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MASTER OF MILITARY STUDIES

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OFFICE OF RECONSTRUCTION AND HUMANITARIAN ASSISTANCE (ORHA):  
THE CASE FOR INTERAGENCY TACTICAL COMMUNICATION SUPPORT  
STRUCTURE

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## *Executive Summary*

**Title:** Office of Reconstruction and Humanitarian Assistance (ORHA): The Case for Interagency Tactical Communication Support Structure

**Author:** Major Jaime Macias, United States Marine Corps

**Thesis:** The experiences of the Office of Reconstruction and Humanitarian Assistance and the transition to the Coalition Provisional Authority provide a useful illustration of interagency communication support challenges.

**Discussion:** The purpose of this paper is to discuss the failure by the United States to properly plan for, man, and equip an OPERATION IRAQI FREEDOM post-conflict interagency component. The challenges experienced by the Office of Reconstruction and Humanitarian Assistance communication staff during the planning and execution of post-conflict operations is the framework used to propose the development of an interagency support structure to meet the communication requirements during post-conflict operations. Until interagency operations are strengthened and doctrine between military and non-military agencies is developed, the following considerations are in order: assigning the right people to the interagency military support staff; identifying and allocating critical high demand/low density equipment; increasing military and non-military levels of training and exposure in the area of interagency operations.

**Conclusion:** The improvements in inter-service cooperation, much resulting from the 1986 Goldwater-Nichols Act, has positioned the U.S. as the dominant military in the world. Central Command's ability to defeat the world's fourth largest military in 28 days is a clear example of the American defense establishment's ability to execute the tenets of the Goldwater-Nichols Act. However, post-conflict operations in Iraq highlighted the complexities of interagency operations. National Security Presidential Directive 44 and the establishment of the Department of Defense's first non-kinetic interagency regional combatant command - Africa Command - are steps in the right direction. Nevertheless, developing a communication structure staffed with the right personnel, properly trained in interagency requirements, and possessing the appropriate equipment, is necessary to meet the needs of a post-conflict component capable of executing all elements of national power – diplomacy, information, military, and economy.

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## *Preface*

This paper addresses the difficulties faced by today's military in the area of post-conflict operations. My education in the Marine Corps, coupled with my operational assignments and experiences, has led me to the conclusion that the Department of Defense should develop a component properly staffed, trained, and equipped to conduct post-conflict operations. My assignment to the communication section of the Office of Reconstruction and Humanitarian Assistance (ORHA) during Operation Iraqi Freedom provided me with first hand experience regarding the complexity of military and non-military operations and the challenges of standing up a post-conflict component in the midst of planning and executing combat operations. My follow-on assignments to United States European Command, II Marine Expeditionary Force, and 26<sup>th</sup> Marine Expeditionary Unit provided me the opportunity to witness the capability and flexibility that a military communication unit is capable of providing a post-conflict interagency component.

I very much appreciate the counsel received from Dr. Gordon Rudd throughout this project. Dr. Rudd's direction and guidance provided the framework for my research. If it were not for his first hand interviews with ORHA personnel, my research would have been incomplete. Finally, I would like to thank the military and civilian staff at the Command and Staff College for the education that shaped the direction of this research.

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## **INTRODUCTION**

The purpose of command, control, communications, and computers is to facilitate a commander's ability to share information in planning, directing, coordinating, and controlling forces. Commanders execute these functions through the arrangement of personnel, equipment, communications, facilities, and procedures.<sup>1</sup> Recent operations in Iraq have highlighted the need to address interagency post-conflict operations and the relational difficulties between military and non-military organizations. The failure by the United States to properly plan for, man, and equip an OPERATION IRAQI FREEDOM (OIF) post-conflict interagency component leads to the question: *Is there a need for a permanent interagency support structure to meet the communication requirements during post-conflict operations?* The experiences of the Office of Reconstruction and Humanitarian Assistance (ORHA) and the transition to the Coalition Provisional Authority (CPA) provide a useful illustration of interagency communication support challenges. For the purposes of this analysis, communications support structure is the capability provided by people, training, and equipment.

In January 2003, under the direction of National Security Presidential Directive 24 (NSPD 24), the Department of Defense (DoD) officially stood up ORHA. Retired Army Lieutenant General Jay Garner, who had been instrumental in the rescue of thousands of Kurdish refugees following the Gulf War in 1991, agreed to serve as the lead administrator for the post-conflict agency. The ORHA staff consisted of seven major components – three functional pillars, three region elements, and a military support staff. The pillars were assigned the responsibility of humanitarian assistance, reconstruction, and civil administration; the regions were responsible for ORHA oversight in the North, South and Central (Baghdad) Iraq; and the military staff was responsible for executing traditional support staff functions (Figure 1). By

mid-February, Garner had a core staff assembled and began reviewing post-conflict plans and preparing for deployment. Based on lessons from OPERATION DESERT STORM, ORHA and Central Command planners focused heavily on: oil fires, large numbers of refugees and displaced personnel, food shortages, and the spread of health epidemics.<sup>2</sup> These planning assumptions would prove inaccurate and faulty.

On 19 March 2003, the American-led coalition crossed the Iraqi border; 21 days later, the coalition forces had advanced 350 miles from the Kuwaiti border to Baghdad. Because of the speed by which the American-led coalition toppled Saddam Hussein's regime, ORHA had to prepare for movement into Iraq earlier than anticipated, and with the initial post-conflict planning assumptions not fully materializing, ORHA planners had to reweigh planning from humanitarian operations to a greater focus on reconstruction in Iraq and the establishment of a post-Saddam Hussein government.

### ***THE PENTAGON***

As part of NSPD 24, the Joint Staff issued a joint manning document (JMD) to the services requiring 94 military personnel across multiple military specialties to join ORHA to form an operational staff. The ORHA military support structure became known as the 'C-Staff.' The C-Staff charged with providing communication services to ORHA was the C-6.

The original ORHA C-6 section consisted of 15 active-duty service members – 5 officers and 10 non-commissioned officers. The original concept for the C-6 personnel was to conduct planning rather than install, operate, or maintain the equipment. With a war on the horizon, military headquarters were trying to meet internal requirements while at the same time trying to find personnel to support the JMDs. In a desperate attempt to meet JMD requirements, services

redirected personnel from non-deployable assignments. For instance, Headquarters Marine Corps pulled several Marines from career and intermediate level schools to serve in ORHA.

The JMD only listed a line number, a specific military occupational skill designator, and a report date. Consequently, the members of the ORHA C-6 staff arrived with diverse operational and technical experience. Some service members possessed a wealth of operational experience, but others brought little technical knowledge to the organization. Furthermore, most joint or coalition headquarters staffs possess a current operations cell that focuses on immediate needs, a future operations/plans cell that works with other agencies to ensure future needs are being addressed, and a support cell to handle help-desk and information technology supply requests. Colonel Conway, USA, the ORHA C-6 Officer, did not structure the C-6 staff in that manner. When one of the officers was asked what her job was, she replied "Just comm[unications] work...I was not designated a specific job."<sup>3</sup> When another officer was asked whom he worked for, he replied, "We were not really broken down into any type of organizational structure."<sup>4</sup> To further complicate matters, the ORHA C-6 staff had no interagency training. Most of the military officers had training or experience for a joint environment, but none for interagency operations. The lack of structure, understanding of interagency operations, and training significantly degraded the ability of the C-6 staff to identify equipment requirements and support the needs of the ORHA components.

