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## EXECUTIVE SUMMARY

**Title.** A CRITICAL ANALYSIS OF THE I MEF INTELLIGENCE PERFORMANCE IN THE 1991 PERSIAN GULF WAR

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**22 May 1995**

**Problem Question.** What was wrong with the I MEF intelligence apparatus during the 1991 Persian Gulf War, and what is being done to correct it?

**Discussion.** Prior to Desert Storm, the I MEF theoretical capability to conduct intelligence operations appeared considerable. Despite no doctrinal foundation, the newly established Surveillance, Reconnaissance, Intelligence Group (SRIG) seemed capable of providing commanders with credible combat support. By the beginning of Desert Storm, major CINC imposed restrictions, changes to the MEF operations plan, and an immaturely developed SRIG severely challenged MEF intelligence planners. Although the CINC had significantly relaxed pre-G-Day restrictions by the start of Desert Storm, some were still in place to hamper MEF intelligence operations. Also, manpower and systems support within the MEF G-2 and the CENTCOM J-2 Staff contributed to a debilitating dissemination bottleneck that existed throughout the campaign.

**Conclusion.** I MEF did not have the doctrinal foundation and existing structure to effectively fulfill the intelligence needs of a reinforced MEF in a land campaign. Also, training, manning, systems support and other deficiencies contributed significantly to the MEF G-2's and the 1st SRIG's inability to effectively respond to the intelligence requirements of commanders at all levels. As a result of post war analysis, the Marine Corps plans to improve its intelligence apparatus by developing pertinent doctrine, enhancing educational opportunities, modernizing support systems and reshaping the manpower structure.

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## **Introduction**

Fifty years after the surprise Japanese attack at Pearl Harbor, the United States lead an international coalition against an invading Iraqi military that had seized and occupied the country of Kuwait. Many have described the resulting coalition victory as one of the greatest in the Republic's history. Despite such an achievement, wartime commanders identified significant flaws in the intelligence apparatus that supported coalition forces. The intelligence support provided from both national and tactical producers revealed a system that was unable to adequately support warfighters throughout all levels of command.

The United States Marine Corps (USMC) also recognized critical deficiencies in the functional area of intelligence and began an intensive review of its own system. Commanders at all levels of I Marine Expeditionary Force (I MEF) had expressed bitter dissatisfaction about the poor intelligence support they received prior to and during the war. I am one of those subordinate commanders dissatisfied with the intelligence support my unit received during Operation Desert Storm. As an infantry company commander who spent a prior tour in a signals intelligence assignment in Europe, the lack of quality intelligence was a major source of frustration; this was especially true because I was certain the support capability existed.

As a result of my Desert Storm experience, I am seeking to answer the question: "What was wrong with the I MEF intelligence apparatus during the 1991 Persian Gulf War and what is being done to fix it?" I will explore this question by critically examining the I MEF intelligence effort in the 1991 Persian Gulf War. I will conduct this analysis by:

- (1) identifying the I MEF Intelligence Organization for combat;
- (2) discussing the I MEF intelligence planning that preceded the ground operations of Desert Storm;
- (3) detailing and analyzing I MEF intelligence operations during the war; and
- (4) highlighting how this debate is reshaping the future of Marine Corps Intelligence.

The end product will bring together the various views on I MEF intelligence performance and compare them to the near and long term solutions the Marine Corps as a service is applying to the intelligence field today. In an attempt to ensure universal access to this study, I shall incorporate only unclassified source material into this paper. Additionally, since I was a part of the I MEF ground combat element during Desert Storm, I will focus this paper on ground intelligence operations.

## Chapter 1

### I MEF ORGANIZATION FOR COMBAT: INTELLIGENCE

One of the surest ways of forming good combinations in war would be to order movements only after obtaining perfect information of the enemy's proceedings. In fact, how can a man say what he should do himself, if he is ignorant of what his adversary is about? As it is unquestionably of the highest importance to gain this information, so it is a thing of the utmost difficulty, not to say impossibility.<sup>(1)</sup>

