UFL KOREA 2005

ULCHI FOCUS LENS

In the recently held Exercise Ulchi Focus Lens 2005, Space played a visible and vibrant role in support of Army, Marine and coalition forces. This exercise was the proving ground for the Space Contingency Operations (CONOPS) devised by U.S. Army Space and Missile Defense Command/ U.S. Army Forces Strategic Command. In order to understand the importance and impact Space was having on the exercise, Army Space Journal Editor-in-chief, Mike Howard deployed to the peninsula with the troops to get the full story.

During Exercise Ulchi Focus Lens 2005, elements of the 1st Space Brigade deployed to Korea to support operations. COL Kurt Story, commander, 1st Space Brigade, explained what the objective of the exercise was for his Soldiers.

"This is the first time we have deployed a brigade size element into a theater to try to validate the theater Space support CONOPS. In the past we sent out individual ARSS Teams. We OPCON'd them to a ground element and then we basically would provide them with some reachback. But we weren't involved in their day to day activities. As a result of that, we didn't have the ability to cross organize or to cross level our work load to ensure we were maximizing our input into the theater," Story said.

"On this exercise we put 108 people on the peninsula. Twenty-five of those out of JTAGS were permanently stationed here but we brought in 83 at one time onto the theater. That is a huge accomplishment. We got six Army Space Support Teams on theater. We got the brigade headquarters and the two battalion headquarters. Not only are we supporting Army elements but we are also supporting Marines, the Combined Unconventional Warfare Task Force and other elements throughout the peninsula."

Story's guidance to the ARSS Teams was to go out and find out what the problems were, find out what effects the warfighter needed, and then tell them how the team could support their needs. This communication with the supported units was very important because, "in some cases the warfighter does not know what he does not know," Story said. "By that I mean we may have a technology or a capability that they are not familiar with. By understanding their problems, by being involved in their planning process we can basically advise them on those capabilities and bring them to bear in a manner that supports them in their warfight."

The following is an article describing how Army Space forces will be managed in the future to support the ground component commander in any exercise or real world operation. It contains the structure that allowed the 1st Space Brigade to be successful during Ulchi Focus Lens.

Enhancing Joint Command and Control of Army Space Forces

How Army Space assets will support the Ground Component Commander

BG Jeffrey C. Horne, COL Kurt S. Story and LTC Troy McKeown

Managing and allocating U.S. Space assets is a dynamic and fluid discipline that demands interaction with all branches of the Armed services and a myriad of "three-letter" national agencies within the intelligence community and others. As the 1st Space Brigade (Provisional) approached its MTOE fielding date of Oct. 16, 2005, it was working to develop doctrine, tactics, techniques and procedures (TTPs), and command and control relationships for today's Space operations across the spectrum of conflicts within the joint realm.

Space Coordinating Authority

During combat operations, the Space authority, as defined in Joint Publication 3-14, Joint Doctrine for Space Operations, and commonly referred to as the Space Coordinating Authority (SCA), will coordinate Space operations, integrate Space capabilities and have primary responsibility for in-theater joint Space operations planning.

The Space authority can be retained at the Joint Task Force (JTF) headquarters or delegated to a component command. In this position, the Space authority designated by the Joint Force Commander (JFC) will coordinate Space support of theater objectives and act on behalf of the combatant commander with primary responsibility in theater for joint Space operations planning.[1]

A number of factors are essential in designating the SCA component. The first and foremost is the preponderance of Space forces in theater. Defining "Space forces in theater" is an interesting, multi-faceted discussion. Should satellites that service joint force commanders globally be considered a theater asset? Is a satellite focused exclusively on a particular mission area for all theaters a theater Space asset? Who "owns" the support structure that flies, manages payloads and maintains the satellite part of the Space infrastructure? It could be argued that these three functions belong to strategic Space forces. It is a stretch to include them in the theater Space forces for one major reason: mission planning and execution for these assets are not done in the theater and they are globally focused multi-mission assets.

Another factor that should be considered when designating SCA is the type and scope of operations. To date, the SCA

LTC Lee Gizzi
Commander, 1st Space Battalion

"By putting Space support teams, for example, at III Corps in their combined fire effects cell, we can do more than just produce images and bring Space information. We can now integrate into the planning process and look at how we can help the ground component forces achieve their desired effects by applying Space as a weapon in that fight. We didn't do that before. Space support teams were out there doing what they did and they did great work, but now we're going to take it to the next level."

