COURSE 440

KUWAIT – USA COALITON COMMUNICATIONS DURING OPERATION DESERT THUNDER
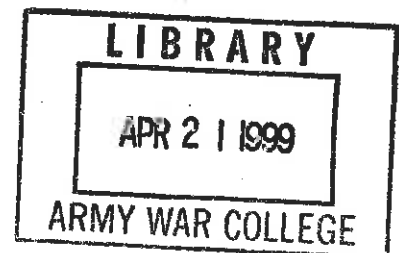
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Report Documentation Page

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ABSTRACT

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This paper presents information about communication support provided during Operation Desert Thunder, joint training with the Kuwait Land Forces (KLF) communication team, and recommendations for future United States-Kuwait communication operations to improve coalition interoperability for future missions. Specifically, the paper addresses actions taken by both the KLF communication team and the 123d Signal Battalion pre-Operation Desert Thunder, the alert process, future Kuwait Land Force communication projects and recommendations to improve joint interoperability between the United States Army and the Kuwait Land Forces.

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INTRODUCTION

". . . we must find the most effective methods for integrating and improving interoperability with allied and coalition partners."

— *Joint Vision 2010*[1]

Today the United States Army operates at an extremely high pace with frequent participation in peacekeeping operations; i.e. Restore Hope, Uphold Democracy, Operation Joint Guard and recently with Operation Desert Thunder/Operation Southern Watch in Kuwait. Leadership, innovation, and flexibility of task organization are essential to the success of continued future operations. Additionally, many of the deployments have found units in a country with little to no communication infrastructure and without the support of Corps-level communication systems. Such was the case for Operation Desert Thunder. Innovation and flexibility were particularly critical to the promotion of interoperable communications during this multi-national operation.

The purpose of this paper is to discuss communication support provided during Operation Desert Thunder, joint training with the Kuwait Land Forces (KLF) communication team, and recommendations for future United States - Kuwait communication operations to improve coalition interoperability for future missions. Section I discusses actions taken by both the KLF communication team and the 123d Signal Battalion. Section II continues with the actual alert and the teaming of the 14th Signal Battalion and the 123d Signal Battalion. Section III proceeds with a limited comparison of lessons learned between Operation Desert Storm and Operation Desert Thunder. Future Kuwait Land Force communication projects are described in Section IV. The paper concludes with recommendations to improve joint interoperability not only between the United States Army and the Kuwait Land Forces, but other coalition forces as well.

COL Hamad Al-Sewaji and LTC Susan S. Lawrence jointly present this paper to provide insight into the communication challenges during Operation Desert Thunder. COL Hamad Al-Sewaji is the senior communications officer for the Kuwait Land Forces. He commands the G6 Staff and the 14th Signal Battalion. COL Al-Sewaji attended several courses in the United States including the Signal Officers Advanced Course, Command and General Staff College and is currently a member of the United States Army War College. LTC Susan S. Lawrence was commissioned in the Signal Corps in 1979. She commanded the 123d Signal Battalion and simultaneously served as the G-6, 3d Infantry Division (Mechanized) during Operation Desert Thunder. Her military education includes the Signal Officer Basic and Advanced Courses, Command and General Staff College and she is currently a member of the United States Army War College.

This paper first unfolds by setting the stage prior to the alert for Operation Desert Thunder. Kuwait is not totally obsessed with Saddam Hussein, but they believe there is a real threat that the "gangster" may return. Even more threatening was the possibility he may use biological weapons against them.[2]

SECTION 1 – PRE-DESERT THUNDER OPERATIONS

KUWAIT LAND FORCES. The Kuwait Land Forces consists of four heavy maneuver brigades and an artillery brigade. The forces are somewhat larger than a United States Army division and are fielded with a mix of equipment including BMPs, T72s, M1A2s and a British Bradley-like vehicle known as Desert Warrior. These KLF units closely monitored activities north of their border.

During the months of September 1997 through January 1998, reports were more frequent on Saddam Hussein's unwillingness to cooperate with the UN agreements. A few defiant acts included violations of no-fly zones, threats to U2 overflights, and interference with UN weapons inspections. Figure 1 gives a few specific incidents.[3]

29 September 97	Iraqi aircraft begin to violate Southern "No-Fly-Zone".
11 October 97	Iraq deploys SAM missiles into Southern "No-Fly-Zone".
27 October 97	Iraq threatens to shoot down UN sponsored U2 surveillance flight.
29 October 97	US threatens Iraq with "serious consequences" if U2 flight is fired upon.
November 97	US deploys USS George Washington and AEF to Arabian Gulf and Diego Garcia.
13 January 98	Iraq regime blocks UNSCOM inspection team led by Scott Ritter.
29 January 98	Saddam Hussein declares Iraq is prepared to defend itself against U.S./U.K. airstrikes.

FIGURE 1. Pre-Operation Desert Thunder Activities

In January 1998, the United States Department of State announced a voluntary departure of dependents and non-essential personnel from Kuwait and Saudi Arabia. This action triggered a huge response from the Kuwaiti people as well as the Kuwait Land Forces. In a short period of time, the government of Kuwait deployed their armor and infantry battalions to battle positions in the desert north of Mutlar Ridge.

Tensions were extremely high. Kuwait Land Forces combat units were deployed and the decision was made to load weapons. One example of high tensions was when an accidental

discharge happened in an armor battalion camp and a "fire-fight" began within the Kuwaiti's own perimeter. It was some time before the Kuwaitis stopped shooting and fortunately no one was hurt.

Right after this incident, the Ministry of Interior (also known as the secret police) started setting up checkpoints throughout Kuwait. All advisors from the Office of Military Cooperation – Kuwait (OMC-K) were ordered to wear bulletproof vests. Advisors were also instructed by the Kuwait government to stay out of the old Souk (*sook*) shopping area in Kuwait City. These protective measures were taken to increase operational security (OPSEC) and to reduce risk to Americans stationed in Kuwait.

KUWAIT LAND FORCES G-6. Today the primary means of communications for the Kuwait Land Forces is the Racal VHF FM radios, known as the Jaguar, and the SINCGARS radio. The Jaguar radio is a British "push to talk" half-duplex radio. One other FM radio used is a Russian single-channel FM radio. Currently, one battalion of the Kuwait Land Forces is required to use this radio because it was fielded with the BMPs. The use of three different FM radios is an issue that affects command and control. The three radios are not compatible. This will be discussed further in Sections III and IV.

Prior to Operation Desert Thunder, the 14th Signal Battalion conducted reconnaissance to identify potential signal repeater or retransmission sites. COL Hamad Al-Sewaji conducted a number of test shots to validate the network north to the Iraq border and south to Kuwait City. ITT was also contracted to conduct a number of SINCGARS instructor and operator classes.