-Baron Antoine-Henri Jomini, *The Art of War*

What did I MEF bring to the table to begin "obtaining...information of the enemy's proceedings" in preparation for the ground offensive? In 1988, the Marine Corps, under direction of the then Commandant, General Alfred M. Gray, pooled all MEF level intelligence elements into a single entity called a Surveillance, Reconnaissance, Intelligence Group (SRIG). His primary purpose for the consolidation was to create an "organization where intelligence assets from throughout the MAGTF [Marine Air-Ground Task Force] would be formed into a cohesive, synergetic, vibrant collector, producer, and disseminator of intelligence." The SRIG's mission was: "to provide surveillance, reconnaissance, intelligence, counterintelligence, electronic warfare, air/naval gunfire liaison, tactical deception, and communications support to the MEF, subordinate MAGTF's, and other commands as directed."<sup>(2)</sup>

I MEF formed 1st SRIG in October of 1989 and, less than one year later, employed it in combat in the Persian Gulf.

The I MEF SRIG consisted of the following elements (see figure 1-1): a Headquarters Company, a Radio Battalion, a Force Reconnaissance Company, a Communications Battalion, a Remotely Piloted Vehicle (RPV) Company, an Air and Naval Gunfire Liaison Company (ANGLICO), and an Intelligence Company. By the start of Operation Desert Storm, 2nd SRIG, II MEF, had substantially reinforced 1st SRIG; this almost doubled the in-theater capability.

The concept of employment for the SRIG centered around a cooperative relationship between the SRIG Commander and the MEF G-2. The MEF G-2 is the staff officer responsible for the total intelligence support to the MAGTF from the direction of the intelligence effort to the final dissemination of finished products. The SRIG commander is required to properly man, equip and train his subordinate elements to ensure the rapid and effective completion of the intelligence cycle as planned for by the MEF G-2.

## Figure 1-1: 1st SRIG Organization for Desert Storm

Paramount to understanding the state of affairs of the SRIG concept rests with doctrine. At the time of the Gulf War, no existing, sanctioned doctrine existed regarding the employment of the SRIG. On 12 October 1990, two months after the beginning of Operation Desert Shield, the Commanding General, Marine Corps Combat Development Command, signed the Coordinating Draft of FMFM 3-22 -- *SURVEILLANCE, RECONNAISSANCE, INTELLIGENCE GROUP (SRIG)* -- and subsequently staffed it throughout the Fleet Marine Forces (FMF) for comments and recommendations. None-the-less, the reinforced 1st SRIG that went to war in the Persian Gulf operated under a set of internal and external perceptions that varied (sometimes widely) between respective MEF commanders and staff officers due to this doctrinal void.

The Intelligence Company provides the key element of SRIG support to the MEF (see figure 2-1). While the other elements are primarily information collectors, those who developed the SRIG concept organized the Intelligence Company to conduct intelligence collection *planning, all-source fusion, and dissemination of intelligence to all MEF elements*. During the Gulf War, two elements of the Intelligence Company, the MAGTF All-Source Fusion Center (MAFC) and the Surveillance and Reconnaissance Center (SARC) figured prominently in the support provided to I MEF.

The Marine Corps created the MAFC (see figure 3-1) as a reaction to lessons learned in Beirut, Lebanon, during the early 1980's. While Marine Amphibious Units (what Marine Expeditionary Units were then called) were conducting peacekeeping operations in Beirut, national and theater intelligence sources showered them with overwhelming volumes

## Figure 2-1: Intelligence Company Organization

## Figure 3-1: MAFC Organization

of intelligence data. The MAFC's established purpose was "...to insure that intel available to the USMC would not overwhelm its ability to process it."<sup>(3)</sup> It would be the hub where analysts turned raw information into intelligence. Raw data from national, theater, and tactical sources reflecting all disciplines of the intelligence field would flow into this central location. From there, MAFC analysts would process the data and disseminate it to the MEF command element and its major subordinate elements. The planned wartime strength of this organization was 117 officers and Marines. However, on 16 January 1991, the first day of the air phase of the campaign, the I MEF MAFC operated at less than 50 percent strength. Like the rest of the SRIG, this would be the *MAFC's first field test*.

The proposed doctrine prescribes that a major information feed into the MAFC should come from the MEF SARC. Theoretically, after the MEF G-2 provides approved essential elements of information and other intelligence requirements, the SARC formulates a detailed collection plan and then oversees the associated collection tasking. Elements from units executing the collection plan (i.e., Force

Reconnaissance, Radio Battalion, RPV Company, etc.) man the SARC to oversee mission execution and to forward incoming information to the MAFC. The SARC concept was not new at the time of the Persian Gulf War.