Unfamiliarity with interagency communication requirements led ORHA C-6 to purchase commercial off the shelf communication equipment with no opportunity to test it prior to deployment. The list of equipment included computer laptops, printers, digital cameras, global position systems, Motorola hand held radios, and satellite phones. The Department of Defense awarded Raytheon the wideband data and voice contract. In hindsight, this was a poor decision.

A company with more experience in the communications field, such as ITT Corporation, who currently has the contract for the Total Army Communications-Southwest Asia program, should have been awarded the contract. According to Major Keith June, USA, C-6 Operations Officer, the decision to award Raytheon the wideband data and voice contract was a result of Garner's experience with Raytheon. Garner worked with Raytheon when he was the Commanding General, U.S. Army Space and Strategic Defense Command.<sup>5</sup>

Raytheon's contract was to design, build, integrate, deploy, and operate both an unclassified and classified data network, provide secure and unsecure telephones and audio-visual support for approximately 300 users. Raytheon would also provide three "First Responder" vehicles for ORHA's region components to use as mobile communications platforms.<sup>6</sup> Raytheon's initial estimate was 20 million dollars. According to Lieutenant Colonel Timothy Phillips, USMC (ret), ORHA Deputy C-6, Lieutenant General Jared Bates, USA (ret), ORHA's Chief of Staff, reset the contract limit to 14.5 million, forcing Raytheon to cut services. Two items that Raytheon removed from the contract were engineering services (power and air conditioning) and a help-desk.

During the two-month period in the Pentagon, the ORHA staff began preparations for the upcoming deployment. The lack of specificity in the JMD for technical or interagency experience did not allow the services to properly screen personnel, leading to the staffing of the C-6 section with an organization that was not prepared or trained to meet the complex requirements of an interagency organization.

## *KUWAIT*

On 16 May 2003, ORHA deployed from the Pentagon to Kuwait with the main body accommodated in the Hilton Hotel complex. The C-6 staff did not anticipate having to work from the Hilton, as Coalition Forces Land Component Command (CFLCC) had allocated ORHA limited space at Camp Doha. Unfortunately, the ORHA components did not want to travel daily to Camp Doha and chose to remain at the Hilton. To meet the needs of the ORHA members, the C-6 staff transformed the villas at the Hilton from vacation sites in to an operational camp.

At the Hilton, ORHA did not have access to the Defense Information System Network services, which include: secure and non-secure internet protocol network (SIPRNET and NIPRNET), defense switch network (DSN) telephone access, defense message system, and video teleconferencing. The Hilton network only provided internet web access. Petty Officer Michael Lee from the C-6 staff coordinated with Hilton computer staff to add a limited number of computers to the hotel's internet service provider to access to the world wide web.

The Hilton data network, designed for vacationers who leisurely "surf" the web and not for a staff of over 500 people preparing to conduct post-conflict reconstruction, quickly became an operational liability. However, through Lee's initiative the Kuwait internet service provider (TELCO) increased the bandwidth to the Hilton villas (Figure 2). The increased bandwidth only temporarily satisfied the ORHA members' initial requirement. Lee's solution just provided internet access to the ORHA staff; the villa connection was not a local area network, and the ORHA staff did not have the ability to collaborate or share information. Also, because a non-DoD Kuwaiti company was providing internet access, the ORHA staff experienced difficulty accessing many DoD web pages. ORHA did have very limited access to SIPRNET via the National Imagery Support Team, within the ORHA C-2 (Intelligence Staff Section). The

imagery team provided a dial-in capability that facilitated SIPRNET connection for 2 to 4 users for a total of 3 hours per day. The inadequate communication capability at the Hilton was soon an operational impediment to ORHA's ability to plan for post-conflict reconstruction.

Within a few weeks of arriving in Kuwait, Colonel Conway, requested communication support from the 335<sup>th</sup> Theater Signal Command, but Major General Dettamore, USA, the Theater Signal Commander, did not approve Conway's request. According to Major June, Dettamore denied the request, because ORHA was not engaged in combat operations during Phase III operations. Dettamore's message was clear; if ORHA wanted support, ORHA would have to move to Camp Doha,<sup>7</sup> but ORHA leadership did not want to move to Camp Doha,<sup>8</sup> so the ORHA C-6 operations section engineered a Kellogg, Brown and Root (KBR) commercial satellite solution to provide the staff a local and wide area network (Figure 3). However, with arrival of Raytheon, the ORHA C-6 operations section put the commercial satellite solution on hold.

The C-6 staff issued an estimated 80 computers that were acquired and began to provide limited communication capabilities to the interim combat operations center and admin/logistics operations center to facilitate preparations for the movement of ORHA components into Iraq. But the ORHA civilians in the Pillars/Region components were eager to get started and did not understand why the equipment and services they needed was not available. The frustration on the part of the Pillars/Regions grew, as they saw the C-6 staff focusing support on the combat and admin/logistics operations centers, while the Pillars/Regions waited for support. Phillips stated, "the non-military ORHA staff felt that the military took care of themselves and basically ignored the civilian requirements."<sup>9</sup> The Pillars/Regions' inability to articulate their

requirements in terms that the military could support led to gridlock. Major June's frustration was clear as he claimed that, "it was hard to determine, which ministries were doing what...there was some major disconnects between the C-Staff and the ministries and the C-Staff's understanding of exactly what the ministries were doing and what their requirement were."<sup>10</sup>

On 5 April, the Raytheon contractors began to arrive in Kuwait. Unlike a cohesive military unit that trains with its own equipment, those in Raytheon team had not trained or operated together before arriving in Kuwait. Most were not employed by Raytheon and were hired to staff the ORHA team. The first time the Raytheon technicians saw any of their communication equipment was in Kuwait. John Eugene Bulla, a retired Army officer, led the Raytheon team. Eventually, Raytheon provided 24 contractors to augment the ORHA military staff - eleven contractors to install and operate the communication equipment at the main headquarters; six contractors for the operation of the regional "First Responder" vehicles; and six contractors to support the operations and intelligence sections. Bulla's intent was never to install the Raytheon network while in Kuwait. Nonetheless, due to the strong desire to increase communication capability at the Hilton, once the gear started to arrive, Conway directed the Raytheon team to test and set-up the equipment; but they were unable to fully set-up their equipment, as preparations for moving into Iraq had begun.

While in Kuwait, Captain Jaime Macias, USMC, [the author] C-6 Assistant Operations Officer, identified two critical deficiencies with the Raytheon contract. First, the Raytheon contract did not provide a help-desk or customer support section. As a result of the arrival of additional ORHA personnel, the demand for communication support increased. The C-6 support section was quickly overwhelmed, resulting in the C-6 planners, June, Macias, and Lee, shifting focus from planning to the installation and troubleshooting of the ORHA network. According to

June, Conway was under the impression that the Raytheon contract covered help-desk support; but after reviewing the contract, it became clear that after the contract reductions, Raytheon was not contractually obligated. Conway said that he would modify the Raytheon contract to address the deficiency, but the modification never took place.<sup>11</sup> Second, Raytheon was not responsible for air-conditioning or power required to operate the communication equipment. As a rule, military communication units provide their own air-conditioning and power. This allows them to begin network installation in parallel with the camp establishment. During final preparations for the move into Iraq, Macias asked the Raytheon engineers if they had the required engineering equipment to operate the communications equipment. Bulla made it known that power and air-conditioning was not part of the Raytheon contract; this was a government responsibility. When June and Macias addressed their concerns, it became clear that Conway did not understand the impact of operating a communication network of this capacity. His response was "we'll just use fans."<sup>12</sup> Unfortunately in very hot temperatures, the use of fans simply circulates hot air instead of cooling it.

