

NAVAL WAR COLLEGE
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THE ARMY DIVISIONAL SIGNAL BATTALION
AS THE FOUNDATION FOR SUPPORT IN
MILITARY OPERATIONS OTHER THAN WAR

by

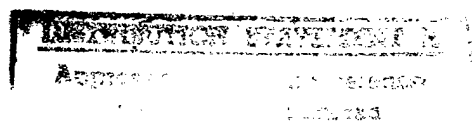
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The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of

THE ARMY DIVISIONAL SIGNAL BATTALION AS THE FOUNDATION FOR SUPPORT IN MILITARY OPERATIONS OTHER THAN WAR

Joint Communications planners are given a variety of responsibilities when given a mission to support a Joint Task Force commander. In view of the principles of joint communications planning and these mission responsibilities, the Army's divisional signal battalions are not equipped or manned to accomplish this task. Joint communications doctrine and the supporting Army doctrine assign a tactical support mission to these signal units. Despite these facts, the 10th Signal Battalion of the 10th Mountain Division was assigned missions to support operational forces. The experiences of the 10th Signal Battalion in both Somalia and Haiti detail the difficulties that occur when units are assigned missions they were not designed to accomplish.

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*"Congress can make a general,
but only communications can
make him a commander."*

General Omar Bradley

Introduction

Even though American military forces have been fighting jointly for many years, it is only since the invasion of Grenada and the passing of the Goldwater-Nichols Act in 1986 that prompted military leaders to consider putting together a joint war fighting doctrine. In addition, the end of the Cold-War prompted an emphasis on military operations other than war. To accommodate the new realities of the post-Cold-War world, the military's communications planners must adjust to new roles and missions across the full range of military operations.¹ As a result of the joint military operation in Grenada in 1983, the United States military was forced to take a good look at how multi-service operations were conducted. In particular, many problems became evident in how communications supported the operational commander. While many of these problems concerned the technical interoperability between different service equipment, other more easily addressed problems existed. One of these concerns is what organizational structure should form the foundation for communications planning for the operational commander. This became apparent in the recent deployments to Somalia, Haiti, and Bosnia. In each of these efforts, military planners had to consider the impact of working with

non-military organizations as well as their sister services. Given the scope of these planning efforts, I believe the Army's divisional signal battalions are not equipped to handle the communications planning and employment for the joint force commander without significant augmentation.

Operational Art

Although the Army has refined its war fighting doctrine over many years, much of this work was confined to the tactical level. It has only been recently that much emphasis has been placed on the operational art. Joint doctrine defines the operational art as "the use of military forces to achieve strategic goals through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles."² In other words, it is the art of determining which actions link the national strategies to tactical actions. For the communications planner, it is determining the most efficient allocation of resources to best support the operational commander. To see if the divisional signal battalion can accomplish this mission, I first looked at joint communications doctrine. The next step is to determine how effectively this joint doctrine is supported by the Army's doctrine. Finally, an analysis of the recent deployments to Somalia and Haiti provided some useful insights using actual communications plans.

Command and Control

Inherent in any operation is the commander's ability to exercise battle command and control. "Command at all levels is the art of motivating and directing soldiers and their leaders into action to accomplish missions."³ With this definition, it is readily apparent that command is not something learned from a textbook, rather it is gained through both study and experience. Control on the other hand refers to a more scientific ability to monitor the organization and to correct any deviation from set standards.⁴ What communications planners do is provide the support systems that make effective command and control possible. "Signal planning increases the commander's options by providing the requisite signal support systems to pass critical information at the decisive times, thus leveraging and exploiting tactical success and facilitating future operations."⁵ Therefore, the goal of the joint communications planner should be to create a system that appears to be a seamless link from the highest level of strategic decision making to the lowest tactical level.

Joint Doctrine

To achieve this goal, joint doctrine defines seven principles that must apply to any communications system no matter what level of war fighting it supports. These principles require that the system be: interoperable, flexible, responsive, mobile, disciplined, survivable, and

sustainable.⁶ For the purposes of this paper, I will concentrate on the principles of interoperable, responsive, and disciplined.