## Summary

At the start of Desert Shield, the I MEF theoretical capability to conduct intelligence operations in theater appeared considerable. Despite no doctrinal foundation, the Marine Corps had recently created an intelligence based SRIG organization that appeared capable of providing commanders with credible combat support. Conceptually, supporting organizations would no longer overwhelm units with mountainous volumes of data because the MAFC would fuse the multi-source incoming information and provide the MAGTF with relevant intelligence products. However, the commanding officer of the embryonic 1st SRIG could not have possibly conceived the sheer magnitude of the task that the MEF Commander was about to lay before him. All the variables he was about to face in the joint, combined battlefield of Kuwait, would make intelligence support planning for Desert Storm an extremely difficult mountainous task.

## Chapter 2

### I MEF INTELLIGENCE PLANNING FOR OPERATION DESERT STORM

Lieutenant General Walter E. Boomer, Commanding General of I MEF, provided clear and unmistakable guidance to his intelligence planners. He believed the Iraqi indirect fire weapons, primarily corps level artillery, multiple rocket launchers and short range missiles, were the greatest threat to his attacking force. The sheer volume of Iraqi systems and, specifically, their capability to deliver chemical fires, concerned General Boomer before the start of the ground war. He directed the G-2 to develop and implement a collection plan based on this guidance.<sup>(4)</sup>

## Requirements

The requirements levied upon the I MEF G-2 and the 1st SRIG were immense. They had to support both their Commanding General's information requirements and those of the MEF subordinate elements who were about to conduct the single largest Marine assault since the Battle of Okinawa in 1945. I MEF (see figure 1-2) consisted of a ground combat element with two divisions (the 1st and 2nd Marine Divisions), an aviation combat element (ACE) that included a reinforced 3d Marine Air Wing which contained the equivalent of over two wings worth of aircraft, and a combat service support element that included the Force Service Support Groups of both I and II MEF.

Figure 1-2: I MEF Organization During Desert Storm

Besides the massive force, the attack plan changed less than two weeks before G-Day. What initially had been a one division obstacle belt breach with another following in trace had, on short notice, turned into a

two division abreast assault.<sup>(5)</sup>

The need for finding suitable breach sites had doubled, thus requiring a major refocusing and shifting of the intelligence effort.

The next higher headquarters' needs, requirements and capabilities exacerbated the difficult challenge facing the Marine Intelligence Community in Southwest Asia. The Central Command (CENTCOM) J-2 Staff was wholly unprepared to go to war when Iraq invaded Kuwait. When the CENTCOM J-2 Staff deployed into theater, it numbered less than 10 personnel on its rolls (although it grew to over 40 by Desert Storm). Additionally, this skeleton staff had no clear pre-planned intelligence architecture to guide the build up of in-theater collection and information resources.<sup>(6)</sup>

This lack of personnel and planning by CENTCOM created another problem for I MEF. Because of staff shortfalls, the J-2 tasked the components, including I MEF, as part of the newly developed Theater intelligence architecture, to provide "ground truth" reporting on respective areas and units in Kuwait. For I MEF, this meant conducting theater level situational analysis reporting on the area controlled by the Iraqi III Corps. The J-2 Staff, who was obviously having difficulty just meeting the day-to-day requirements of the CENTCOM Commander-in-Chief (CINC), had in effect become *a reliant consumer from rather than a supporting producer to the major subordinate commands*.<sup>(7)</sup>

At the strategic level, the national intelligence community mobilized to provide CENTCOM with an unprecedented view of the battlefield. The Director of Central Intelligence established Watch Condition One during early August 1990; this directed virtually every national intelligence collection system to focus on the Kuwait and Iraqi Theaters of Operation. The assets allocated included satellites and airborne platforms for gathering imagery and signals intelligence (SIGINT) against Iraqi targets.<sup>(8)</sup>

Because of the vast, wide open spaces common in a desert environment, imagery became the intelligence source of choice. Every level of command in all the service components desired imagery to determine the Iraqi order- of-battle and lay down of forces in their respective zones of action. SIGINT, which would have normally satisfied a large number of tactical and theater intelligence requirements, was relatively ineffective because the Iraqi defenders in Kuwait communicated primarily through land lines.<sup>(9)</sup>

In I MEF, requests for up to date, accurate imagery were constant and under the circumstances very difficult to satisfy.