In addition, COL Hamad had combat units turn-in their radios for testing and maintenance. The RACAL country representative, Harry Tan, obtained over $30,000 in repair parts from the

United Kingdom overnight to improve the turn-around time and to get the radios back to units as quickly as possible.

123d SIGNAL BATTALION. The 123d Signal Battalion was heavily engaged in normal activities at Fort Stewart, Georgia. In December 1997, there was a Division CPX and a deployment exercise for the Division Rapid Brigade (DRB). This was a challenging time for the battalion because all of the assigned Mobile Subscriber Equipment (MSE) equipment was going through an upgrade that required an intensive operator training program. The battalion was specifically tasked to participate in the division exercises, conduct operator training on the upgraded MSE equipment, and prepare for 3d Brigade's NTC rotation in January.

Leaders of the battalion were listening to news reports from the Middle East and knew Saddam Hussein was once again flaunting his ability to not cooperate with the signed peace accord. Specifically, he was denying uninterrupted access to the UN weapons inspectors. The 123d Signal Battalion had one of the highest OPTEMPOs in the division for 1997. Although there was obvious interest in the Middle East, the leadership was extremely sensitive to protecting days off during the holiday season for the soldiers and their families.

The New Year approached with many unknowns facing the United Nations, Kuwait, and the United States Army.

SECTION II – ALERT – OPERATION DESERT THUNDER

Tensions continued to mount in Kuwait as February approached. The leadership of the 3d Infantry Division (Mechanized) was quietly alerted of a possible deployment. The key leaders gathered in the War Room where initial planning began.

Major General James Riley, Commanding General, 3d Infantry Division (Mechanized), hand-picked his planning team. He was extremely adamant that no other individuals be told what was going on. This included our own personal staffs and our higher headquarters, XVIII Airborne Corps. Leaders were sensitive to keeping a military build-up quiet. This was done to ensure UN diplomatic efforts were not thwarted by the impression that there would be an imminent attack against Iraq.

Many rumors arose over a possible deployment and keeping a lid on the division's planning efforts was very difficult. Soldiers knew their leaders and division staff were not conducting normal operations. Family Support Group Leaders were key in keeping spouses calm and informed.

By the first week of February, deployment to Kuwait seemed a real possibility. Brigade and battalion commanders were told to ensure 100% of their soldiers had up-to-date Soldier Readiness Packages (SRPs). All vehicle load plans were verified and soldiers' uniform and boot sizes were turned in to G-4 for issuance of Desert Camouflage Uniforms (DCUs).

The decision was made to send the Assistant Division Commander – Maneuver, COL (P) William Webster, and an eight-man team to Kuwait to begin preparations in case of deployment. This team was critical in getting answers to the division's request for information (RFI). Daily video teleconferences (VTCs) were conducted between this team and key division leaders back at Fort Stewart.

The President's Day four-day weekend approached with no word on if, or when, an actual alert would take place. The Commanding General made the decision to place Force Package 1 on a 2-hour recall. On Monday at 0800, 17 February, the alert was sounded and units immediately began preparation for movement.

Many debates preceded the deployment on where to place communications assets in the flow into Kuwait. Ultimately, the commanding general decided to accept some risk by placing the equipment later in the timetable. Information Operations can convey to an adversary a very strong message through the media – the power of forces he will face. This is the image CINC, USCENTCOM and the 3d Infantry Division (Mechanized) Commanding General wanted to send to Saddam Hussein. The first planes that land, with CNN on the runway, would show iron-faced combat soldiers ready and willing to strike Saddam Hussein if necessary. The decision also helped the signal battalion because there was equipment at the National Training Center (NTC), Fort Irwin, California that was needed in Kuwait. Aircraft were sent to the NTC to bring this equipment back to Fort Stewart. Lastly, putting the battalion later in the flow allowed additional maintenance and preparation time.

Operation Desert Thunder was different from any other operation of the past. General Anthony Zinni, Commander in Chief, United States Central Command (CINC, USCENTCOM), and his staff devised a new method of deployment that would resolve the latest confrontation with Iraq. This new method was a "just enough, just in time" force to show a coalition commitment during the UN negotiations with Iraq. UN Secretary Kofi Annan stated the deployment was key to achieving the diplomatic success.[4] In fact, General Zinni stated "deploying a multi-service, multi-national force, large enough to actually defend Kuwait, and clearly configured to expand further, has drastically altered the region's military calculus."[5] Coalition Task Force – Kuwait (CTF-K) was basically a land-based task force composed primarily of Army and Marine Corps units as shown in figure 2 below.
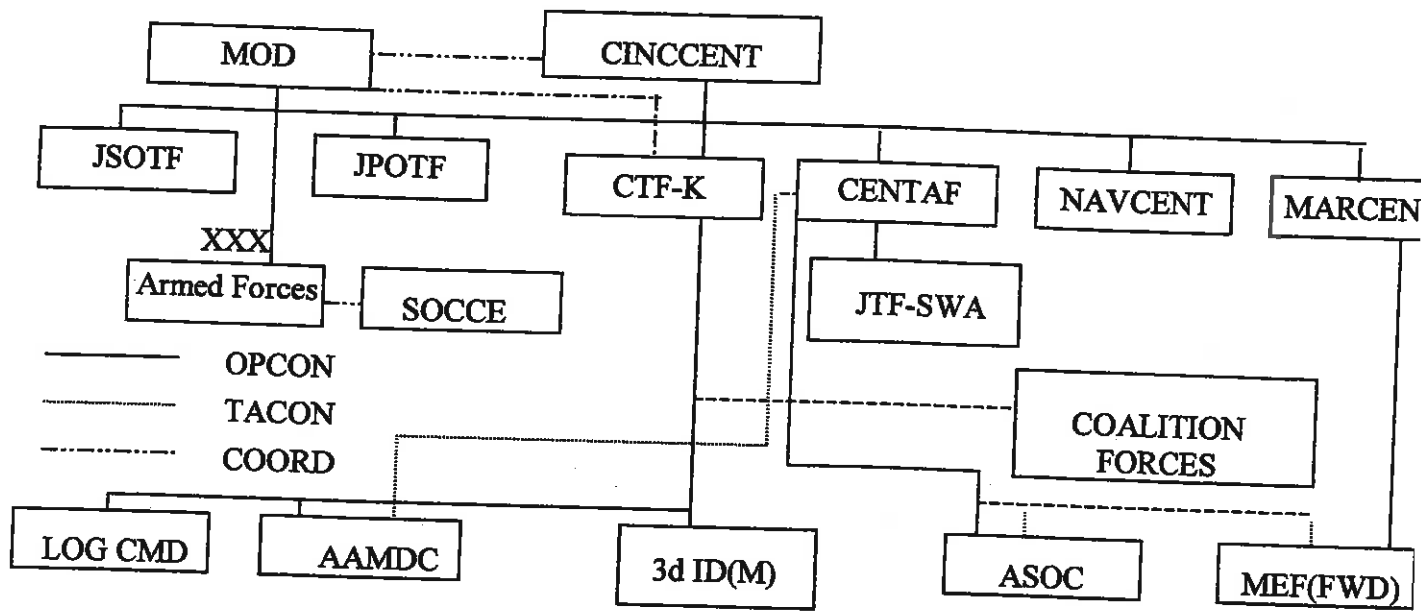
Figure 2. CTF-K Organization