"The exercise Ulchi Focus Lens is named for a Korean General Ulchi, who very early in Korea's history — about 1400 years ago — lured a Chinese Army of about 300,000 into a trap and virtually annihilated it. Only about 4,000 Soldiers escaped the ambush. He could only have done that with superior intelligence that he worked very well with. Space allows the Commander (of today) to have superior intelligence. And so, hopefully, like General Ulchi, if it comes to war, we will annihilate the enemy quickly."

– BG Byrne, G-2, 8th Army

MAJ Richard Zellman
Commander, 2nd Space Company

"It's really a fluid process at this point. I think we're evolving in how we understand where Space assets are important on the battlefield. The concept has worked well and there are growing pains as with any organization, trying to figure out the lines of communication and who gets to talk to whom and so on. I think we're working those issues out, I think the concept is valuable ... it really allows us to fuse the whole picture of what's going on in the complete theater battle."

has always been granted to the air component commander. Yet, the priority of effort for many of these operations has been the ground component with the air component playing a supporting role. The joint community should investigate moving the SCA to reside with the ground component during these operations rather than placing it with the air component.

Joint Functional Component Command for Space and Global Strike

The SCA's link to many Space assets is through the newly formed Joint Functional Component Command for Space and Global Strike (JFCC-SGS), the Joint Space Operations Center (JSpOC), and the Joint Commander-Space Operating Forces. The JFCC-SGS is U.S. Strategic Command's (USSTRATCOM) mechanism for planning, executing and synchronizing Space capabilities.

While the SCA may facilitate non-traditional uses of Space assets, the JFCC-SGS should utilize the established processes for planning traditional Space force enhancement missions — intelligence, surveillance and reconnaissance; integrated tactical warning and attack assessment; environmental monitoring, communications, and navigation and timing.[2]

Normally the JFCC-SGS supports a combatant commander's component commander who retains the SCA role. It is comprised of staff personnel with expertise in Space control, Space force enhancement, Space force application, and Space support with augmentees from the other services and Department of Defense organizations. Through the JSpOC, the JFCC-SGS is able to do the following. It gains and maintains Space superiority through centralized command and decentralized execution of joint Space operations when assigned to support global or theater JFC

It conducts Space combat planning and directs Space combat operations across the spectrum of conflict by planning, synchronizing, tasking, integrating and assessing execution of assigned and attached worldwide Space forces (including USSTRATCOM's Unified Command Plan Space missions).

The JFCC-SGS applies Space functional concepts — coordinate and provide full spectrum of Space effects/capabilities to supported commanders (when designated a supporting commander by appropriate authority) through the operational or administrative chain of command. It Provides operational estimates, courses of action, intelligence summaries and weather support. It produces, distributes and executes Space tasking orders to produce Space combat effects in worldwide operations, and it operates and sustains Space Air Operations Center as the primary command and control node of Space forces

As USSTRATCOM's mechanism for strategic planning, executing and synchronizing Space capabilities, JFCC-SGS has further delegated the execution authority and responsibility to its Space component and the joint Space officer who executes through the JSpOC.

As this relationship with the JSpOC matures, so will the

LT Kent Myer, USN
Commander, JTAGS C Detachment

"We are a 24/7 operation that provides theater ballistic missile warning to the Pacific theater for our primary concern. This a big challenge here for us with UFL. We want to enhance our participation next year and fully integrate and play for the entire exercise. This is a good challenge for us because we get to operate and improve our participation with all the ground fighters and air crews here that are operating and also increase our participation in the Space warfare arena so we can provide better coverage and better tools for all the troops out there."

Space support SMDC/ARSTRAT provides to the theater land component commander. Space situational awareness will continue to improve. This relationship will increase our capabilities to maintain knowledge of all Space systems, not just Army systems. It will provide us access to more analysts performing Space-based intelligence estimates thus making it easier to maintain awareness of enemy Space systems and their capabilities.

Evolving Theater Space Support Structure

The road ahead is filled with many challenges and will force Space professionals to redefine the Theater Space Support Structure. SMDC/ARSTRAT is in the process of redefining the new Army Space support structure requirement for both the theater and future capabilities. As the requirements and capabilities are defined, the command must figure out how to employ them efficiently.