## ***IRAQ***

On 15 April 2003, ORHA conducted its first Baghdad site survey. June along with other members of the ORHA staff visited possible headquarters. After looking at several locations, the ORHA site survey team settled on the National Palace as the permanent site for the ORHA headquarters. Upon June's return to Kuwait, he and Macias developed a three-phased support plan in concert with ORHA's initial deployment plan. The ORHA communications plan provided increased levels of support as the movement of personnel from Kuwait increased.

### **Phase I (ADVON)**

- Two C-6 communicators would deploy to Iraq to coordinate with CFLCC
- CFLCC would provide two SIPRNET, three NIPRNET computers, and phone access

### **Phase II (Initial Main Body)**

- Two ORHA C-6 personnel would deploy into Iraq to establish communications in the Deployable Operations Command Center (DOCC) collocated with CFLCC.
- Establish six SIPRNET and fourteen NIPRNET computers, and DSN Phones
- ORHA would establish the initial main headquarters in the DOCC.
- Begin coordination for movement of Raytheon equipment to National Palace

**Phase III (Main Body)**

- The remainder of ORHA C-6 personnel deploys into Iraq
- Raytheon team and equipment arrives in Theater
- Stage equipment ready for movement to follow on headquarters
- Begin movement of regional communication teams.

Because of pressure from Washington, Garner and a select number of individuals (known as “Jay’s Team”) moved into Iraq earlier than expected. With the “mad dash” of staffers that followed Garner and “Jay’s Team,” the initial communication support plan was no longer feasible.

During the Iraqi site survey, June had determined that the size and layout of the National Palace would entail communication challenges. Raytheon’s engineers had designed the communication architecture to support a headquarters located in a hotel with a vertical structure and multiple floors. The National Palace was a two-story building with a basement and each of the floors structured in a horizontal manner resembling a flat horseshoe (Figure 4). Bulla later noted that with the impact of the layout of the National Palace that, “we [Raytheon] had been told that we were going into an area that would have to have cabling extended up to three floors up or down, and our cable was all precut.”<sup>13</sup> June’s recommended solution was to use the center portion of the two floors as operational space and the wings as living space. Such a solution would allow Raytheon to extend services to all the offices in the center of building.

Due to the requirement for immediate communication support upon arrival in Iraq, June met with CLFCC planners to request support until ORHA’s network was operational. He requested an initial capability of 30 unclassified and classified computer connections, 30 telephone lines, access to the Defense Red Switch Network, and video teleconference capability

to be installed in the National Palace. General David McKiernan, USA, CFLCC commander, agreed to support the request and assigned the task to the 86<sup>th</sup> Signal Battalion. The signal battalion organized a detachment to provide ORHA with access to the DoD strategic communication architecture (Figure 5) for two weeks, as Bulla estimated that it would take the Raytheon team ten days to get the network operational.

Realizing that the Raytheon team alone would not be able to support the growing needs of the ORHA staff, the C-6 operations section began coordination with KBR to install an additional satellite network to support communications between the regions and the ORHA headquarters. The final communication solution consisted of the communication node located in Baghdad, "First Responder" Vehicles and KBR commercial satellite terminal in the North and South regions, and satellite phones in all regions (Figure 6).

On 23 April 2003, the ORHA quartering party departed from Kuwait and drove by convoy to the National Palace to prepare for the movement of the main body and the relocation of "Jay's Team" from the CFLCC's forward headquarters located at Baghdad International Airport. Upon the quartering party's arrival, the 86<sup>th</sup> Signal detachment was in place and was starting to install its communications network. June, Macias, and Lee met with the signal detachment commander and provided him with ORHA's initial requirements.

Within 72 hrs of the quartering party's arrival, "Jay's Team" moved to the National Palace soon followed by the movement of the main body from Kuwait to Iraq. The premature movement of "Jay's Team" and the main body forced the C-6 staff to shift efforts from a systematic installation of the communication architecture to meeting the immediate needs of the ORHA components. That triggered three events that plagued the C-6 staff for several months. The first was the location of the pillars. Due to pre-cut wires, Raytheon could not extend

communication services to wings of the palace. Nevertheless, Baghdad Central and the Pillars/Ministries insisted on setting up their offices on the wings and away from the center of the palace. Phillips discussed the issue with Colonel Glen Collins, the camp commandant, but Baghdad Central and the Pillars/Ministries would not move.<sup>14</sup> The second was the video teleconference failure between Garner and President Bush. The Office of the Secretary of Defense had attached a top-secret video teleconference team to support Garner until Raytheon's network was established. When the Office of the Secretary of Defense's videoconference system failed, the problem came to the attention of the Brigadier General Moran, USA, Central Command's senior communicator. The third was the failure of Raytheon to get its communication architecture operational in a timely manner.

Many issues led to the Raytheon team's failure to meet the ten-day time limit specified in the contract. Once their equipment arrived in Baghdad, the team unpacked and moved the equipment to the network operations center located on the second floor of the National Palace. On April 28, five days following quartering party's arrival, power and air conditioning became available. Unfortunately, the power flow was unstable and the air conditioning did provide sufficient coolant to keep the networking equipment operational; it was not until 3 May that reliable power and air conditioning were in place and Raytheon was able to begin to test and install their network, delaying computer and phone support for ORHA for two critical weeks in Iraq. At the same time, Raytheon determined that their satellite terminal was faulty, and it took several days to fly in the replacement part. It was not until 15 May, over two weeks into ORHA's time in Iraq, that the network was operational and the process to extend data and voice services began (Figure 7). The process took 22 days rather than the 10 days anticipated. Because of the delay in getting Raytheon's network operational and the need to get services to

the ORHA staff, Conway instructed the 86<sup>th</sup> Signal detachment to increase their level of support. The signal detachment's installation increased from 30 SIPRNET/NIPRNET connections and 30 phone lines to 114 NIPRNET/35 SIPRNET connections and 126 telephone lines.

Raytheon was not contractually obligated to install services beyond the data and telephone switch plate on the wall. Therefore, to meet the needs of the ORHA components, the C-6 planning staff, once again, simultaneously supported planning efforts to increase communication capabilities to pillars and regional elements while trying to install computers, printers, phones, and conduct trouble-shooting tasks. June leveraged the existing Logistics Civil Augmentation Program contract awarded to KBR to fill the help-desk shortage. After about two weeks with KBR personnel, it was clear that two separate contracts in support of a single communication network was a poor solution. With contractual limitations, Raytheon would not grant KBR full network privileges. To properly troubleshoot a communication network, a technician requires administrative access to diagnose the problem. In June 2003, the contract was modified and Raytheon was now responsible for help-desk support. By the end of June, there were roughly 300 NIPRNET/100 SIPRNET computers and 100 phone lines from the Raytheon network on line.