The CTF-K organization sent a powerful signal to Saddam and clearly met the CINC's intent of sending just enough, just in time. The deployment of CTF-K Force Package 1 was completed by 27 February 1998. The next step was to rehearse the actual war plan in Kuwait. This was done through a serious of exercises including rehearsals, rock drills, command post exercises (CPX), live fire training, and a Close Air Support Exercise (CASEX). Figure 3 continues the timeline in country.

17 February 97	Iraq disperses Air Force and mechanized forces. 3ID(M) is alerted to deploy to Kuwait.
25 February 97	Full BCT is combat ready. MEU sends one company ashore for training in Kuwait.
15 March 97	US anthrax vaccinations begin. Iraq units begin to return to normal parking.
22-25 March 97	CTF-K and Kuwaiti Armed Forces conduct combined CPX.
31 Mar-19 Apr 97	US Forces conduct force-on-force maneuver and live fire training less than 30 kms from Iraq.
25-27May 97	CTF-K conducts CASEX in Kuwait including J-STARS. Up to 90 sorties were flown a day.
Early June	Redeployment begins.

FIGURE 3. Operation Desert Thunder Activities

Beginning 7 March 1998, Iraq begins to return Air Force assets to normal parking and dispersal sites. The decision was made by the CTF-K leadership to continue to train with coalition forces. After a series of meetings and rehearsal, a full CPX is executed with CTF-K and Kuwait Armed Forces. A number of effective after action reviews (AARs) proved helpful in continued improvements to operations. The CPX was followed by the conduct of a force-on-force maneuver exercise and live fire training on Kuwait's Udairi Range. This exercise was conducted less than 30 km from the Iraq border. In addition, observer controllers (OCs) were flown in from NTC to actually evaluate the brigade combat team. This was an extremely successful operation set in a real-world environment. Figure 4 is the map of Kuwait, which shows placement of 3d Infantry Division (Mechanized) assets during Operation Desert Thunder.

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1 - 1st BCT - Udairi Range
2 - NC 60/FFA Kabal
3 - Avn Bde/Ali Al Salem
4 - NC 64/Mutlar Ridge
5 - NC 61/HQ 3ID(M) Kabal
6 - Camp Doha
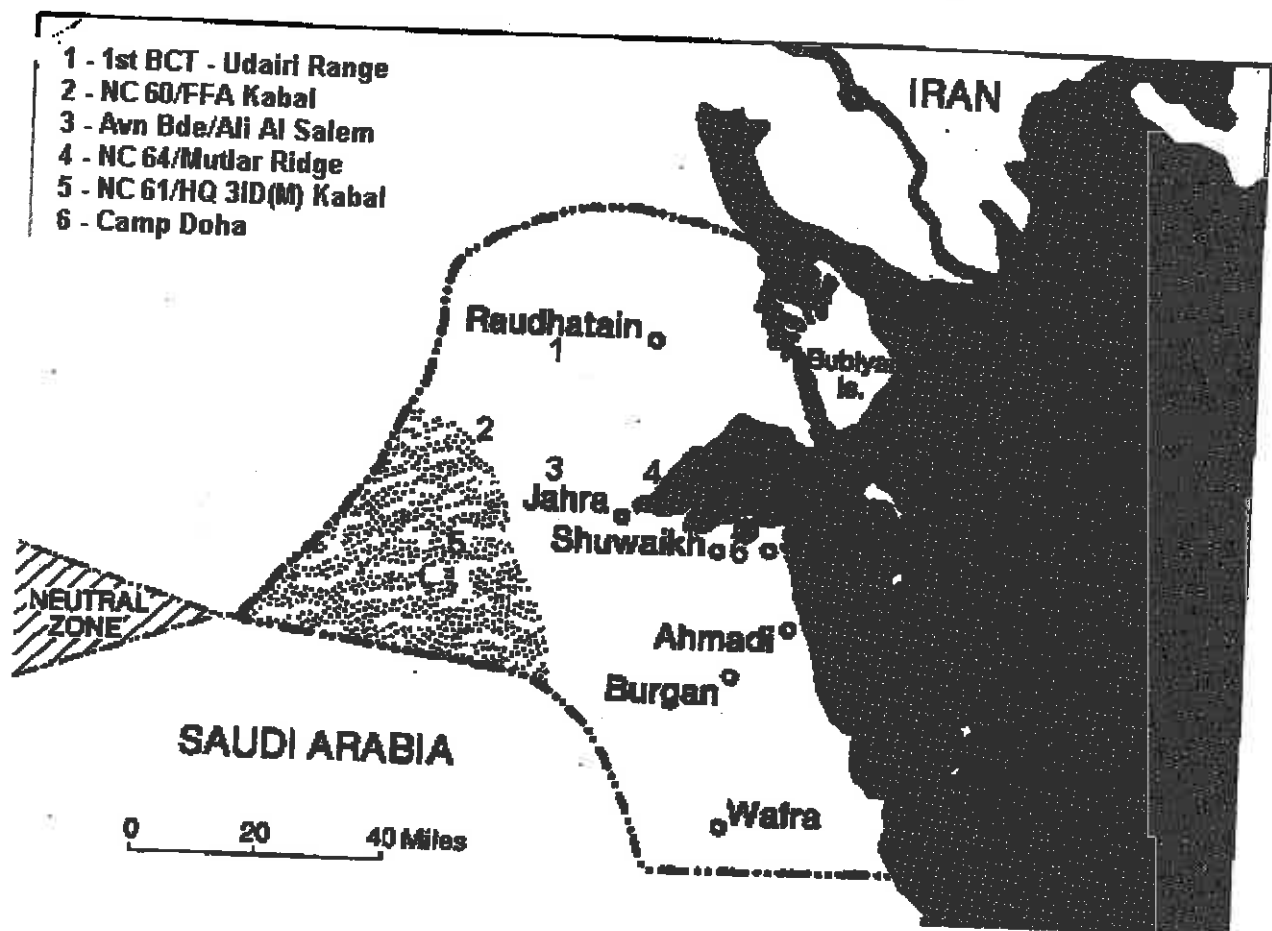
Figure 4. Kuwait Map

Plans continue to develop and the last joint exercise is a CASEX on 25 – 27 May 1998. Over 90 sorties a day were flown and the flights included immediate intelligence reports and feedback from JSTARS. All training objectives were met and redeployment planning took place next.

