Combined Operations and the BCD

by Colonel Bruce A. Brant

If you think joint operations are tough, try joint and combined. That's what a group of fire supporters are part of every day in a unique unit in the Republic of Korea (ROK). The US Army has four battlefield coordination detachments (BCDs), but only one is combined: the ROK-US Combined Forces Command (CFC) BCD located at Osan, Korea.

Although commonly thought of as the highest level fire support agency in the US Army, officially the BCD isn't titled a fire support agency. As stated in *FM 100-13 Battlefield Coordination Detachment,* the BCD's mission is to "facilitate the coordination and synchronization of the Joint Force Air Component Commander (JFACC) [known as the CFACC in the combined BCD] and Army Forces (ARFOR) ground operations."

In Korea, the mission is greatly expanded to coordinate operational fires for the commander of the ground component command (CGCC). This is currently an evolving mission with the creation of the GCC's future enhanced deep operations coordination cell (DOCC), the fielding of an array of automation systems to the BCD and a changing modified table of organization and equipment (MTOE).

This article discusses the mission, organization and operations of the CFC BCD and examines some cultural challenges inherent in its combined operations.

Mission and Organization

Although the mission statement sounds simple, the BCD tasks are diverse and cover every element or asset of support to the ground commander that flies through the air. These tasks range from targeting to clearing restricted fire areas (RFAs) for Special Forces to coordinating theater airlift for multiple-launch rocket system (MLRS) rocket resupply.

The CFC BCD is authorized 32 Americans and 14 Koreans. It is commanded by a US Field Artillery colonel with a ROK colonel as deputy. The US colonel, like many in Korea, wears three hats: Commander of US forces of the Eighth Army BCD; Chief of the CFC BCD; and Ground Liaison Officer (GLO) for the 7th Air Force.

The BCD operates through four main elements: the operations, plans and intelligence branches and the deep operations synchronization cell. During war or exercises, the detachment expands to well over 100 personnel with augmentees and liaison attachments. Part of the augmentation comes from the 2d BCD, an Army Reserve unit from Anniston, Alabama.

Operations Branch. This branch fights the current battle from the CFACC air operations center (AOC), which is the Air Force's "tactical operations center (TOC)." The operations branch tracks the ground battle for the CFACC and air operations for the CGCC.

The BCD operations officer enjoys what may be the best common operating picture in the area of operations. He is surrounded by the best intelligence systems in the theater. A joint surveillance and target attack radar system (JSTARS) ground mobile station module sits on his desk. He also has three ROK Field Army Liaison Officers (FALNOs) permanently assigned to the BCD. While he gets the top-down picture from the intelligence systems, the ROK FALNOs provide him the most up-to-date ground situation from units in contact as well as the situation outlined in future plans. The operations officer gets updates on the situation through the ROK FALNOs much faster than waiting for an automated picture sent from the GCC or CFC TOCs. LNOs from the 2d Infantry Division, III US Corps, US Marines and other units participating in exercises also provide timely reports.

Given an up-to-date intelligence and common operating picture, the BCD operations officer uses the CFC commander-in-chief's (CINC's) and the CGCC's targeting guidance and high-payoff target (HPT) list to divert assets to targets that might influence the battle. He can do this because of the flexibility of air power and the Army tactical missile system (ATACMS) missions available. For example, during an emergency attack of an HPT, he can instantly clear the congested airspace using his own airspace control element, the US and Korean air force controllers and the airborne warning and control system (AWACS) aircraft. This clears the way to divert aircraft or deep fires in an emergency.

The BCD operations officer uses the integrated tasking order (ITO) to help him determine assets to divert. Normally called the air tasking order (ATO), the ATO is called the ITO in Korea because it must integrate the operations of joint and combined forces: US and ROK Air Forces, Navy and Marine fixed-wing aircraft and sometimes also Apache helicopters, preplanned ATACMS and Special Forces direct action missions. The ITO also contains the airspace coordination order (ACO) that deconflicts airspace and provides guidance to air defense units. This single

Digitizing BCDs

The battlefield coordination detachment (BCD) is primarily a liaison element between the joint force land component commander (JFLCC) and the joint force air component commander (JFACC). The BCD operates within the air operations center (AOC)—an Air Force facility with a significant amount of state-of-the-art automation equipment. Before November 1995, the Air Force was fighting the air war on computer terminals while BCD personnel were using telephones and map boards to accomplish their mission.