While standardization of equipment can go along way towards achieving an interoperable communications system, "Incompatibilities among systems, standard operating procedures (SOPs), and doctrine can be expected in multinational operations."⁷ This problem becomes even more amplified when military units are working in close hand with other non-military organizations. For this reason, the use of liaisons is a technique that should not be forgotten when trying to plan an interoperable communications system.

In order to keep up with the tempo of the modern battlefield, the C4 system must be responsive. To do this, a system must be created that is "available when needed and must perform as intended."⁸ Planners can provide for responsive systems by building in redundancy. This will provide alternate paths and back-up equipment should a failure occur anywhere in the system.

Because communications assets, especially satellite systems, are usually very limited, the operational C4 system must also be disciplined. "This ensures that limited C4 systems and their associated forces and resources are employed to best advantage."⁹ To create a disciplined system, the planner must determine the extent of centralized or decentralized control that must exist for certain

functions such as spectrum management, system configuration, and information security.

J-6

To accomplish the communications mission of a joint task force, the J-6 has the responsibility to establish and supervise the operations of the Joint Communications Control Center (JCCC). "The primary emphasis for the JCCC is overall systems management..."¹⁰ This includes, but is not limited to top level network control, management of tactical communications systems within the Joint Operations Area (JOA), and strategic communications connectivity within the JOA.

Joint Communications Support Element

To assist in this mission, the Department of Defense has organized and equipped the Joint Communications Support Element (JCSE). This one of a kind battalion sized signal element is under the control of the Chairman of the Joint Chiefs of Staff (CJCS) and must be requested by the operational commander. The primary mission of the JCSE is to provide tactical communications support to two Joint Task Forces (JTFs) and two Joint Special Operations Task Forces (JSOTFs) at the same time.¹¹ It is rapidly deployable for operations of shorter duration not to exceed 90 days. The JCSE provides the communications support to link the JTF or JSOTF to the strategic system and the internal headquarters communications of the supported unit. JCSE support is

tailored to the mission and is comprised of personnel from all services. The equipment organic to the JCSE enables it to interconnect the communications systems of each of the military services as well as many civilian communications systems.

Levels of Communication

The mission of the JCSE to provide tactical communications support brings me to a discussion of how the levels of communications support relate to the levels of war. Army communications doctrine specifies two levels of communications support. These two levels are the strategic systems and the tactical systems. Strategic level systems are those systems referred to as national systems, sustaining base communications, fixed station, or as the Defense Communication Systems. These systems are responsible for the continuous link between the National Command Authority (NCA) and the home bases of military units. These systems remain operational at all times. All other communications systems are considered tactical and include deployable signal assets from any of the services. Due to these definitions, tactical systems can sometimes be employed at the strategic level of war and strategic systems can be employed at the tactical level of war. For example, the 1109th Signal Brigade, a fixed station unit, provided some support to the tactical operations during Operation Just Cause in 1989.¹² On the other hand, tactical systems

like the JCSE and the 11th Signal Brigade, have been used to provide support at the strategic level of war. Operational planners should therefor not link the level of communications support with any particular level of war.

Army Doctrine

To understand what the Army brings to support the JTF commander during military operations other than war (MOOTW), you must first understand some basic Army communications doctrine. To begin with, all units below the Army level (Corps, Divisions, and Separate Brigades) come with their own organic signal units. For example, an Army Corps is assigned its own organic signal brigade made up of several signal battalions. At the division level, there is an organic signal battalion. In general, these units are responsible for linking their supported commander to his subordinate units' headquarters and providing the internal communications to the commander's headquarters. With the absence of specific guidance, responsibility for establishing communications systems goes from one headquarters to another based on the concept of higher to lower, left to right, and supporting to supported. The entire system is made up of three parts: combat net radio, area switching networks, and data distribution networks. This design provides for a flexible system that is very responsive to the operational commander.