Two other dates of interest are 15 and 26 March. March 15th is when anthrax vaccinations began. This was a smooth operation with no soldiers refusing to take the vaccination. A series of three shots were given while in country. On 26 March, the UNSCOM inspections resumed. The first inspections included Presidential Sites and they were done without incident.

The leaders of CTF-K and Kuwait Land Forces also tasked their respective units to formalize a training plan with the coalition partners. COL Hamad Al-Sewaji and LTC Susan Lawrence developed a comprehensive training plan that first began with a tour of 123d Signal Battalion sites. The officers from both organizations bonded very quickly and learned a great deal from each other. COL Hamad requested 123d Signal Battalion instructors focus on the Deliberate Decision-Making Process and Troop Leading Procedures. Figure 5 is a picture of key Signal Corps leaders from both organizations during the joint training exercise.

There were a few cultural challenges, but these were overcome very quickly. The first hurdle was language. Although, the majority of the Kuwaiti officers spoke fairly good English, we did use an interpreter from the 103d Military Intelligence Battalion. However, when we broke down into small teams to do practical exercises, the young officers found a way to communicate effectively. The second challenge was how non-commissioned officers (NCOs) were used in the organizations. The Kuwaiti NCO is a very skilled professional, usually on one particular specialty. The American NCO's are used as the "backbone" of our forces. They are not only specialized in a technical area, but they are tactically proficient and are the primary trainers and leaders of soldiers.

American forces need to be sensitive to the cross-cultural dynamics when they deploy overseas. Leaders of United States forces continuously emphasized that we were "guests" of Kuwait and as such should always conduct themselves properly. "There are we normal Americans; then there are 'those people' you don't touch with your left hand, at whom you don't point the sole of your foot, to whom you don't offer alcohol, etc. This mind-set reinforces rather than lowers the psychological barriers between the Americans and the host populace."[6] What is

important is our soldiers respect the ways of the host country including their language, customs, and religion.
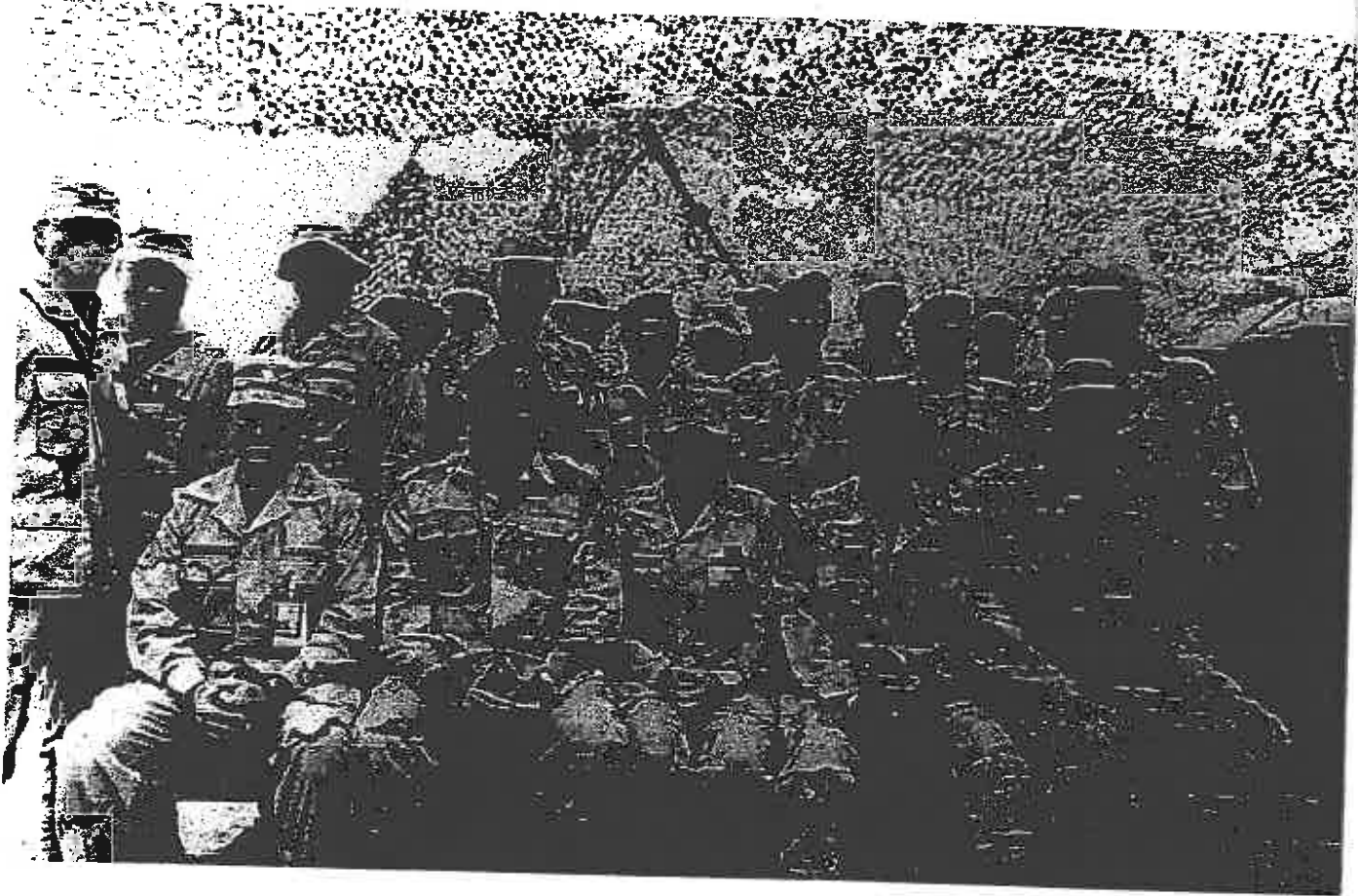
Figure 5. Joint Signal Corps Leaders

We will give one "war story" as an example. An important tradition to Kuwaitis is the conduct of diwaniyas (*di-wa-knee-yas*). This is a forum where men, and men only, come together to discuss politics, raise issues and generally socialize. A meal is normally served at diwaniyas. At the end of the CTF-K and Kuwaiti Armed Forces CPX, the leaders of the KLF invited the leaders of the 3d Infantry Division (Mechanized) to a diwaniya. At one point during

the meal, LTC Susan Lawrence laughed. Major General Riley said General Salem, the KLF commander, sat straight up and proclaimed, "There is a woman in here". General Riley said "yes", that I was his senior communication officer. There were a few tense moments until General Salem was introduced to LTC Lawrence, shook her hand and, fortunately, the dinner continued.