While the installation of more NIPRNET, SIPRNET, and phones lines at the National Palace increased the capability of the ORHA members, the perception was the reverse. The two networks (Raytheon and 86<sup>th</sup> Signal) created a management dilemma for the C-6 staff and increased user frustration. It was not uncommon to find in one office a computer or phone installed by the signal detachment and in the next office a computer or phone installed by Raytheon. The user would have to be aware of the differences, as these devices had different

address and phone instructions. Furthermore, if the user had problems, he would have to know whether to contact the signal detachment or Raytheon for support.

As people continued to join ORHA, they arrived without communication equipment requiring immediate support. Lieutenant Commander Angela Albergottie, the ORHA C-6 Support Officer, coordinated with KBR to acquire additional equipment. To account for the increase in equipment, meet the needs of the ORHA staff, and continue to keep a focus on the planning efforts, in May 2003, the C-6 section was restructured into an operations and support section with the majority of the staff focused on support not planning (Figure 8).

The C-6 section's limited grasp for communication procedures between military and non-military organizations presented several challenges. DoD protocols for operating communication networks are rigid, especially in granting access to non-DoD personnel. ORHA personnel did not understand such restrictions and often felt that the military did not want to meet their requests.<sup>15</sup> Second, with cable length limitations, the C-6 staff had to wire the center section of the National Palace until the arrival of additional cable. The non-military personnel in Baghdad Central and Pillars/Ministries working in the wings of the building perceived that the military taking care of its own members first, as the majority of the personnel in the center of the palace were the C-Staff. Third, once services were extended to the Pillars/Ministries, a significant cultural issue came to light: the DoD military domain with ".mil" extension. There are over 280 domains. Generally speaking, the three common domains used in government operations are the ".mil" extension for the DoD use; the ".gov" extension for US government use; and the ".org" intended for use by miscellaneous agencies that do not fall into the other two

categories. The Raytheon network was designed under the “.mil” domain. Thus, an ORHA member’s e-mail account would appear as follows, last name first initial@orha.centcom.mil.”

The Pillars/Ministries felt that to work more effectively with Iraqi civilians, they did not want to be directly associated with the military and wanted the military to find a way to hide the “.mil” extension from their e-mail accounts. Some non-military organizations chose to use the government network to gain internet access and utilize their personal web e-mail (i.e. Hotmail, AOL, Yahoo, etc...) as their official mail. That created two problems. Normally, the DoD prohibits the use of commercial e-mail for official business; and the use of web mail creates a bandwidth constraint, as the user is not operating on the local e-mail server, but rather using bandwidth to “reach back” to an e-mail server back in the United States.

There were also initial inadequacies in the voice capability of the ORHA communication network. The Raytheon and 86<sup>th</sup> signal detachment networks were not engineered to support commercial phone access. Both voice networks were limited to the Defense Switch Network (DoD). Therefore, if there was a need to dial or receive a commercial call, ORHA members had to call a military operator and request a phone patch. The only means to call a commercial number directly was satellite phones. That type voice network design is common to military networks, as there is very little need to dial commercial phones. Likewise, the post-conflict cellular phone service was not operational in Iraq until late May 2003. In the interim, Albergottie issued satellite phones to ORHA members. Although the satellite phones were useful out in town, they were ineffective inside the palace, as ORHA members had to go outside to get a signal.

After a few of months in the National Palace, six communication units were providing support to individual ORHA components. Although Conway was the senior communications

officer within ORHA, he only had operational control of the Raytheon and 86th signal detachment. The ORHA intelligence section had two communication elements – a National Imagery Support Team and an Air Force signal detachment. With the arrival of Ambassador Bremer (Garner's successor) on 12 May 2003 and the establishment of the Coalition Provisional Authority (CPA), a signal detachment with a Joint En-route Mission Planning and Rehearsal System- Near Term (JEMPERS-NT) arrived and an additional detachment from the Joint Communication Support Element was redirected by GEN Moran to provide support to Bremer. Conway's failure to gain control of these units and harness the collective communication capabilities under a centralized section resulted in a disjointed communication support structure.

Colonel Conway significantly underestimated the communication requirements for the regions based in Erbil, Hilla, and Basra. The concept of communication support for the regions had been a mobile data and voice capability that the region planners could use to conduct field surveys. The ORHA leadership did not want the regions to be restricted to a building, but rather have the ability to get out and assess the post-conflict requirements. Conway's solution had been to use the "First Responders." June's assessment of the support plan was that "the 'First Responder' vehicles would be like scout vehicles with limited voice and limited data, with just enough COMMS to send reports back to Baghdad."<sup>16</sup> Unfortunately, because of bureaucratic contractual issues, the KBR commercial satellite solution did not arrive in time and the regions chose to utilize the "First Responders" as their headquarters communication hub. The decision to employ these assets in such an ineffective manner was a result of not having appropriate personnel to support the regions. Earlier in Kuwait, June had suggested to Conway that the company grade officers be assigned to the regions during the first few weeks to get the systems operational and identify any shortfalls, but Conway did not agree.

As a result of Conway's decision, within a few days of the first ORHA elements crossing into Iraq, Macias and Lee traveled from Kuwait to Um Quasar to help coordinate communication support from the Naval Support Unit located in the area and to assist with the technical configuration of the existing network. Again, on 2 July, Macias led a team to Basra with the JEMPERS-NT communications suite. After meeting with Ambassador Henrik Olesen, the Basra ORHA senior advisor, Macias worked with the "First Responder" and JEMPERS-NT contractors to engineer and develop a local solution. June foresaw the communication failures that the regions were going to experience and provided recommendations, but Conway did not listen to the suggestions. When asked about the regions' communication capability, June stated, "I was quite frankly appalled at the level of comms that we were providing the regions."<sup>17</sup>

Coalition Joint Task Force 7 (CJTF-7) replaced the Coalition Forces Land Component in June 2003, assuming operational control of all U.S. and coalition forces in Iraq, and established its headquarters in the National Palace. With the co-location of CJTF-7 and CPA (which replaced ORHA), additional communication assets and personnel were relocated to the National Palace, increasing the communication capability of CPA/ORHA. CJTF-7 established the Joint Command, Control, and Communications element that provided oversight for all communication units in Iraq. CPA/ORHA and CJTF-7 communicators engineered a solution to integrate their respective networks to provide system redundancy and additional capability to both staffs (Figure 9).

With the arrival of CJTF-7 and the stabilization of the communication network, the CPA C-6 staff developed a three-stage plan to commercialize the communications architecture in preparation for transfer to Iraqi control - continue to improve the current communication architecture; develop a stabilization communications network; and transfer to post-stabilization

under Iraqi leadership. First, the C-6 extended the Raytheon contract and coordinated service needs with CJTF-7. Second, satellite communications was increased from 11 Mb of bandwidth to over 24Mb, allowing for users to access information much quicker and with an increase in quality; Third, voice services were improved to include additional commercial, DSN lines, and the addition of voice over internet protocol services. Likewise improvements in the data network were introduced with development of a “.org” e-mail domain to transition users that do not require “.mil” access along with transitioning SIPRNET users to the coalition secure data network (Combined Enterprise Regional Information Exchange - CENTRIX).