In addition, Army doctrine is formed around the idea that terminal equipment is 'user owed and operated'. What this means is that communications personnel in the Army are responsible for providing the wire line access to the communications system and the subscribers are responsible for providing their own telephones or other equipment to actually access the system. The communications personnel for the other services still provide and install all terminal equipment for their subscribers. This will greatly impact on the operational planner if an Army signal unit is tasked to support a multi-service or multi-national effort. In this instance, "Network managers must decide how subscribers requiring support from an Army switchboard will get terminal instruments, and then coordinate to make it happen."¹³

Recent Deployments

Given the enormous range of possibilities during MOOTW, it would be impossible to provide specific guidance for the employment of signal assets to support the operational commander. On the contrary, such guidance must remain general to allow for the flexibility required given the variety of the different MOOTW missions. Since Grenada, the service component with the greatest contribution of communications assets has been given the responsibility of the J-6 and in turn the JCCC. For the operations in Somalia and Haiti, this responsibility was assigned to the Army.

The operation in Somalia was based on a humanitarian mission to feed the starving population and eventually shifted to a mission of peacekeeping. On the other hand, the operation in Haiti was based on nation building. Even though these two missions differed drastically, in each instance, the 10th Signal Battalion of the 10th Mountain Division was used as the foundation to plan the JTF communications system. Based on these two case studies, I aim to show that the division signal battalion is not organized to accomplish this objective given the requirements of joint doctrine.

Somalia

The operations in Somalia can be separated into three distinct phases. The first phase, UNISOM I, took place from August 1992 until December 1992. The operation then transitioned to what was called UNITAF, Operation Restore Hope. This transition took place because relief supplies could not be distributed to the distant parts of the local population. The mission given to this part of the operation was to stabilize the situation in Southern Somalia so that humanitarian supplies had free passage. Once the situation warranted, the mission would be transitioned over to a United Nations (U.N.) peacekeeping force. This U.N. peacekeeping mission started in May of 1993 and lasted until the U.N. ended the operation in March of 1994. This third phase was known as UNISOM II. I will concentrate on the

period of time during the transition from UNITAF until U.S. forces were withdrawn from Somalia.

While a Marine Expeditionary Force headquarters served as the nucleus of the JTF, the 11th Signal Brigade out of Fort Huachuca, Arizona provided the foundation for the JTF communications system during UNITAF. This system ultimately supported a JTF composed of 20 different countries and as many as 49 different U.N. and humanitarian relief agencies.¹⁴ With a mission of "worldwide deployment of a combat-ready signal brigade in response to Joint Staff, Department of the Army, and Information Systems Command mission directives across the spectrum of conflict,"¹⁵ the 11th Signal Brigade was accustomed to planning and managing the diverse nature of a communications system of this size. In order to gain the necessary interoperability between all multinational forces, it is estimated that the U.S. "probably brought in 1300 short tons of communications equipment over and above the TO&E [organic] equipment..."¹⁶ In addition to the extra equipment provided to install this austere communications system, part of what made the system work was the extensive use of liaisons. A Defense Information Systems Agency liaison officer was brought in at the very start of UNITAF. This permitted some flexibility in adjusting communications packages and pathways connecting the JTF to the permanent national communications system.¹⁷ Communications discipline was imposed over all organizations

so that the JCCC could handle the deconfliction of radio frequencies centrally. The communications problems for the operations in Somalia started with the transition over to UNISOM II. During this time, JTF Somalia was formed with the 10th Mountain Division as its nucleus. As a result, many of the communications requirements were turned over to the 10th Signal Battalion.¹⁸ Not only were the officers of the signal battalion staff inexperienced in operations involving multinational forces, they also had limited experience in the joint environment. With the small size of its staff, the 10th Signal Battalion could not manage its own communications network while at the same time handling the JCCC mission of overall systems management. This lack of staff capability combined with a lack of communications and ADP equipment required for joint operations made the division signal battalion a bad choice to conduct this mission.

Joint doctrine also states that "communications planners must consider the termination of U.S. involvement in MOOTW and the transfer of responsibility to another agency."¹⁹ In some instances, systems may have to be left behind temporarily to assist in this transition. This unit, like the 10th Mountain Division itself, has a tactical orientation and is not capable of handling what amounts to an operational mission. "The ability to communicate with all military forces, NGOs, PVOs, U.N. agencies, HN agencies,

religious organizations, and other organizations involved in the peace operation is essential."²⁰ Because of this unit-mission mismatch, the communications system that remained in Somalia during UNISOM II hindered rather than provided for unity of effort. Some elements of the UNITAF JCCC should have remained in Somalia until an appropriate transition to a U.N. organization could have taken place.