A number of very valuable lessons were learned from the deployment, training exercises, and interchange with our coalition partner.

SECTIN III – LESSONS LEARNED BETWEEN OPERATION DESERT STORM AND OPERATION DESERT THUNDER

There is actually no comparison between the communication assets deployed during Operation Desert Storm and Operation Desert Thunder. General Anthony Zinni (CINC, USCENTCOM) task organized a response task force to meet the challenge from Iraq when they violated the peace agreement and failed to cooperate with the UN weapons inspections. His goal was to take "just enough, just in time" to respond to this threat. USCENTCOM and 3d Army were the clear, defined strategic leaders of Operation Desert Thunder and served as the Headquarters, Coalition Task Force (CTF). The 3d Infantry Division (Mechanized) deployed as the tactical unit. The challenge for information flow came when XVIII Airborne Corps did not participate in the operation. The division faced a non-traditional relationship and there were multiple challenges to information flow. The task from CENTCOM to 3d ID (M) was to deploy with just enough, just in time with the right assets to execute a defensive operation against the threat of Iraq.

Specifically, the 123d Signal Battalion was tasked to provide communication support to the 3d Infantry Division (Mechanized) mission for Operation Desert Thunder. The original

guidance was for one company's worth of node centers and just enough additional equipment to support a division tactical command post, division jump command post, one brigade combat team command post, Force Field Artillery (FFA) command post, aviation command post and the Forward Support Battalion (FSB). There was also a requirement to be prepared to provide connectivity to joint and allied forces; initially unidentified.

Based on this guidance the battalion prepared load plans for two node centers, fourteen SENS, five multi-channel tactical satellites (TACSTATs), two Enhanced Position Location Reporting System (EPLRS) net control stations (NCSs), and two division retransmission (RETRANS) teams. Once in-country, it became very clear that the unit would need a third node center to solidify the network and reachback to the CTF headquarters at Camp Doha. Permission was granted to flow the third node center with Force Package 1. The map on page 9 shows the final placement of key node centers. Figure 6 shows the communication diagram used during the initial deployment of the 3d Infantry Division (Mechanized) units. Figure 7 shows communication connectivity between the Kuwait Land Forces brigades.
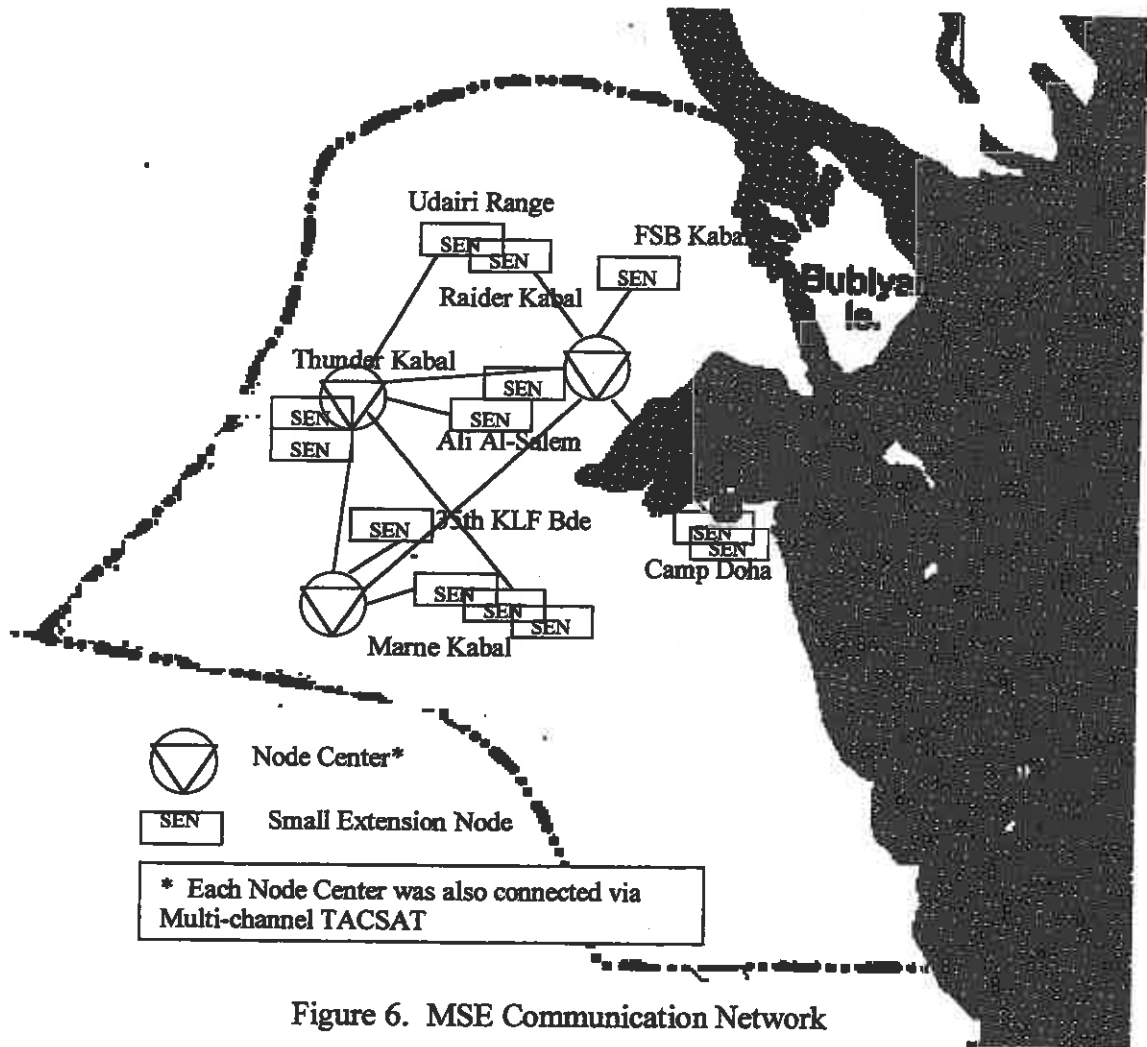
Figure 6. MSE Communication Network
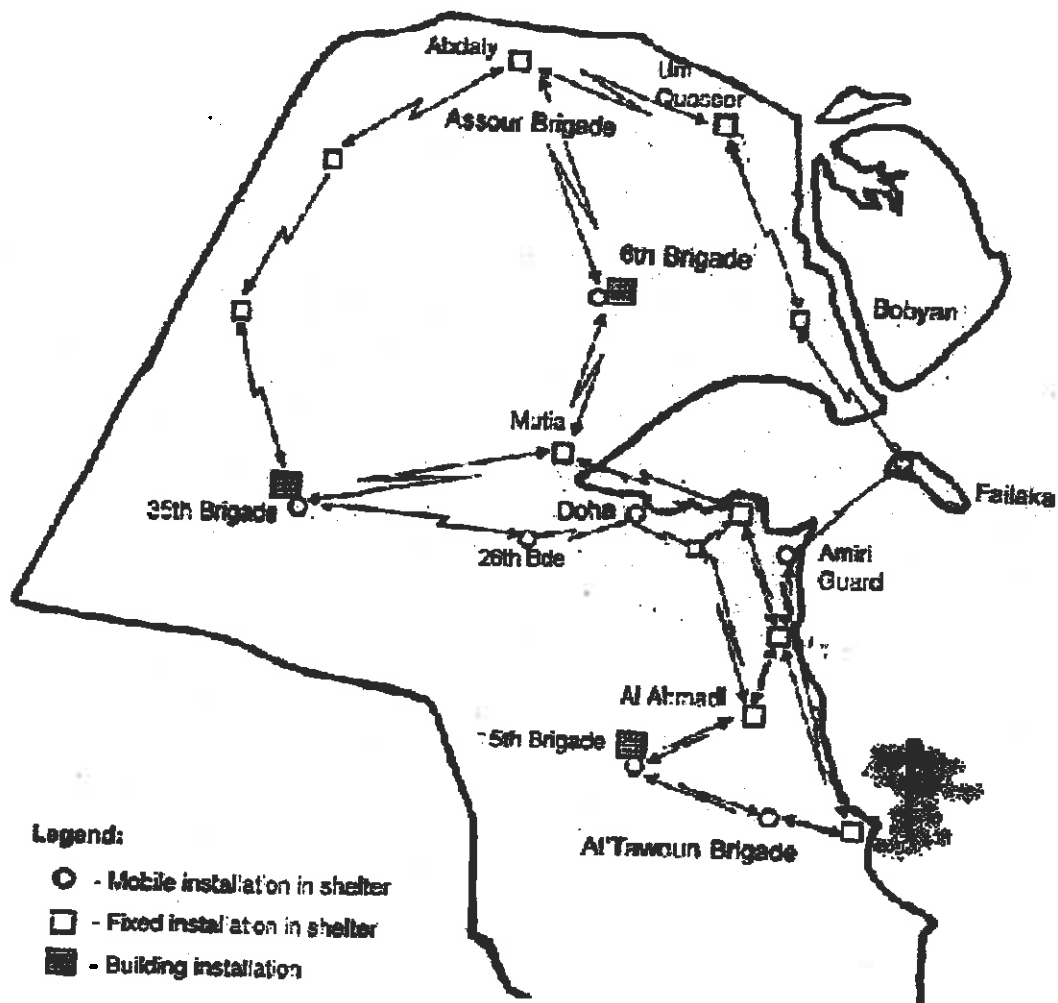
Figure 7. Kuwait Land Forces Communication Diagram