## **Limitations/Restrictions**

Once the I MEF Staff and the SRIG began to operate in support of Operation Desert Shield, the effects of a lack of doctrine immediately became apparent. The parties concerned had to settle how the SRIG fit into I MEF's command, staff, and intelligence architecture. Unfortunately, the MEF staff and the SRIG leadership were unable to mutually define the association. As a member of the MEF staff recalled: the SRIG Commanding Officer wanted to be an operational commander who worked directly for Lieutenant

General Boomer. The MEF staff saw the SRIG as more of an asset pool that supported the G-2's intelligence plan.<sup>(10)</sup>

Ultimately, the SRIG became a non-entity in the operational aspects of offensive ground warfare planning. The MEF staff simply reverted to the old way of doing business by ignoring the SRIG organizational chain-of-command altogether. Before the establishment of the SRIG, MEF intelligence agencies planned, trained, and operated within their respective specialties as independent functional entities with their operational tasking coming directly from the MEF G-2. This was generally how MEF intelligence units operated during Desert Storm.<sup>(11)</sup>

Circumstances in theater forced components to fulfill the vast majority of their intelligence requirements prior to Desert Storm primarily through the national architecture. This situation existed because General H. Norman Schwartzkopf, the CINC of CENTCOM (CINCENT), had established specific rules of engagement (ROE) in theater. These ROE restricted all cross boundary incursions into occupied Kuwait until after 16 January 1991, the beginning of Operation Desert Storm (i.e., the air phase of the campaign). This restriction nullified the use of virtually all available in-theater imagery and ground surveillance assets prior to the first offensive action. Tasking the national collection assets became another major problem for I MEF. To access national assets, the I MEF G-2 had to have all requests for national support validated by the CENTCOM J-2 Staff. The J-2 had to balance the requests of each major command against the CINC's current focus of effort. These circumstances placed all service commands in fierce competition for the thin pool of support. Initially, the air phase of the campaign had top priority. Until the beginning of the ground phase of the war, I MEF's ground combat concerns were at the bottom of the priority listing. Unlike the other services, I MEF had no other avenue through the service chain to obtain national support.<sup>(12)</sup>

There was an equally intense internal competition for the MEF's focus of support. The MEF was directing most of its intelligence effort to promoting targeting for the prosecution of its own in-zone battlefield preparation by the ACE. So focused was the MEF on attriting the Iraqi III Corps prior to G-Day, that RPV's never flew in support of the 1st or 2nd Marine Divisions until seven days before starting ground operations (G-Day minus 7).

The MEF G-2 organized the SARC, the entity established to support intelligence collection for the ground war, after Desert Storm had actually commenced (16 Jan 91). Previously, little thought had gone into who would man and lead it, and how it would function. In the SRIG concept (FMFM 3-22 coordinating draft), the SARC is a pre-established, functioning organization that the SRIG commander has trained and prepared for war. As a result of this late beginning, ***no coherent concept of employment was developed*** that efficiently and effectively made use of the existing organization. As a by-product, most of the intelligence asset employment occurred in a piecemeal manner with tasking coming directly from the G-3 (Operations and Plans) vice the G-2.<sup>(13)</sup>

In the MAFC, which was working directly for the MEF G-2, an information bottleneck evolved as the air phase of the campaign began. The Analysis and Production (A&P) Section received an average of 3000

individual reports a day from national, theater and MEF intelligence support agencies. A&P was, in theory, supposed to analyze the multi-source incoming information and produce a fused all-source intelligence product on the enemy situation for the MEF Command Element and its subordinates. With A&P manned with somewhere between 20-24 personnel (less than 50 percent as proposed in FMFM 3-22 coordinating draft), the section became little more than a "repository" of incoming information. The *analysis function never really existed* as analysts focused their efforts on "bean counting" and plotting enemy positions on maps.<sup>(14)</sup>

A&P did what it could to simply sort through and plot the incoming bits of information. Thus, the MEF staff acquired a fairly good picture of the enemy situation, but provided very little information to its subordinate commands.<sup>(15)</sup>