When the Chiefs of Staff of the Army and Air Force signed a memorandum of agreement (MOA) in November 1995, among other things, the Army committed to automating its BCDs. Digitizing BCDs became a top priority and the responsibility of the Training and Doctrine Command (TRADOC). Then TRADOC "pinned the rose" on the Field Artillery School at Fort Sill, Oklahoma, and the Depth and Simultaneous Attack Battle Lab became the proponent for BCD digitization.

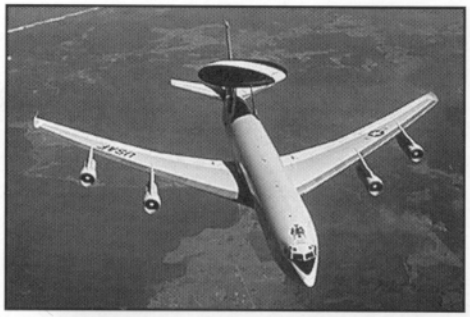
The ABCS Systems. The digitized BCD uses the same systems developed through the various warfighter experiments, the latest at Fort Hood, Texas, in November 1997. The Army battle command system (ABCS) for digitized operations is scheduled to be fielded to the first digitized division in the year 2000 with the Army at large fielded by 2005.

The fielding of the five ABCS systems in the BCDs is best described as a "technology insertion." Those digital systems are the advanced field artillery tactical data system (AFATDS), the all-source analysis system–remote work station (ASAS-RWS), maneuver control system (MCS), air and missile defense work station (AMDWS) and the global command and control system–Army (GCCS-A). (See the figure listing the five ABCS digital systems and the capabilities they bring to the BCDs.)

One of the primary goals of digital systems is to provide near-real-time situational awareness. The ABCS systems share information by exchang-

ABCS System	BCD Support
Advanced Field Artillery Tactical Data System (AFATDS)	The Army's fire support system that can nominate targets for the air tasking order (ATO), monitor the prosecution of the ATO targets and keep Army units informed of their status.
All-Source Analysis System–Remote Work Station (ASAS-RWS)	An intelligence system that generates a "ground picture" of the enemy situation and communicates with supporting military intelligence units, normally all-source control elements (ACEs).
Maneuver Control System (MCS)	A maneuver system that graphically generates a "ground picture" of friendly forces and receives/shares operations plans (OPLANs) and operations orders (OPORDs); it has MS Office software.
Air and Missile Defense Work Station (AMDWS)	An air defense system that graphically depicts friendly and enemy aircraft, receives enemy missile launch alerts from intelligence feeds and executes calls-for-fire to AFATDS.
Global Command and Control System–Army (GCCS-A)	An Army, Marine, Naval and Air Forces system that provides a joint, common operational picture within a theater and tracks aircraft flying against ATO targets.

BCDs are being digitized using the Army Battle Command System (ABCS), which is comprised of the five systems outlined in this figure. The BCDs are the First BCD at Fort Bragg, North Carolina; Second BCD, US Army Reserve, at Anniston, Alabama; Korea BCD at Osan Air Force Base; and US Army Europe (USAREUR) BCD at Ramstein Air Force Base in Germany. (Systems will also go to the Air Force Battle Staff Training School at Hurlbert Field, Florida.)



The Airborne Warning and Control System (AWACS) Aircraft

document ensures a coordinated targeting and attack effort.

The ITO is used as a "play book" by the BCD operations officer and the AOC director of combat operations (battle captain), a US Air Force colonel. Unlike the perception of most fire supporters that the Air Force's ITO is written "in stone," only to be executed as published, at the CFC BCD, the opposite is true. In the AOC in Osan, the Air Force refers to the ITO as the "ITS," the "integrated tasking suggestion." It is a list of assets with missions assigned against the best targets intelligence collectors can produce that meet the CINC's guidance. The BCD operations branch links the intelligence, the attack asset and the CINC's guidance together for timely attack.