The lessons learned that should be compared between Operation Desert Storm and Operation Desert Thunder is the required information that must flow between joint and coalition organizations. A brief discussion of these categories follows.

Secure Communications with Higher Headquarters

First and foremost, a commander requires secure voice and data communications with all headquarters; higher, lower and laterally. These links may take many forms; GCCS, SIPRNET,

and tactical telephones just to name a few. Orders, mission guidance, commander's intent, PIRs, CCIRs, logistical data, force flow and situational updates must be readily available to all command headquarters. It is essential that this information be passed quickly and accurately. This will shorten the commander's decision making cycle and give him an operational advantage over the enemy.

Advances in Command, Control, Communication, Computers and Intelligence (C4I) technology and pre-positioned equipment sets have improved since Operation Desert Storm. Only one Middle East country (Bahrain) allowed United States military equipment to be pre-positioned prior to Operation Desert Storm. Today multiple countries allow the United States to place equipment forward.[7] Of concern though, is that no communications equipment is pre-positioned in the Middle East. Many airframes were used during Operation Desert Thunder to transport all communications equipment.

Secure Communications with Joint and Allied Forces

In order to effectively command and control the total force, a commander must have secure data communications when deployed with joint and combined forces. On today's battlefield, the primary means of transmitting orders, spot reports, and combat updates is some form of voice communications; i.e. FM. A faster and more reliable means is data communications. Any system used by the forces must be capable of interfacing with all coalition forces. In addition to using NIPRNET and SIPRNET over MSE, the use of Video Teleconferencing (VTC) has greatly increased.

VTC provides commanders simultaneous, multi-point, real time, voice and video connectivity. This means allows a commander to more clearly convey his intent through the use of real time voice and simultaneous display and graphical data. For example, a commander can

conduct a rehearsal of a plan with subordinate and allied commanders and staffs in their own Tactical Operation Centers. During Operation Desert Thunder, VTC was used to conduct daily operational updates between the CTF-K Headquarters at Camp Doha and 3d Infantry Division (Mechanized) Headquarters at Marne Kabal. This saved many hours of travel time.

Section I introduced the problem of the KLF having three different FM radios. Today there is no compatible communication assets between the United States Army and the Kuwait Land Forces. Current plans are to field ITT SINCGARS to three of the four brigades. However, the encryption device between the two countries is not compatible. The forces would only be able to communicate in the clear. As during Operation Desert Storm, the primary means of communication is the liaison officer (LNO). Kuwait is expending a great deal of money to improve communication technology. Section IV discusses this in more detail.

Intelligence Resources

The commander must have timely and accurate answers to Commander's Critical Information Requirements (CCIR). With this, a commander is better able to visualize his battlespace and apply the correct amount of force at the critical time and place to achieve decisive victory. This requires access to real time intelligence products from a variety of sources to include national-level resources, and local open sources such as news media, commercial sources and academia. As proven in the Gulf War, the international news media is on the cutting edge of world events. The media provides pictures and first-hand data many times faster than an intelligence source receives, processes, analyzes, and disseminates the same information. The commander also needs real-time targeting information through national reconnaissance, intelligence, surveillance and target acquisition (RISTA) assets. This information was provided during Operation Desert Thunder on an as-needed request and throughout the CASEX.

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The intelligence effort provides current, accurate threat and targeting data to weapon systems and intelligence sensors. Their effectiveness is dependent upon the rapid movement of data between collector, processor, decision-maker, and shooter. [8]

A foreign disclosure office structure exists today for intelligence-related releasability issues.[9] The goal is to continue to share intelligence data among coalition forces. The division G-2 and the KLF G-2 spent many hours together rehearsing how intelligence information would be passed during the execution of the war plan.