The primary mission of Army Space Forces is to support the land component commander in support of the joint force commander's campaign plan. Recent experience in Ulchi Focus Lens (UFL), demonstrates our need to be prepared to also support coalition forces. During the September 2005, Ulchi Focus Lens Exercise the command put Space elements with the 1st and 3rd Republic of Korea armies. To meet the growing support requirements with the current Space force structure, mission analysis becomes ever more critical. The command is also developing smaller, but tailored teams to provide Space support to the warfighter.

Proposed 1st Space Brigade Support

Real world experiences and exercise support have enabled us to refocus our theater warfighting concept, brigade task organization and subordinate unit mission statements. As the brigade redefines its TTPs and concepts, it is developing a template to craft a Space support plan for each theater. Because the threats and concept plans for the major theaters are different, support for each must be customized prior to executing an operation or an exercise.

Recent experiences in exercises UFL, Sharp Focus, and Terminal Fury, and deployments to Iraq and Afghanistan in support of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have provided several lessons. First, the use of non-doctrinal terms to identify the elements that deploy forward causes confusion among the war-fighting community. Second, while every mission is different, we now better understand the joint force commander's information requirements and task organization to best support ground force commanders.

The brigade will deploy their Tactical Operations Center (TOC) to the Joint Task Force (JTF) commander and deploy its TAC to the component that retains SCA. The battalion element or TOC will locate with the ground component commander. The battalion will then pick up the requirement to attach an air coordination team to the brigade TAC in order to support the brigade's role in information operations.

Proposed changes in the structure will improve the support to the ground component commander by refocusing efforts on the battlefield. Placing the brigade TOC at the JTF headquarters will allow the brigade commander to influence and direct the priorities of Army Space support. For example, this gives him the ability to coordinate for cross-leveling or changing the priority of support

COL Eric Walters, USMC

3rd Marine Expeditionary Force

"The 193rd Space battalion, this is the first time they've come out to help us with an exercise, provide a lot of very specific and tailored intelligence support that we don't normally possess. So they come here and provide services in regard to Space weather, they give us additional topographic capability and they also help us with understanding Space effects on navigation and targeting instruments — basically that use geo-positioning data.

For example, when we build our air schedule that decides how many aircraft we need to attack various targets and what kind of ordnance to use, we use a lot of precision munitions that require geo-location data — very precise geo-location date. There are some Space effects that sometimes can affect that data, so the Space battalion gives us information that helps us make sure we use the right weapon at the right time and the right place."

across different components within the task force. By placing a battalion TOC at the ground component command headquarters, we will improve the structure to allow better integration into the ground component commander's battle rhythm to ensure that we are capturing the Space requirements. This will allow Space requirements to be fully integrated into the initial planning phases.

Evolving Capabilities

Emerging capabilities offer opportunity for Army Space Forces to harness existing strategically oriented Space capabilities with critical Space-based force enhancement capabilities and bring those capabilities to the tactical arena in the areas of intelligence, surveillance and reconnaissance, communications and positioning/navigation. Future capabilities will also allow the Army to apply Space power from tactically oriented Space platforms to perform Space control, apply Near Space toolsets, improve persistent intelligence, surveillance and reconnaissance, communications and enhance Space and situational awareness.

The near-space arena offers exciting tactical possibilities in the future for all Army Space Forces. Near-Space platforms, such as High Altitude Airships, provide a persistent loitering that increases the Army Space warrior's capabilities in three areas. Certain payloads could provide a persistent intelligence, surveillance and reconnaissance source. This would increase the maneuver commander's ability to plan and destroy enemy forces, while reducing friendly casualties. Geospatial data will be readily more available to aid in building maps and various other topographic products. Lastly, the platform could provide a long range communications platform that could alter the way the Army looks at re-transmission and greatly extend the range of conventional radios.

Conclusion

In preparation of future changes the Army is constantly reevaluating how it supports the warfighter to incorporate changes to the evolving joint construct, while preparing to deliver new capabilities to the battlefield. The resulting infrastructure integrates personnel with complete Space expertise at all echelons of the chain of command. The overarching objective is to get the benefits of Space effects down to tactical level units in order to give our Soldiers an overwhelming force multiplier on an ever-changing battlefield.

BG Jeffrey C. Horne spent five years with U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command, first as the TRADOC System Manager where he was instrumental in the emplacement of a National Missile Defense system. Following this assignment, he was selected to be deputy commanding general for operations. Horne is currently serving in Iraq as the Joint Fires and Effects Chief, Multi-National Corps – Iraq.