Haiti

Following its redeployment from Somalia in late 1993, the 10th Mountain Division was once again called for duty. This time, the mission required the division to deploy as part of a multinational force designed to return the Aristide government to power in Haiti. Before the operation took place, the Army prepared two plans. First, the XVIIIth Airborne Corps developed the plan to be implemented in the event that non-permissive forced entry operations were required. The 10th Mountain Division came up with the plan for the operation should a permissive landing become possible. In each plan, the XVIIIth Airborne Corps became the nucleus of JTF 180 and the 10th Mountain Division formed the nucleus of JTF 190. On 18 September 1994, the decision was made to execute the plan developed by the 10th Mountain Division. Elements of the JTF 190 initiated Operation Uphold Democracy the very next day.

Having learned many lessons from their experiences in Somalia, the 10th Mountain Division headquarters had to

expand in order to accomplish this joint mission. The division staff was augmented with 377 extra personnel to bring the total staff strength to 677 soldiers.²¹ Because of this, it took the JTF 190 staff a period of time before it operated efficiently. For this reason, JTF 180 remained operating on the Mount Whitney for the first five weeks of the operation.

Like the division headquarters, the headquarters of the 10th Signal Battalion had to undergo a drastic expansion to satisfy its joint mission requirements. Key to successful communications execution in Haiti was the proper task organization of all in country signal forces. For the first time, a signal task force (Task Force Signal) was formed with the 10th Signal Battalion as the command element. In addition to the elements of the 10th Signal Battalion, elements of the 11th Signal Brigade and the XVIIIth Airborne Corps' 35th Signal Brigade helped to form this signal task force.²² Having one signal unit in command of all signal assets in Haiti helped to ensure unity of effort in establishing JTF 190s command and control system.

The communications plan called for the 11th Signal Brigade and the 35th Signal Brigade elements to provide the communications systems to support command and control from JTF 190 headquarters and higher. The organic divisional signal assets provided the command and control support for JTF 190 headquarters and its subordinate elements in Haiti.

To do this, several non-doctrinal employments were made. Flexibility was built into the system by placing some Army Mobile Subscriber Equipment (MSE) aboard the Mount Whitney. This facilitated communication between JTF 180 and JTF 190 during the first five weeks of the operation. The flexibility of the Army's MSE system also allowed for the non-doctrinal employment of small extension nodes down to the infantry battalion level. This employment of signal assets provided for added responsiveness to the command and control support system. In the end, the communications network provided by Task Force Signal supported the efforts of 27 different countries in support of this operation.²³ Other non-doctrinal elements supported by Task Force Signal were the U.S. Embassy, the Coast Guard, the Presidential Palace, as well as other non-military organizations. While the communications support provided by Task Force Signal was exceptional, one cannot be fooled to believe that the 10th Signal Battalion was able to plan and execute it alone. The J-6 of JTF 190 as well as the battalion headquarters were both augmented by numerous personnel from units with experience in the joint and operational environments. Alone, the battalion staff was too inexperienced in operational communications to accomplish this mission.

Conclusion

Since the Grenada operation, communications planners have come a long way in providing effective operational

command and control support for the JTF commander. As more and more joint operations are conducted, the doctrine that supports them can be refined. No matter how much this doctrine is refined, communications planners must be aware that no two command and control support systems will be the same in MOOTW. Based on the experiences of the 10th Signal Battalion in Somalia and Haiti, the Army's divisional signal battalions are not equipped to handle joint operational missions. Only after significant augmentation was the 10th Signal Battalion able to cope as the lead JTF signal unit in Haiti and this could not have been done without JTF 180s support during the first five weeks of the operation. If an Army divisional signal battalion is given a similar mission in the future, the operational commander must allow time to augment the battalion with both personnel and equipment.

NOTES

¹FM 100-16, Army Operational Support, (Headquarters, Department of the Army, Washington DC: May 1995), 8-0.