Responsive Logistics System

Joint Force Commanders need to establish and coordinate a flexible and responsive logistical support system. A responsive supply system provides the commander flexibility to exploit opportunities on the battlefield. They supply system must respond to the commander's intent and his priorities while anticipating future requirements. Accurate and timely information is a must. Data communications plays an integral part in flowing supplies into a theater. The supply systems transitioned from a mass system into a just enough, just in time support system. Modern sophisticated military logistics requires reliable communication systems. Just enough, just in time supply system relies on a robust communication and transportation network.

Key to the new method of deployment for Operation Desert Thunder, "just enough, just in time" depended on a small theater logistics footprint. The Kuwaiti's were extremely generous in providing at no cost bulk fuel, fresh food, water, facilities, use of ammunition and vital assemblies like main battle tank engines and transmissions.[10] Unfortunately, there was no communication repair parts in country. All equipment had to be sent to Europe or back to home station for repair. Because of the turn around repair time in Europe, almost all equipment was sent back to home station at Fort Stewart, Georgia.

The next two areas are mostly of importance to the forward deployed United States Army.

Split Base Capability

A deployed commander must leverage existing Army and Department of Defense (DOD) agencies for split base operations. As we have seen in the past, a division rarely deploys in its entirety. Forward force packaging results in only a portion of the division being forward deployed with the remainder in the division base. Therefore, to conduct split base operations, a commander must have access to both classified and unclassified voice and data communications with home station and DOD agencies. Specifically, a commander needs to access DSN, SIPRNET, NIPRNET, and VTC.

Communications links between Kuwait and Fort Stewart, Georgia were extremely critical during Operation Desert Thunder. One-third of the division was deployed to Kuwait with normal operations continuing at Fort Stewart for the remaining two-thirds of the division. One particular incident during the deployment where communication links to home station were critical, was when a tornado hit Fort Stewart. There was a tremendous amount of damage done to the post and two lives were lost during this horrific storm. General Riley was able to conduct an immediate VTC with Fort Stewart to get a first-hand report on the damage.

Morale Support Operations

Rear Detachment operations and Family Support Group activities have evolved since Operation Desert Storm. The ability for a soldier to maintain communications with home station increases morale and is a combat multiplier. Additionally, these operations are a commitment to our high quality soldiers. Through these communication channels, the soldier can update his records and prepare for promotion boards. Support tools available to the commander are electronic mail (E-mail) and morale support telephone calls. Electronic mail supplements postal

operations and can provide rapid communications even in the early stages of a deployment when postal operations are still being coordinated. Limited morale support telephone calls through a tactical switch can reassure family members and provide the soldier peace of mind.

Certain hours were set aside for soldiers to call home during Operation Desert Thunder and access to e-mail was also provided. Each Kabal was equipped with AT&T phone banks as well. The postal service was extremely dependable.

The last part of this section will discuss specific communication challenges the division experienced at the beginning of the deployment.

Answering The Challenge

Defense Switching Network (DSN):

PROBLEM: The existing communications connectivity did not provide adequate access to DSN lines. The division was tasked to provide a division tactical command post with deep operations capability as well as a brigade combat team to defend Kuwait against Iraqi aggression. The commanding general, his primary staff, the 1 BCT commander, Aviation Brigade commander, DIVARTY commander, and Engineer commander deployed in country within 7 days of the alert. The distribution of voice trunks was not enough for this size element to call higher headquarters, home station, or any other Army agency as needed.

SOLUTION: The division requested and was granted low bandwidth (256 kbps) satellite access to Fort Bragg, North Carolina. This link provided the division with 10 trunks using Motorola STU-III Strategic Tactical Secure Voice Terminals and 4 trunks for operator assisted calls. Additionally, an IG team was sent from USCENTCOM to investigate why current switches in country were providing less than adequate call completion rates. Recommendations were given to the J6 to improve customer service throughout Kuwait.

Non-Secure Internet Protocol Routing Network (NIPRNET):

PROBLEM: The division signal battalion did not have the required multiplexer, routers, or cables to access this gateway and must depend on higher headquarters. Additionally, the battalion had no one who was formally trained on this equipment. NIPRNET was used to access home station e-mail to facilitate split base operations and to order and track critical logistical parts. The division must be able to arrive in theater and immediately access the NIPRNET gateway.

SOLUTION: The battalion received access to the gateway via a Tri-Band Satellite vehicle attached from the 86th Signal Battalion, Fort Huachuca, Arizona. The battalion borrowed a FCC-100 and a CISCO router from CTF-K. Members of the unit fabricated cables to hook up these pieces within our internal node center. The last step was to borrow a KIV-7HS High Speed Embeddable KG-84 COMSEC module because the battalion internal COMSEC devices were not adequate. The minimum data transfer must be 128 kbps. Lack of formalized training on the equipment cost the division valuable setup time. Finally, CTF provided a technical assistance team to assist us in the installation.

Secret Internet Protocol Routing Network (SIPRNET):

PROBLEM: The SIPRNET connection is needed to receive critical intelligence feeds from higher and outside agencies. We faced the same problems with access and equipment shortage as with the NIPRNET.

SOLUTION: The same Tri-Band satellite access used for NIPRNET was used for SIPRNET connectivity. An additional router was needed and more cables were fabricated to extend this connectivity.

Video Teleconferencing (VTC):

PROBLEM: VTC facilitates the Land Component Commander's ability to coordinate among the Army and Marine units through simultaneous, multi-point, real time, voice and video connectivity. The division does not own any VTC equipment other than what is used with Trojan Spirit.

SOLUTION: The Army must standardize the purchase of all VTC equipment to facilitate compatibility among units. As a minimum, the bandwidth must be 256 Kbs for adequate transmission and clarity.

After approximately 20 days, the division had the necessary connectivity to successfully communicate higher, lower, and laterally. The key lesson learned from this deployment is to build an adequate communication contingency package to ensure the warfighter has all means of communications available to him within hours of his deployment in theater.

SECTION IV – FUTURE KUWAIT LAND FORCES COMMUNICATION PROJECTS

The Kuwait Land Forces current communication assets include the in-country telephone system, AT&T commercial microwave towers, HF radios, FM radios and STU-IIIs. The country has a mature telecommunication system that the KLF often uses during training. The unit also uses two HF radios. The first one is the RACAL HF radio, which is non-secure. Second is the Harris HF radio which is encrypted and has the capability to frequency hop.

The greatest challenge is the non-compatibility of FM radios. One battalion in the 15th Armor Brigade is fielded with BMPs, which came with a Russian FM radio. The plan is to replace these radios with Jaguar. Two battalions in the 6th Mechanized Brigade were also fielded with BMPs and no radios. The future plan is to field these battalions with SINCGARS. The 35th Armor

Brigade and 26th Armor Brigade are fielded with SINCGARS. The goal is to have the 35th Armor Brigade, 6th Mechanized Brigade and the 26th Armor Brigade fielded with SINCGARS by FY2000. The 15th Armor Brigade will keep the British Jaguar radio. This will continue to pose a command and control challenge since the Jaguar and SINCGARS are not compatible.