As noted previously, the CINC, by his overflight and ground reconnaissance ban, fully restricted I MEF from exploiting the potential of organic and theater intelligence resources. In addition, at the request of Special Operations Command (SOCCENT), the CINC established a restrictive zone between the Kuwait Border and I MEF which denied I MEF access to Iraqi deserters and Kuwaiti expatriates who were streaming across the border. Even after SOCCENT captured the deserters and put them into enemy prisoner of war (EPW) camps, the CINC still denied I MEF access until late December 1990.<sup>(16)</sup>

Seven months prior to Operation Desert Storm, the MEF G-2 could have tasked VMFP-3, the Corps' sole tactical reconnaissance squadron, to provide timely, hard copy, wide area coverage imagery on specified targets. However, this was no longer an option: because of end of service limitations associated with the RF-4 airframe, the Marine Corps deactivated VMFP-3 two weeks before the beginning of Operation Desert Shield! Therefore, the MEF Commander could acquire suitable tactical, wide area coverage imagery only if the CINC directed some of the theater assets away from supporting pre-G-Day air operations.

## Summary

The intelligence planning considerations were extensive for the MEF G-2. Those in Marine intelligence were extremely challenged to meet the support requirements emanating from all command levels because of the immaturely developed SRIG organization and considerable in-theater limitations and restrictions. As the date for ground operations approached, Lieutenant General Boomer, his staff, and the MEF major subordinate commanders sought to mitigate the existing limitations and restrictions to increase intelligence collection and dissemination. Although the MEF G-2 was beginning to satisfy some intelligence requirements by the start of the air phase of Desert Storm, significant obstacles still existed as intelligence operations reached their peak during the ground phase of the campaign.

## Chapter 3

### I MEF INTELLIGENCE OPERATIONS DURING DESERT STORM

Once Operation Desert Storm commenced on 16 January 1991, the potential existed for increasing the intake of quality intelligence support to the MEF. Theoretically, unrestricted intelligence operations appeared probable; however, significant restrictions still existed. Nonetheless, as the air phase continued, the enemy situation on the ground became progressively clearer for some within I MEF.

With the CINC and the I MEF Commanding General concentrating most of their attention on conducting air operations, both focused most of their in-theater intelligence collection assets on that end. General Schwartzkopf directed most of his attention to reducing the Iraqi center of gravity, Saddam Hussein's highly centralized system of command and control.<sup>(17)</sup>

Lieutenant General Boomer concentrated his intelligence activities on supporting the ACE's efforts on reducing the Iraqi III Corps artillery, missiles, and nuclear, chemical and biological (NBC) threats. Not until five to seven days before the start of the ground phase of the campaign did the focus shift for both generals. Because of the scant intelligence support that had been flowing to ground commanders prior to then, this late shift in focus would be a key source of friction between the MEF staff and the maneuver divisions throughout the operation.

## Collection

With the national and theater collection assets focused on the CINC's priorities, the MEF commander had to maximize the collection capabilities of his organic assets. There was information flowing into the MAFC from national sources, but nearly all of it focused on Iraq and not in I MEF's sector of the Kuwait theater of operation, i.e., the Iraqi III Corps area.<sup>(18)</sup>

**Imagery.** Hard copy, up to date imagery was in short supply throughout both Deserts Shield and Storm. During this period, a significant volume of imagery flowed into the theater from national sources both before and after 16 January 1991, but very little of it was of value to MEF decision makers. Most of the national imagery that reached the MEF and its subordinate elements was "not current enough to satisfy most operators."<sup>(19)</sup>

As a 1st Marine Division G-2, Analysis Section Officer stated: "We received a multitude of imagery products...a few were useful and many were of no assistance." Most imagery products came to the 1st Marine Division G-2 unevaluated. They often lacked reference grid locations, north arrows, photo interpreters' analytical annotations, and image dates.<sup>(20)</sup>

The MEF G-2 believed hard copy, high resolution imagery focused on the Iraqi III Corps was available from national sources but the CINC's J-2 and his Staff were not consistently distributing the products. In a desperate move, the MEF G-2 sent two officers back to Washington, D.C. to search for any current and available imagery on the Iraqi III Corps. They located a large volume of imagery from national level sources focused on the MEF's zone and personally brought it back to the MEF for use and dissemination.<sup>(21)</sup>