Besides the ROK FALNOs and other LNOs, the operations officer has additional assets to maintain an excellent common operating picture. Reporting to him are GLOs and battlefield coordination officers (BCOs). The GLOs are

ing United States message text format (USMTF) messages. Each system brings unique information to the total system. For example, AFATDS provides the locations of artillery units to MCS, which updates its computer screen with the new information and then shares this with the other ABCS systems. ASAS, once it receives an update from its intelligence source, updates the other ABCS systems with the latest "red picture." Because one of the primary missions of the BCD is sharing situational awareness information with the Air Force, telling the Air Force where friendly and enemy units are located, ABCS systems provide the BCD new capabilities to execute its mission.

Fielding Challenges. Inserting the Army's objective digital systems into the BCDs has created several challenges. First, they must be physically installed on the AOC fiber-optic network. Additionally, AFATDS must exchange targeting data with an Air Force system—the contingency theater automated planning system (CTAPS). It is through AFATDS that Army units submit air support requests in the form of a list of prioritized targets to CTAPS. Once CTAPS generates the final air tasking order (ATO), the ATO is sent back to Army units through AFATDS. The BCDs must be fully interoperable with the Air Force and, simultaneously, capable of external digital communications with deployed Army units.

The First BCD at Fort Bragg, North Carolina, was selected to receive the initial suite of ABCS systems. Data collectors closely monitored the First BCD through a number of exercises to develop the tactics, techniques and procedures (TTP) for a digitized BCD and establish a BCD's objective hardware and software architecture. In addition, hardware required for the BCDs in Korea and US Army Europe (USAREUR) were positioned at the Depth and Simultaneous Attack Battle Lab at Fort Sill to validate the horizontal integration of the ABCS systems in accordance with *FM 100-13-1 Tactics, Techniques and Procedures for Digitized BCD Operations*. The integration team also developed the program of instruction (POI) for teaching the new TTP as part of the six-week new equipment training (NET). Then the Korea and USAREUR BCDs received their equipment and NET on digitized BCD operations in 1997.

Because the Korea BCD did not have AFATDS before its digital automation fielding, additional AFATDS work stations had to be fielded to establish the appropriate communications links. These work stations included maneuver units and selected command posts for the submission of air support requests.

The Korea BCD NET training culminated with a one-week communications exercise where the BCD also had its full complement of external data feeds. For example, MCS receives the combined ground picture by accessing an existing theater data base that contains the most recent locations for US and ROK ground forces. Another example—AMDWS receives data feeds that show the location of aircraft throughout the theater as well as receives intelligence information in the event of a Scud missile launch.

The challenge of fielding digital systems to the USAREUR BCD in Germany was that under different contingencies, the BCD could work with one of two Army force candidates: V Corps or the Southern European Task Force (SETAF). This made the theater integration a little more complex; the BCD had a requirement for digital communications with units in Germany, Italy and Bosnia-Herzegovina.

Lessons Learned. Units Army-wide, not just the BCDs, will receive or interface with these systems by early in the next century and can learn from the BCD fieldings. One lesson is that these ABCS systems are complex enough to require highly trained system administrators to keep them running. They also require network engineers to establish and maintain electronic connectivity with dispersed units. The Army's ability to train and maintain the proficiency of these system administrators and network engineers will be a significant challenge.

Software for these systems is continuously in a state of evolution. Before any system's software is modified, it must be tested exhaustively to ensure that interoperability is maintained.

In addition, soldiers of the future must be more computer literate and know how to care for and maintain automated systems.

The technology insertion of ABCS into the BCDs is an Army success story. In less than two years from the time the Army and Air Force signed the MOA, the digitization of BCDs went from concept to reality. By the end of 1998, the last of the four US Army BCDs (the Second BCD, US Army Reserve at Anniston, Alabama) will have its ABCS digital systems. This initiative puts BCD automation out on the Army's–even the joint force's–cutting edge.

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US Army officers stationed with US fighter wings. The BCOs are the ROK "GLOs," stationed with the ROK fighter wings. The BCO position is a fairly recent addition to the ROK Army.