The Kuwait Land Forces recently made the decision that they need to purchase a multi-channel communication system that is comparable to the United States Army GTE MSE network. An investigation into a number of systems was conducted. The leading contender is the NFT-Ericsson system. The proposal is currently at the office of the Military of Defense for a final decision. This new system will allow the Kuwait Land Forces to communicate via voice, message, facsimile or data. It is an UHF radio link system encrypted at a very high security level. It includes ECCM features that will allow frequency hopping and adaptive power output.

The NFT-Ericsson network consists of four integrated subsystems. The first is the fixed subsystem, which is a fixed installation that provides the secure backbone network. Secondly, the tactical multi-channel subsystem is the mobile installation using a mobile system. These are installed in shelters and HMMWVs. They are normally located at brigade headquarters. Thirdly, is the combat net radio (CNR) subsystem. The Netcall CNR system is interfaced to the tactical multi-channel subsystem. This gives CNR subscribers access to telephone services of the system. Lastly, is the cable networks subsystem located on the Failaka and Bobyan Islands. NFT-Ericsson will install and terminate up to 22 coastal defense sites at Failaka as well as connecting cable systems at Bobyan.

Other Middle East countries using this system include Saudi Arabia, Bahrain, Pakistan, Egypt, Algeria, and Morocco.

SECTION V – CONCLUSION AND RECOMMENDATIONS

Operation Desert Thunder was a resounding success in multiple ways. First, is the improved

working relationship between the United States Army and the Kuwait Land Forces. The joint

training programs offered considerable information sharing on both sides.

The formation of CTF-K was a winner and there is a plan to continue a long-term presence in

the country of Kuwait. This forward presence of the United States includes between 10 – 25

embedded members of the coalition armed forces. This element is tasked to coordinate the

activities of Intrinsic Action (IA) Task Force, United States Special Forces, any United States

Marine Corps forces ashore for training, and an aviation element that includes Apaches and

Blackhawks.[11] Kuwait in turn remains a cooperative partner in the Gulf Region. Also, the

Government of Kuwait continues to improve the Camp Doha facility and the APOD capacity.

Just a few recommendations:

- The presence of United States Forces in the Middle East is a forgone conclusion. Programs should be established in ODPs and NCOPDs that cover American and Arab cross-cultural encounters.

- Currently, Jordan sends one to two officers a year for six-months to train in America in like units. An exchange program like this would be beneficial to members of the KLF communication team.

- MAJ William S. Schumaker was a signal officer assigned to OMC-K. He was very critical in bringing COL Hamad Al-Sewaji and LTC Lawrence together quickly and served as an important LNO. This position is currently vacant. Highly recommend that this position always be filled so continued coordinations could take place.

- There is no signal equipment placed forward. Absolutely every piece was flown in for Operation Desert Thunder. The Army has downsized from 18 divisions to 10. Recommend at least one division's worth of MSE assets be prepositioned in the Middle East area of operation.

- Section III discussed the need to identify a contingency communication package that is rapidly deployable, flexible enough to be tailored to the commander's need, and reliable. Three possible solutions are:

  - Continue to pursue the Power-Pac Company concept within the Army Signal Command (ASC). This is a unit that first deploys into a theater with Tri-Band Multichannel access to reach back to the United States for SIPRNET, NIPRNET, VTC and DSN access. The task force arrives and extends the services to the tactical network. The Power Pack Company will provide all the necessary multiplexers, routers and COMSEC equipment to the task force.
  - Identify the required equipment it takes for a task force to extend to necessary gateways. This again includes the required multiplexers, routers, secure equipment, cables, etc. This contingency package can be located at a CINCs headquarters and passed to the deploying force on order.
  - A third solution is to put equipment in the hands of multiple users; i.e. 3d Infantry Division (Mechanized), 1st Cavalry Division, 10th Mountain Division, etc. The plus to this solution is the users are responsible for the equipment and can train at home station they would execute during deployment.

- The last recommendation is much more difficult. The primary means of communication between allies today is LNOs. Agencies need to continue to pursue a means of compatible communications between all coalition forces deployed. This is steeped with hurdles such as language, COMSEC, and budgets.

CTF-K is an organization unique in our Nation's military history. Never before have we formed a forward deployed, joint, multinational, ground combat oriented, and rapidly expandable deterrent force. The CTF has already proven its worth during Operation Desert Thunder by contributing to a show of force that was ultimately successful in deterring Iraqi aggression and compelling compliance with UN mandates. . . . It will also allow the United States to achieve unprecedented levels of interoperability with foreign militaries in a region that is of vital importance to our national security.[12]

WHAT A GREAT EXPERIENCE!

COLONEL Hamad Al-Sewaji
Lieutenant Colonel Susan Lawrence

NCO	Noncommissioned Officer
NCS	Net Control Station
NIPRNET	Non-Secure Internet Protocol Routing Network
NTC	National Training Center
OCs	Observer Controllers
OMC-K	Office of Military Cooperation – Kuwait
OPCON	Operational Control
OPTEMPO	Operation Tempo
PIR	Priority Information Requirements
RETRANS	Retransmission
RFI	Request for Information
RISTA	Reconnaissance, Intelligence, Surveillance and Target Acquisition
SENs	Small Extension Nodes
SIPRNET	Secret Internet Protocol Routing Network
SRP	Soldier Readiness Package
TACON	Tactical Control
TACSAT	Tactical Satellite
UN	United Nations
USCENTCOM	United States Central Command
VTC	Video Teleconferencing
3ID(M)	3d Infantry Division (Mechanized)

ENDNOTES

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[2] Steve A. Yetiv. Kuwait: In Iraq's Shadow. (Philadelphia, PA: Current History, Inc., February 1999), 69.

[3] Headquarters, 3d Army/ARCENT. The Role of Coalition Task Force-Kuwait; UN – Iraq Crisis of 1997-1998, June 1998, 5.

[4] Headquarters, 3d Army/ARCENT, 1.

[5] Headquarters, 3d Army/ARCENT, 1.

[6] Army – Air Force Center for Low Intensity Conflict, CLIC Papers: The Gulf War: An Analysis of American and Arab Cross-Cultural Encounters. April 1995, 32.

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[9] C4ISR Architectures Working Group (AWG). Multinational Force C4ISR Operations Panel Report. 11 December 1997, 4.

[10] Headquarters, 3d Army/ARCENT, 10.

[11] Headquarters, 3d Army/ARCENT, 12.

[12] Headquarters, 3d Army/ARCENT, 13.

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