Once Desert Storm began, I MEF used the RPV very effectively to support the information needs for pre-G-Day battlefield shaping operations. This meant, however, that Pioneer RPV's did not fly in direct support of the Marine division commanders until just prior to the start of the ground phase of the war. Still, when the MEF sent the RPV's to support the divisions, the respective staffs put them to very productive use both for last minute planning and for supporting ground operations after G-Day.[\(22\)](#)

Although both the MEF and the divisions extensively employed the RPV's, the system could not fill the hard-copy imagery void. The RPV's collected "narrow field of view" video images onto cassette tapes. The ground station operators could copy the tapes, but the RPV Companies maintained only a limited capability to do so. In addition, once a unit had a tape, they would have to possess a compatible video tape player (VHS) to view it, but such VHS players were in very limited supply in the Persian Gulf. Even if tape players were available, the raw video was of little value without a trained ground station operator to interpret the running mission data (location, direction, etc.), however they were not normally available at the division level and below.[\(23\)](#)

**HUMINT**. Because of the ROE restrictions and the lack of access to enemy deserters, I MEF was not able to maximize HUMINT assets to support planning for G-Day operations. But a change occurred in late December when I MEF took over the SOCCENT zone along the border from Central to Eastern Kuwait. SRIG Marines from 1st Force Reconnaissance Company and Interrogator-Translator and Counter-Intelligence Teams relieved the Special Operations Forces in the border observation posts (OP's) immediately after the boundary change. These OP's provided the most current and accurate pre-G-Day information available on the Iraqi units opposite I MEF. Deserting enemy soldiers provided the first indications that the Iraqi obstacle belts were not as formidable as expected. The EPW reports coming from the OP's also provided invaluable insight as to the effectiveness of deception operations and to the state of Iraqi front-line morale.[\(24\)](#)

Although the CINC lifted most ground associated cross border restrictions immediately after the beginning of the air phase of Desert Storm, he still prohibited cross border ground reconnaissance operations until just immediately (nearly three days) before G-Day. When the CINC lifted the last prohibition, the only intelligence collection elements to conduct cross boundary operations were Division Reconnaissance Teams (which crossed the border at G-Day minus 3). The actions of these teams, coupled with imagery that was now trickling down from the MEF, verified the poor state of Iraqi defenses in the first obstacle belt.[\(25\)](#)

**SIGINT**. Although the Iraqi III Corps radio communications were relatively low key for several months, there was a small increase in enemy tactical communications immediately after the start of Desert Storm. Through 1st Radio Battalion's Mobile Electronic Warfare Support Systems (MEWSS) which were well forward, they were able to make a limited intelligence contribution through communications intercept.[\(26\)](#)

The MEWSS were deficient, though, in their ability to conduct direction finding (DF). Their outdated DF equipment was of such poor accuracy that the MEF was unable to use the locations provided for

targeting.[\(27\)](#)

**The ACE.** With the ACE's loss of VMFP-3, its ability to contribute to the ground intelligence collection effort was limited. Traditional pilot debriefings during the air phase were of some positive value to ground commanders. The MEF G-2 did attempt to have the ACE air drop ground motion sensors along the Kuwait Coastal Highway during the air phase. However, the CINC's restrictions on U.S. aircraft flying under 10,000 feet due to the surface-to-air missile and anti-aircraft artillery threat precluded the ACE from providing the support. Fortunately, Kuwaiti pilots were not under the same restriction. The MEF G-2 coordinated with them and they deployed the sensors at altitudes under 3000 feet. One major success from this should be noted: these sensors were the first system to detect the Iraqi withdrawal out of Kuwait City after the ground war began.[\(28\)](#)

## Processing

The Analysis and Processing Section of the MAFC had a limited ability to process the staggering number of incoming pieces of datum. During ground phase of the war, the volume of incoming traffic jumped from a pre-G-Day average of 3000 messages per day to upwards of 6000 to 8000 per day after G-Day.[\(29\)](#)

The MEF needed a significant number of analysts and capable data processing systems to adequately process such a large number of reports. Compounding an already existing problem, on 14 February 1991, the I MEF Command Post (CP) split into two sections: a forward and a main CP, with 180 kilometers between both elements![\(30\)](#)

With this relocation, the A&P section experienced a commensurate split of its limited assets. Now, the A&P section had to support two separate command posts with half the personnel at each location and double the incoming information.[\(31\)](#)