COL Kurt S. Story has been the commander, 1st Space Brigade since August 12, 2004. He commands a brigade of three one-of-a-kind battalions that are spread around the globe, from Colorado Springs to Europe and Asia and Southwest Asia. These units are charged with providing day-to-day Space support to the operational Army. Prior to his current assignment, he was the Chief, G-3 Operations with SMDC/ARSTRAT.

LTC Troy D. McKeown is the executive officer of the 1st Space Brigade and served as the brigade S-3 from 2004 to 2005. He a native of Cheyenne, Wyo., and a graduate of the University of Wyoming.

Warfighter Testimonials

MAJ Rich Lewis
FA40, 8th Army

"We've essentially doubled the size of Army Space support to UFL this year. We've essentially added four more locations that we are providing Space support to this year over what we provided last year."

CPT Charles Alonzo, USAF
Combined Unconventional Warfare Task Force

"For planning purposes, with their geo-spatial products, we were able to provide an overall target intelligence package to the Army Special Operations force component or sub-unit. We were able to give them a comprehensive analysis of a certain region so they could go in there, conduct their operations and understand what the terrain was like. If they were doing a water infiltration they provided a hydrology study to understand what it was going to be like, (things like) tides, ebbs, flows, etcetera. Overall they provided not only intelligence support but also operations support for the mission planning as well as the execution."

LTC Greg Schultz
III Corps

"The Space operations guys bring yet another capability to the corps commander. They help him to better see the environment he is operating in, assess the affects we are trying to get, and in many cases assist in accomplishing those effects."

MAJ Robert Guerriero
FA40, III Corps

"I think Space support to operations is going through an evolution now. Traditionally we have done things like track GPS accuracy, track satellite status, constellation status, Space weather and Space environment in general. We still do those sorts of things, but we are heading more and more toward supporting full spectrum operations where we look at the enemy and the enemy's vulnerabilities from a Space perspective. We look at effects that we can deliver, effects that we can achieve from Space and then we look at how we can assess those effects from Space. That is where Space support is heading."

THE SOLDIER'S PERSPECTIVE

SGT Francena Scott
Geospatial NCO, ARSST #4

"Here on an ARSS team I don't really do as much geospatial work as I would on a TOPO team. Here I get the imagery faster. If you wanted some imagery to do a battle assessment I can give it to you almost immediately. If something happened early in the day I can go in and get it and give it to you that same day where the TOPO team is going to take maybe a week."

MAJ Jesse Morehouse
193rd Space Battalion

"I think one important thing our team understands is that we're not an asset that goes out and actually pulls triggers. What we do is … people plan those missions. We help them make their plans more accurate and better by our presence and by the support we provide with our access to Space-based capabilities."

MAJ Richard Zellman
1st Space Company

"We have a legacy task ... the Space force enhancement task. We can do imagery, we can do 3-D fly-throughs, we can do maps ... we can do Space weather, we can do navigation and accuracy predicts, but I think where we're really important is where we can actually bring an effect to the enemy. All those things I just previously mentioned are items that help make us more efficient. They're not things that directly affect the enemy, but if I can find a way to impact the enemy's communications systems, if I tell the targeting Soldiers in our synchronization cell that hey this is a downlink site for all their critical satellite communications and we hit it with a Joint Direct Attack Munition, well then they can't talk anymore. That's an example of a Space Soldier impacting and actually putting an effect on the enemy."

Gunnery SGT
Michael Lambuth
III Marine Expeditionary Force

"It's good to have that back up there. And some of the stuff they got is really high speed. And I can see a lot of this stuff getting real good use."

SSG Hugo Lara
193rd Space Battalion

"My job was a forward observer. I was an NCOIC for a Stryker Team. When I am developing a product I tell myself what if it is me in there? What if I'm going in there with my team? That is a big role."

MAJ Gary Prater
HHC, 1st Space Battalion

"It's important for us to get out here and show the divisions and corps, and the Republic of Korea for that matter, what our capabilities are and what we bring to the fight. You know, we're doing a lot of effects-based stuff, how we can affect the battle. It's important for us to get out there and show what we can do so that they know what we can do. Hopefully, over all, we'll be able to shorten the battle because of what we bring to the fight. Save lives and move on."

SGT Nicholas Neilson
JTAGS C Det
1st Space Battalion

"It is a very critical mission what we do. We provide every body with warning. It starts with us and works all the way down. It is very important because there is no room for failure with this job. Everything you do is real world mission. So everything you do, everyone is relying on you."