphetamine.

“We still have a lot to learn about Ecstasy, but brain scans have shown that it alters the basic structure of the brain,” Fisher said. “Young people are pretty resilient. Some might be able to take it a few times without feeling any visible lasting effects—but it will catch up with them.”

For more information on Ecstasy and other club drugs, visit the ACSAP website, [www.acsap.org](http://www.acsap.org).

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