The systems support was equally as vexing as the manpower issue. There were four data-base management systems brought into theater to support the G-2, I MEF. Both the Intelligence Analysis System (IAS) and the Intelligence Analysis Center (IAC) never worked and consequently MAFC analysts never used them. IAS was still in the developmental phase at the time of the Gulf War and MAFC personnel were relatively untrained in its operation. IAC was an outdated system that had outlived its usefulness. Analysts used the Swifthawk System only as a Top Secret/Special Compartmented Information word processor. The only system serving as a functioning data base was the Intelligence Database Management System, an old, obsolete design that provided the best order of battle data available to the MEF. While this system was functional, the subordinate element G/S-2's could not access its data, and it was not compatible nor linked with other theater or national data base systems.[\(32\)](#)

Although little time existed for analysts of the A&P

Section to do anything but read messages and plot enemy situational details on maps, they did manage to

provide a daily intelligence summary to all MEF major subordinate elements. However, this product was of limited value to many who received it. Division intelligence personnel described these reports as consistently containing a multitude of glaring inaccuracies, to include incorrect grid coordinates, mis-identification of units, and misdated information.[\(33\)](#)

## Reporting

Intelligence dissemination was a constant difficulty for I MEF throughout the war. Officers of the I MEF G-2 blamed the dissemination problem primarily on the physical separation between the MEF command post and its major subordinate units. Also, they implicated the inferior and unreliable communications architecture supporting the G-2's dissemination process. Regarding the physical separation, the G-2, I MEF, possessed only 25 percent of its allocated vehicle support. Due to this vehicle shortage, several individuals involved with I MEF intelligence stated they were unable to push out hard copy imagery to the major subordinate elements with any acceptable regularity.[\(34\)](#)

It seems logical, though, that the divisions and the Force Service Support Group, all of which had fleets of vehicles available, would have eagerly picked up any available intelligence products from the MEF G-2.

Regarding the communications support, the MEF maintained a Local Area Network (LAN) that kept them connected with their major subordinate elements. This system was slow and very prone to being backed up when the message load increased. This limitation ultimately led analysts to deem it unreliable during the high volume information periods during the ground war. LAN by default was used primarily to pass intelligence summaries back and forth every twelve hours.[\(35\)](#)

To pass time sensitive, perishable information, the MAFC had to rely on single channel high frequency (HF) radio. Intelligence officers labeled the HF as unreliable as well as slow.[\(36\)](#)

Operators would have to pass individual messages over encrypted radio nets and the individual receiving the traffic would record each word by hand on message pads. Radio operators would have to repeat this process down each level of command. This "Stovepipe" method of dissemination through every level of command was extremely slow and very inefficient.[\(37\)](#)

## Summary

Although the CINC significantly relaxed pre-G-Day restrictions by the start of Desert Storm, many obstacles still existed to hamper intelligence support within the MEF. CINC imposed cross border restrictions remained a reality until the actual beginning of ground combat operations. Additionally, manpower and systems support issues within both the MAFC and the CENTCOM J-2 greatly contributed to the dissemination bottleneck hampering the entire in-theater MEF intelligence effort. Despite the higher headquarters' somewhat debilitating impact upon the MEF G-2's ability to provide support, the genesis of most problems were a product of self inflicted, internal problems that were years in the

making.

## Chapter 4

### I MEF INTELLIGENCE PERFORMANCE ANALYSIS

The Marine Corps did not prepare its intelligence apparatus to support the MEF as a separate element in a joint, combined land campaign. Almost all the existing Marine Corps doctrine dealing with intelligence operations (FMFM 3-20 -- *Commanders Guide to Intelligence*, FMFM 2-1 -- *Intelligence*, etc.), focused primarily on the MAGTF fighting as an element of a Naval force. Fighting as part of a Navy-Marine Team, the MAGTF would have direct access to the national as well as theater intelligence architectures through the Navy. In addition, a naval task force provides an enhanced communications capability that is only available to Marine intelligence personnel when working out of a command and control configured ship's Joint Intelligence Center.

The SRIG in theory was to provide the MEF Commander, through enhanced organization and training, proficient and properly equipped analysts to ensure rapid completion of the intelligence cycle.<sup>(38)</sup>

Two years after fielding the first SRIG, the vision of General Gray had not come to fruition. The major single point of failure was the MAFC. The SRIG had improperly equipped, minimally manned and poorly trained the MAFC. Although MAFC personnel did the best they could with the tools provided, it was not ready to support such a large scale operation as Desert Storm.