The GLOs and BCOs pass pilot mission reports and aircraft status to the BCD operations officer. This is important in determining whether a target should be attacked again. Mission reports are normally the first form of battle damage assessment (BDA) the operations officer receives. The BCD intelligence officer in the AOC feeds pilot mission reports through intelligence channels while the ROK FALNOs send the information down to the field armies.

Two other elements in the operations branch are airlift and air defense. The airlift element verifies and coordinates with the Air Force all intratheater airlift support requests from the GCC. Besides coordinating air defense warnings and measures, the air defense element provides the liaison between US Army Patriot units and the CFACC, who is responsible for theater missile defense.

Plans Branch. This branch executes many nonstandard missions for the CGCC. In addition to creating timely war plans, the branch updates target lists via the GCC cell; conducts GCC targeting meetings; serves as the ground order of battle agency for the CFACC; supports the combined targeting board (CTB); and ensures the decisions made by the CTB are executed in accordance with the CGCC's guidance for weaponeering, packaging, etc.

In peacetime, the theater CTB meets almost every month (daily in wartime) to update the war plan. Unlike the theater operational plan (OPLAN), air support war plans are written every year and updated as assets are added or reprioritized.

The plans branch of the BCD uses current daily intelligence to update its target lists. It conducts GCC targeting meetings with fire support and intelligence representatives from the ROK field armies, ensuring new targets are prioritized and targeted to meet the field army commander's need to shape his battlespace. The branch also ensures the field army plans and targeting priorities stay within the CINC's and CGCC's guidance.

Intelligence Branch. After assessing daily intelligence, this branch provides the plans branch with updated targets. During exercises, it ensures the operations branch receives timely targeting intelligence on HPTs and enemy unit locations. Using the all-source analysis system (ASAS) and other systems, the intelligence branch is fully integrated with US national assets as well as theater, Air Force systems and the GCC analysis and control element. It also provides the CFACC the overall enemy ground order of battle.

Deep Operations Synchronization Cell. During exercises, the cell meets with the ACC synchronization cell to ensure long-range plans reflect GCC future operations considerations. These missions might include synchronizing an attack on a specific enemy unit using both air interdiction aircraft and attack helicopters, using intratheater C-130 aircraft to move forces and supplies from ports to the forward line of own troops (FLOT), deconflicting airspace during a simultaneous attack on enemy air defense assets using ATACMS, or putting together an air suppression of enemy air defenses (SEAD) package.

Cultural Challenges

A major mission for the combined BCD is to be the intermediary between services and countries to resolve differences and create the best solution for the theater. The BCD continuously works to improve points of friction and frustration.

The Goldwater-Nichols Law forced US services to work together and develop common doctrine. Although there are still difficulties–mostly due to a lack of education of other service's needs and culture–the US has come a long way in a relatively short time. This is especially true outside the Washington "beltway" in a warfighting theater where the enemy continuously tests the coalition's resolve.

However, Korea's armed forces have no Goldwater-Nichols Law to force joint cooperation. The ROK Army, which historically has been the major political force in the country, is ten times the size of the ROK Air Force. For many reasons, the services are not only uncooperative, but also, at times, hostile to each other.

Service and national culture clashes occur in the CTB. In Korea, the CFC CINC delegated the responsibility for coordinating, synchronizing and integrating deep operations and fires beyond the GCC's forward boundary to the CFACC. He also designated the CFACC as the coordinating authority for all fires between the fire support coordination line (FSCL) and the GCC forward boundary. The CGCC, as the supported commander out to the GCC's forward boundary, facilitates synchronization of maneuver, fires and interdiction by designating target priorities, effects and the timing of interdiction operations within his area of operations. The CFACC established the CTB for the CINC to accomplish the broad targeting functions associated with these joint and combined operations.

The CTB consists of ROK and US colonels from the Army, Navy, Air Force, Marines and Special Forces. It is chaired by the chief of staff of the ACC. During the monthly meetings, each representative fights for assets to support his part of the campaign plan. Usually, problems are resolved by holding up the CINC's targeting guidance and getting everyone's support.