²U.S. Department of Defense, Doctrine for Joint Operations, Joint Pub 3-0, (Washington DC: 1 February 1995), II-2.

³FM 100-5, Operations, (Headquarters, Department of the Army, Washington DC: June 1993), 2-15.

⁴Ibid, 2-15.

⁵Ibid, 2-15.

⁶U.S. Department of Defense, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, Joint Pub 6-0, (Washington DC: 30 May 1995), II-4.

⁷FM 100-23, Peace Operations, (Headquarters, Department of the Army, Washington DC: December 1994), 43.

⁸U.S. Department of Defense, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, Joint Pub 6-0, (Washington DC, 30 May 1995): II-6.

⁹Ibid, II-7.

¹⁰U.S. Department of Defense, Procedures for Forming and Operating a Joint Task Force (Preliminary Coordination Draft), Joint Pub 5-00.2, (Washington DC: 19 March 1996), X-5.

¹¹Ibid, X-7.

¹²Jared A. Kline, "Joint Communications in Support of Joint Task Force South During Operation Just Cause," Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 7 June 1991, 40.

¹³Carl M. Tengen, "Joint Communications Doctrine at the Operational Level," Unpublished Research Paper, U.S. Naval War College, Newport, Rhode Island: 1993, 17.

¹⁴Kenneth Allard, Somalia Operations: Lessons Learned, (Fort McNair, Washington DC: National Defense University Press 1995), 23.

¹⁵Total Army Personnel Command, The Signal Bulletin, (Headquarters, Department of the Army, Washington DC, 1997), 97.

¹⁶U.S. Department of Defense, Procedures for Forming and Operating a Joint Task Force (Preliminary Coordination Draft), Joint Pub 5-00.2, (Washington DC: 19 March 1996), X-9.

¹⁷Kenneth Allard, Somalia Operations: Lessons Learned, (Fort McNair, Washington DC: National Defense University Press 1995), 77.

¹⁸Ibid, 80.

¹⁹U.S. Department of Defense, Joint Doctrine for Military Operations Other Than War, Joint Pub 3-07, (Washington DC: 16 June 1995), IV-5.

²⁰U.S. Department of Defense, Joint Task Force Commander's Handbook for Peace Operations, (Washington DC: 28 February 1995), 42.

²¹U.S. Department of Defense, Report on 10th Mountain Division Operations in Haiti, (Fort Drum, NY: June 1995), 7-6.

²²Ibid, 17-7.

²³Ibid, 7-11.

Bibliography

- Allard, Kenneth, Somalia Operations: Lessons Learned, (Fort McNair, Washington DC: National Defense University Press 1995).
- FM 100-5, Operations, Headquarters, Department of the Army, Washington DC: June 1993.
- FM 100-16, Army Operational Support, Headquarters, Department of the Army, Washington DC: May 1995.
- FM 100-23, Peace Operations, Headquarters, Department of the Army, Washington DC: December 1994.
- Kline, Jared A., "Joint Communications in Support of Joint Task Force South During Operation Just Cause," Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 7 June 1991.
- Tengen, Carl M., "Joint Communications Doctrine at the Operational Level," Unpublished Research Paper, U.S. Naval War College, Newport, Rhode Island: 1993.
- Total Army Personnel Command, The Signal Bulletin, Headquarters, Department of the Army, Washington DC, 1997.
- U.S. Department of Defense, Doctrine for Joint Operations, Joint Pub 3-0, Washington DC: 1 February 1995.
- U.S. Department of Defense, Joint Doctrine for Military Operations Other Than War, Joint Pub 3-07, Washington DC: 16 June 1995.
- U.S. Department of Defense, Procedures for Forming and Operating a Joint Task Force (Preliminary Coordination Draft), Joint Pub 5-00.2, Washington DC: 19 March 1996.
- U.S. Department of Defense, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, Joint Pub 6-0, Washington DC: 30 May 1995.
- U.S. Department of Defense, Joint Task Force Commander's Handbook for Peace Operations, Washington DC: 28 February 1995.

U.S. Department of Defense, Report on 10th Mountain Division
Operations in Haiti, Fort Drum, NY: June 1995.