To sum up, the movement to Iraq and the transition from major combat to post-conflict operations highlighted several problems. Initially, the main body and “Jay’s Team’s” premature movement to the National Palace resulted in the inability of the C-6 staff to effectively establish communication services in support of a smooth transition of personnel. Raytheon’s reliance on the government for power and air conditioning extended the time of full operational capability of the communications network. The C-6 staff lacked the appropriate personnel to meet both the every day needs of the staff and to plan for post-conflict requirements until the modification of the Raytheon contract. The cultural gap between the military and non-military staff created frustration regarding support requirements, which could have been avoided with training and education, as stated by the Phillips, “There were some unrealistic expectations and maybe we didn’t do a good job of training people and telling what the environment was going to be like.”<sup>18</sup> The lack of unity of effort of all the communication units supporting the ORHA staff created a fractured support structure. Finally, the failure to fully understand the regions’ requirements resulted in the piecemeal of communication support structure.

## *CONCLUSION*

Post-conflict operations in Iraq highlighted the complexities of interagency operations. In planning interagency operations, the relationship between military and non-military organizations requires immediate examination. The improvements in inter-service cooperation, much resulting from the 1986 Goldwater-Nichols Act, has positioned the U.S. as the dominant military in the world. Central Command's ability to defeat the world's fourth largest military in 28 days is a clear example of the American defense establishment's ability to execute the tenants of the Goldwater-Nichols Act. Until interagency operations are strengthened and doctrine between military and non-military agencies is developed, the following considerations are in order.

Assigning the right people to the military support staff is the most critical requirement in the execution of complex interagency operations and ultimately established the foundation for the planning and execution of interagency operations. Additionally, military personnel assigned to an interagency staff should possess both appropriate technical and intellectual experience to quickly assess requirements and work through the cultural differences. The JMD must be specific enough to ensure that services properly screen and assign the right personnel.

With the increase of information on the battlefield, military communication assets are in high demand. Allocation of scarce resources is further complicated during the transitioning from combat to post-conflict operations. Therefore, interagency organizations should train and deploy with an organic communication capability prior to deployment. The Joint Staff should assign a task-organized unit from the Joint Communication Support Element to the headquarters of the interagency unit before deployment. The Joint Communication Support Element's ability to organize a self-sufficient unit allows this organization to meet the requirements of interagency

operations. Another option could be the assignment of a Marine Expeditionary Unit to provide the infrastructure and support to an interagency headquarters. One of the Marine Expeditionary Unit's mission tasks is to serve as a combatant commanders "joint task force enabler."<sup>19</sup> The ability to plan and execute full spectrum communications makes it a useful formation to establish temporary interagency headquarters. A final recommendation would require the assignment of a service as the executive agent for interagency communication support. The lead agent should establish a reserve corps, (a civil-military organization trained and equipped to provide communication support to an interagency staff) that is mobilized to support post-conflict operations. These three examples should provide initial support to post-conflict operations. Once an operational area is stabilized and conditions are set, contractor support can be usefully employed. However, contractors should not provide the initial post-conflict communication infrastructure, as they are insufficiently robust for the demanding tasks of an austere environment. Contracts do not provide the flexibility required in the transition between combat and post-conflict operations. However, if a contractor is the only option, the contract should include all the personnel required to fully operate a network from installation of the communication infrastructure to customer/help-desk support, as well as include power and air-condition support.

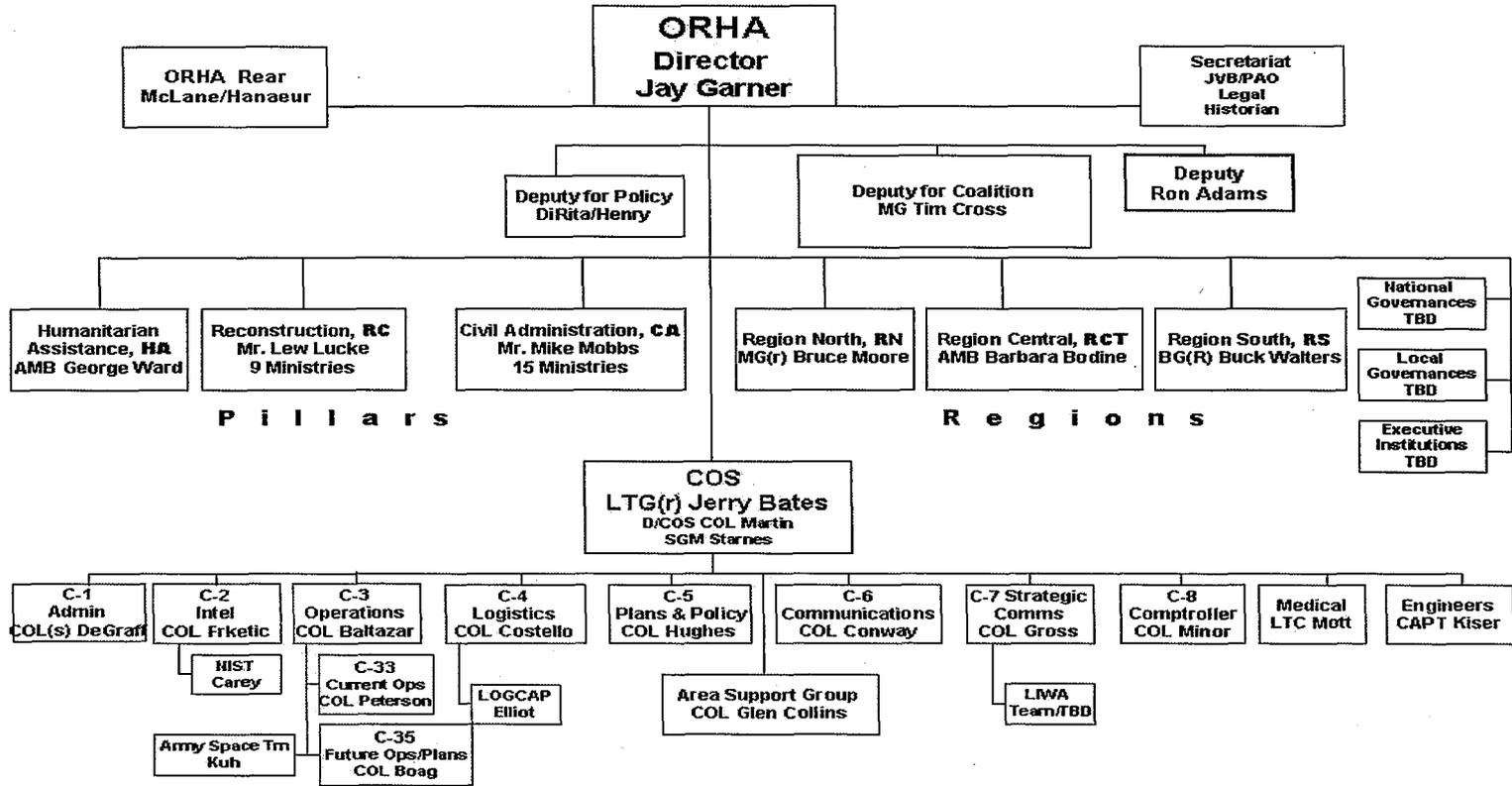
Both military and non-military agencies should to increase their level of training and exposure in the area of interagency operations. Many military schools such as the Marine Command and Staff College have implemented steps to increase the education of military officers in the subject of interagency operations. However, these institutions are simply teaching the "what should be done" but not the "how it will be done." A training organization is necessary to ensure that practical application is implemented in the operating forces. For

example, prior to a unit's deployment to Iraq, a mission rehearsal exercise is normally conducted between the Marine Corps and Army. These exercises facilitate cooperation and understanding between the two lead services in Iraq. Similarly, interagency exercises are required to break interagency policy, procedure, and language barriers. Trying to build these operational bonds and understand the process during the execution of post-conflict operations leads to inefficiency and lack of productivity. As Colonel Michael E. Lebiedz, USAFR, Chief of Coalition Warrior Interoperability Demonstration, points out, "It is almost more difficult to do interagency than military coordination because militaries speak the same language ... In government agencies, terms, processes and policies often differ."<sup>20</sup>