However, the CTB also recommends to the CFACC percentages of missions for air apportionment. Here is where it often gets tense. Each component needs the limited assets to support its objectives. Special operations may need jamming support for an infiltration while the ACC needs the same support in a different area to suppress early warning radars during an interdiction mission. Simultaneously, the GCC wants the same jammers on standby in case there's a major enemy movement where a cross-FLOT Apache strike is desired. The CTB must work out a compromise recommendation for the CFACC to send to the CINC.

Different political and military objectives of the coalition members are also a consideration for the CTB. For example, the main mission of the ROK Air Force is defensive counterair. Their overarching objective is not to allow one bomb to fall on Seoul. Although the city is well within North Korean artillery range, the ROK Air Force views the artillery's proximity to Seoul as a ROK Army problem. The ROK Air Force wants to husband its aircraft for counterair in spite of the fact the US and ROK Air Force air-to-air aircraft could quickly sweep the skies of the North Korean 1960's technology air force.

Korea has purchased US counterbattery radars, bought and now manufactures F-16 fighters and recently announced it will buy the multiple-launch rocket system (MLRS), shown here being fired by the 2d Infantry Division Artillery.

The BCD also must take into account the differences in coalition technology that have significant impact on planning. Assumptions American planners tend to make about capabilities–such as air refueling to increase combat radius–do not necessarily apply to the ROK.

An increasing technological gap is in command and control systems (and not only with our UN coalition partners, but also US units that don't have the digital systems or version of software the BCD has). ROK digital systems are limited and voice networks are slow, creating bottlenecks and inaccuracies in reporting. This is not to say the Koreans do not have a modern force. They purchased US counterbattery radars, bought and now manufacture F-16 fighters and recently announced the purchase of the multiple-launch rocket system (MLRS). As a world leader in electronics and computer parts, the ROK has created its own digital systems, some of which are not compatible with those used by US forces.

BCD personnel must stay proficient on ROK and US systems. Recently, the US fielded the CFC BCD with the five digital systems of the Army battlefield command system (ABCS) as outlined in the sidebar to this article,"Digitizing the BCD." These Army XXI systems bring the BCD to the forefront of digitization and command and control modernization.

Coalition doctrine and training differences also cause a cultural gap. For example, the way each country executes close air support (CAS) challenges BCD planners and operators to determine parameters and under what conditions to best use each country's aircraft. In training, Koreans, as most countries, have trouble with American military agility. Americans sometimes seem to be able to operate based on a commander's intent that sounds suspiciously like "move to the sound of the guns and kill anyone not dressed like you." This causes problems in cultures that want to fight the plan as written.

The Korean forces work hard at trying to understand American tactics, techniques and procedures (TTP). For example, the ROK Army was the first defense force in the world to use a Battle Command Training Program (BCTP) modeled after the US. They also flew almost 300 soldiers to Fort Hood, Texas, to participate as the III Armored Corps higher headquarters during the last III Corps Warfighter exercise. The CINC established theater-level "rock drills" as a forum to develop common tactical and operational procedures.

The CFC BCD is leading the charge to bring about "jointness" to the ROK defense forces and bridge cultural warfighting differences. ROK leaders recognize the BCD as the linchpin in their development of joint procedures. ROK personnel assigned to the BCD are specially selected. They all speak English; most trained in the US in schools, ranging from Command and General Staff College to the Cobra Transition Course and even Ranger School.

All the ROK officers in the BCD are an elite, hand-selected, highly trained group of professionals. Their credibility is very important to the success of their mission. They continuously give classes to the ROK Joint Chiefs of Staff, War College, the ROK version of the US School of Advanced Military Studies (SAMS), branch schools and individual units. Recently, they established a block of instruction on air-ground and deep operations as part of the curriculum at a ROK Air Force school.

A tour with the CFC BCD at Osan is one of the most rewarding in the Army. Many soldiers extend their tours to be able to serve with an organization that has a mission against a real-world threat. Using intelligence capabilities they only may have read about, soldiers in the BCD conduct targeting and planning almost daily to ensure that if North Korea decides to invade, all our combined assets will be used most effectively.

Living and working with 7th Air Force personnel and the Korean members of the BCD is an excellent experience and priceless education. Most importantly, the daily tensions in the theater heighten the sense of responsibility and feeling that each member of the unit makes a major contribution to the defense of Korea, an ally and great country.

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