In summary, Nation Security Presidential Directive 44 (Management of Interagency Efforts Concerning Reconstruction and Stabilization) and the establishment of the Department of Defense's first non-kinetic interagency regional combatant command - Africa Command (AFRICOM) - are steps in the right direction. However, legislation is required to officially promote incentives, enforce requirements, and institutionalize the process of military and non-military interagency cooperation. Similar to the Goldwater-Nichols Act, such legislation linked to promotion and funding will encourage both military and non-military agencies to allocate personnel and assets to the development of an interagency communication structure that can meet future challenges. Failure to develop legislation, doctrine, and understanding among interagency organizations will hamper efforts to develop a communication structure staffed with the right personnel, properly trained in interagency requirements, and possessing the appropriate equipment to meet the needs of a post-conflict component capable of executing all elements of national power – diplomacy, information, military, and economy.

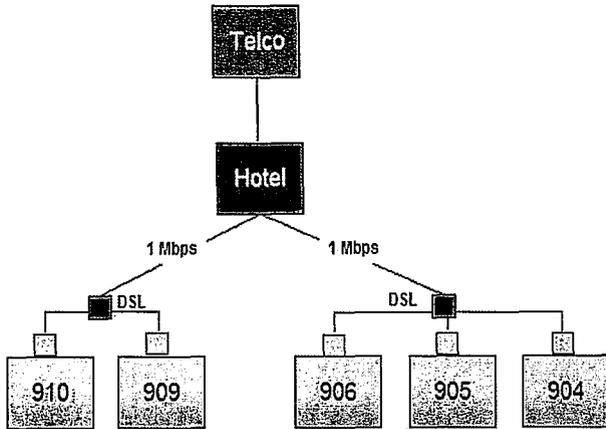
# FIGURE 1

## Office of Reconstruction and Humanitarian Assistance



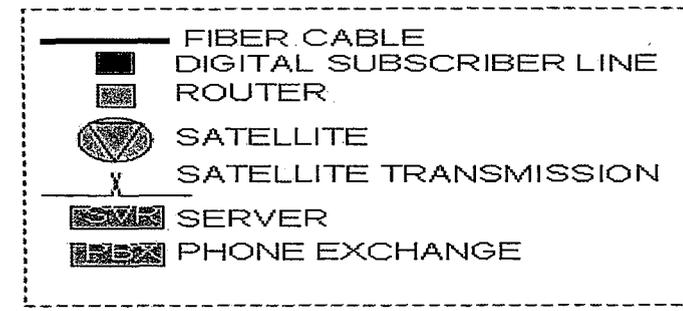
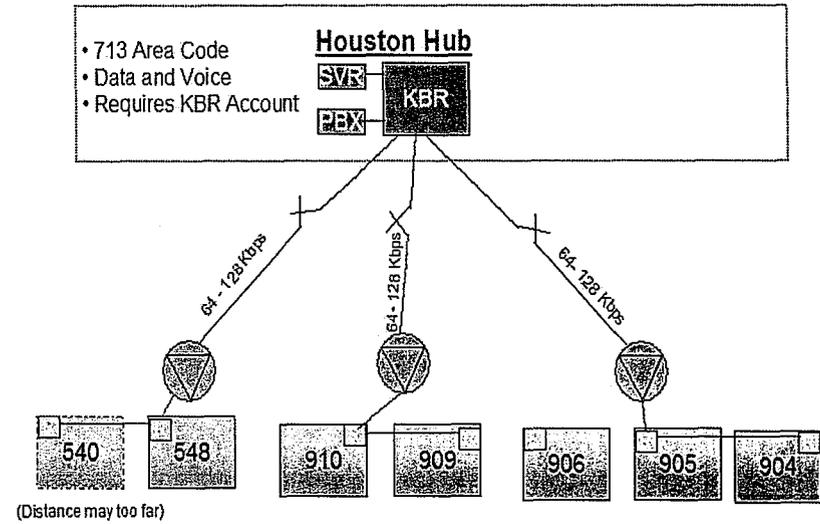
**FIGURE 2**

**Hilton Villas Communications**



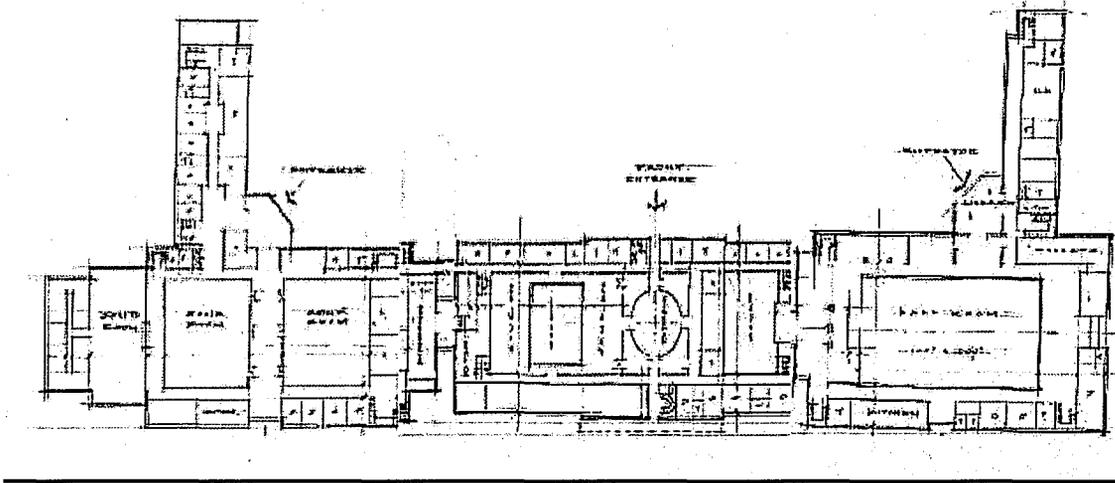
**FIGURE 3**

**Proposed Villas Communications**



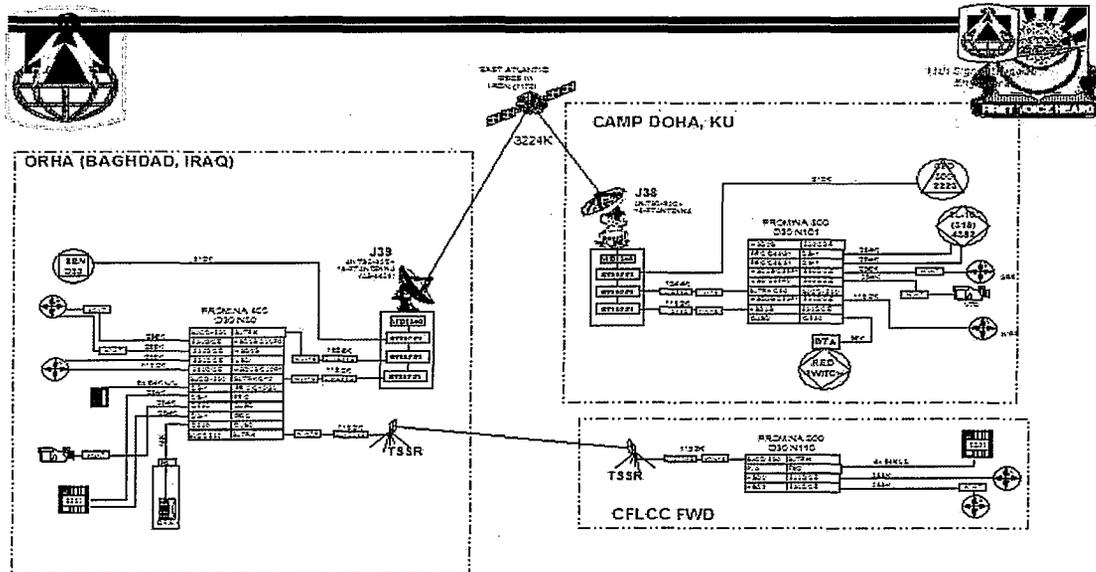
**FIGURE 4**

**National Guard Palace Layout**



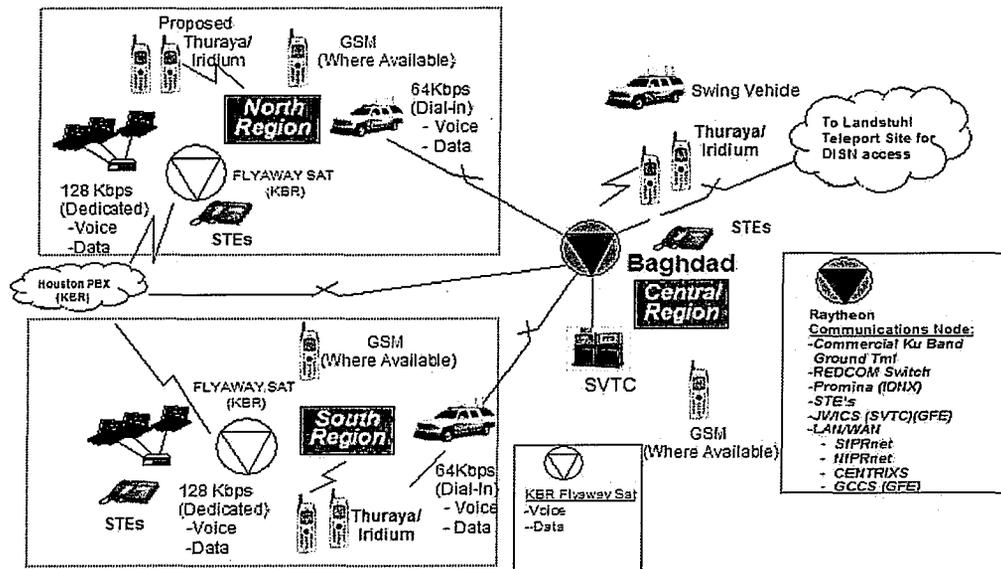
**FIGURE 5**

**86<sup>th</sup> Signal Battalion ORHA Detachment**



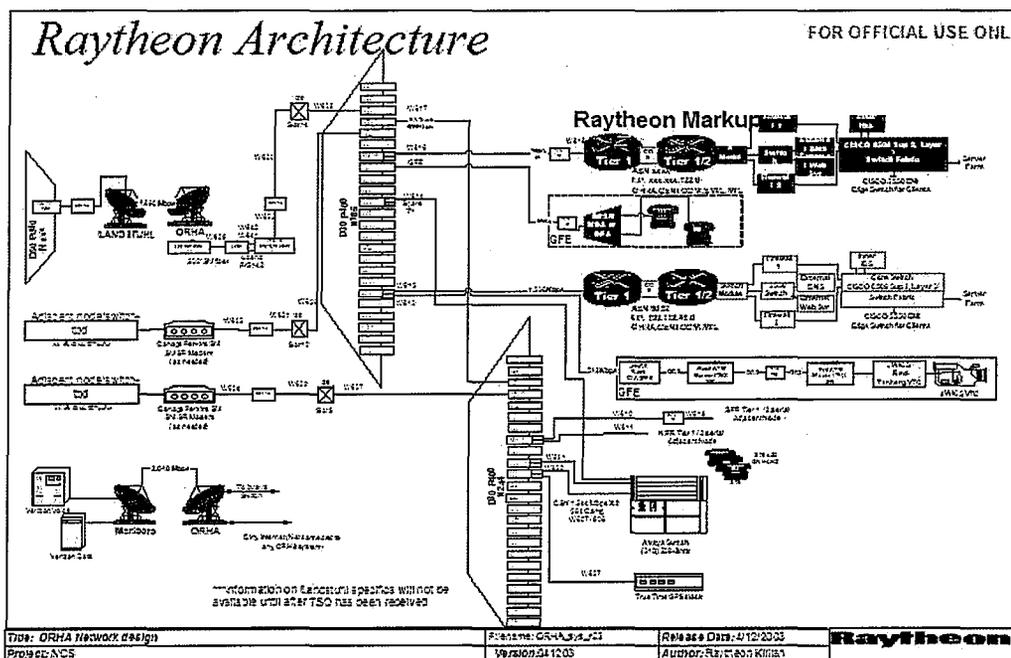
**FIGURE 6**

**ORHA HQ and Region C4 Support Plan**



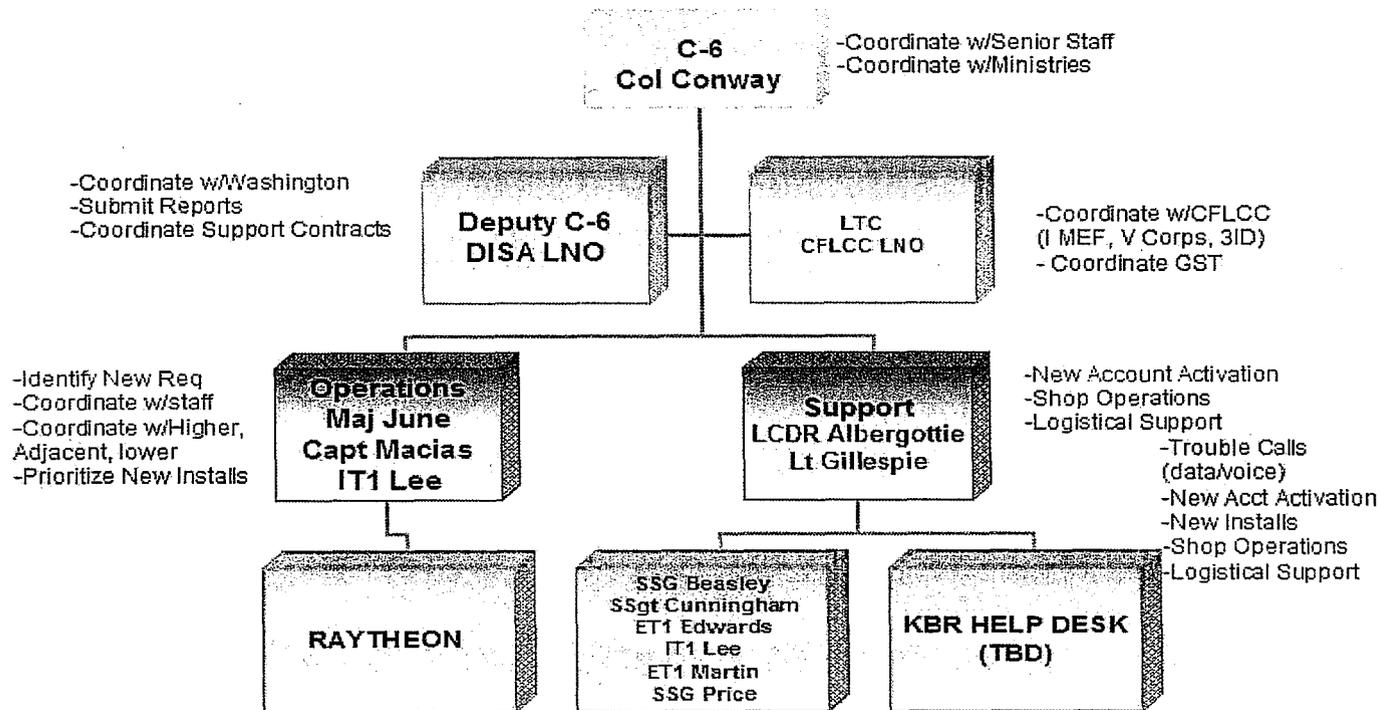
**FIGURE 7**

**Raytheon ORHA C4 Architecture**



**FIGURE 8**

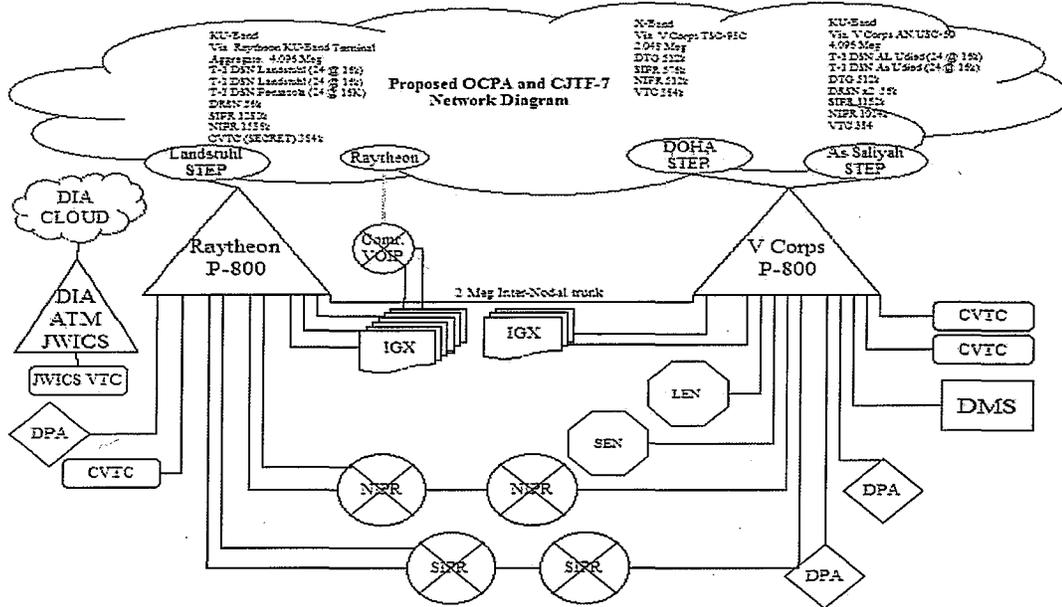
**C-6 ORGANIZATION CHART**



*As of May 2003*

# FIGURE 9

## ORHA and CJTF-7 C4 Architecture



SERVICE	CPA <sup>1</sup>	CJTF-7
<b>SATELLITE</b>		
Commercial (Raytheon)	2MB to Marlborough, MA	
DISN - Commercial	Landstuhl - 4.096MB	As Saliyah 4.096MB
DSCS		CP Doha 1.152MB
<b>VOICE SERVICES</b>		
Commercial (Raytheon)	Marlborough - 2 T1s	
DSN	Ramstein - 2 T1s (384kbps) Pensacola - T1 (384kbps)	As Saliyah - T1 (384kbps)
DRSN	Ramstein - 1 DPA (56kbps)	Bahrain - 2 DPAs (56kbps)
Commercial Cellular/Satellite	MCJ Cell Thurava Satellite	
<b>DATA SERVICES</b>		
MIPRNET	Heidelberg - 1536kbps	As Saliyah - 1024kbps
SIPRNET	Heidelberg - 768kbps	As Saliyah - 1024kbps CP Doha (Tier 1) - 128kbps
<b>VIDEO SERVICES</b>		
DVSG	Vaihingen - 384kbps	Vaihingen - 384kbps
VTC		CP Doha (Tier 1) - 384 kbps
<b>BROADCAST SERVICES</b>		
Commercial Broadcast	CNN, AFN, BBC, AL JAZEE RA	
<b>OTHER SERVICES</b>		
JWICS	JWICS - 768kbps (Non-DISN Transport)	As Saliyah - 512 kbps
DTG		Bahrain - 512kbps CP Doha - 512kbps

## Endnotes

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- <sup>1</sup> Joint Staff, Joint Publication 0-2, *Unified Action Armed Forces (UNAAF)*, GL-5.
  - <sup>2</sup> Jones Christopher R. "Turning Victory to Strategic Success." (Naval War College, Newport RI, 2005), 7.
  - <sup>3</sup> Interview Gordon Rudd with Commander Select Angel Albergottie. June 23, 2003.
  - <sup>4</sup> Interview Gordon Rudd with Captain Jaime Macias. July 20, 2003.
  - <sup>5</sup> E-mail from LtCol Keith June (February 26, 2008).
  - <sup>6</sup> Interview Gordon Rudd with John Eugene Bulla, June 14, 2003.
  - <sup>7</sup> Ibid.
  - <sup>8</sup> Interview Gordon Rudd with LtCol Timothy Phillips (ret), U.S. Marines. July 12, 2003.
  - <sup>9</sup> Interview Gordon Rudd with LtCol Timothy Phillips (ret), U.S. Marines. July 12, 2003.
  - <sup>10</sup> Interview Gordon Rudd with Major Keith June, U.S. Army Interview. June 14, 2003.
  - <sup>11</sup> Interview Gordon Rudd with Major Keith June, U.S. Army Interview. June 14, 2003.
  - <sup>12</sup> Ibid.
  - <sup>13</sup> Interview Gordon Rudd with John Eugene Bulla, June 14, 2003.
  - <sup>14</sup> Interview Gordon Rudd with LtCol Timothy Phillips (ret), U.S. Marines. July 12, 2003.
  - <sup>15</sup> Ibid.
  - <sup>16</sup> Interview Gordon Rudd with Major Keith June, U.S. Army Interview. June 14, 2003.
  - <sup>17</sup> Ibid.
  - <sup>18</sup> Ibid.
  - <sup>19</sup> U.S. Marine Corps. *Marine Corps Order 3120.9B*. Sept 25, 2001, 4.
  - <sup>20</sup> Lawlor, M. "Warfighters Gear Up to Address Interop Issues," *Signal Magazine*.  
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