After the 1991 Persian Gulf War, some intelligence officers implicated their commanders (primarily at the regimental level and below) and other staff officers for not understanding how the G/S-2 really did their jobs. Most of this type of criticism came from intelligence officers who felt operators wrongly attacked them for their performance in the Persian Gulf, or from those who felt commanders were a major part of the problem.<sup>(39)</sup>

Whatever the case, the maneuver tactics preached in FMFM-1, *Warfighting*, can only be a reality if commanders are extremely competent in every aspect of employing their organizations in combat. Those that are only skilled in maneuver will eventually fail because they will disregard the concerns of such critical areas as intelligence and logistics, the results of which will cause them to fight blindly and without endurance.

The post-war performance analysis from Lieutenant General Boomer and from Major Generals J.M. Myatt and William Keys, the Commanding Generals of 1st and 2nd Marine Divisions, were equally critical of I MEF intelligence support. General Boomer stated that [the MEF staff] led subordinate commanders to believe that they were "...going to get some marvelous stuff..." from national satellite imagery sources, but what the MEF provided never measured up to their expectations. Hence, they wanted to know why.<sup>(40)</sup>

*Both Major Generals Myatt and Keys believed the intelligence community erroneously depicted the Iraqi's as being "ten feet tall" or "monsters" when they really were just the opposite -- demoralized and neglected individual foot soldiers. Major General Keys believed this inaccurate depiction made his forces "more gun-shy" going into the battle than they should have been. He also stated he did not receive [from I MEF] enough "front-line battle intelligence" to support his combat operations.<sup>(41)</sup>*

*Although Major General Myatt recognized the inaccurate depiction of the Iraqi's, he didn't believe this view was all bad. In an interview with Naval Institute Proceedings after the war, Myatt stated because they believed the Iraqi's to be ten feet tall the 1st Marine Division prepared to fight someone ten feet tall. He was more critical of the volume and quality of imagery reaching the division, which he believed was poor. Most of the imagery, when it did reach the division analysts, appeared to be "third and fourth generation copies" that were very difficult to read and analyze. He also stated during a debrief with the Marine Corps Battlefield Assessment Team that too many intelligence officers were enamored with national systems, yet did not understand how to employ [collection] assets organic to the MAGTF.<sup>(42)</sup>*

## **Summary**

*I MEF did not have the doctrinal foundation and existing structure in place to effectively fulfill the intelligence needs of a two division MEF engaged in a land campaign. Although they did the best they could, the MEF G-2 and the 1st SRIG could not adequately adapt and respond to meet commander's needs throughout all levels within the MEF. With sharp criticism coming from both the I MEF commanders and from the intelligence community, the Marine Corps needed to conduct a penetrating examination of the I MEF intelligence apparatus and resident service level structure to correct the deficiencies that existed during the 1991 Gulf War, and this is what the Corps proceeded to do.*

## **Chapter 5**

### **WHERE DOES THE MARINE CORPS GO FROM HERE?**

*Immediately after the end of the Gulf War, the Marine Corps embarked upon a two pronged examination of its intelligence apparatus. The first set of analysis were internal examinations spearheaded by career intelligence officers. These studies examined the effectiveness of intelligence support within I MEF. They focused primarily on the functioning of the intelligence cycle and how it supported MEF staff planning. They began one day after the 28 February 1991 Desert Storm cease fire! They then continued after forces returned to CONUS. Input for these internal evaluations came primarily from intelligence officers at the MEF headquarters and down to the battalion level, and from division and regimental commanders and their respective operations officers.<sup>(43)</sup>*

*The basic conclusions were:*

*(1) Intelligence support to I MEF during Desert Storm adequately supported the MEF staff but did not fulfill the needs of tactical units (division and below) in a timely manner.*

*(2) Imagery support was inadequate.*

*(3) Processing and dissemination of combat information and all source intelligence of immediate tactical value were inadequate.*

*The predominant factors contributing to these shortfalls were insufficient personnel and physical resources, and constraints imposed by operating in a joint environment.*[\(44\)](#)

*The Department of the Defense, Inspector General (IG) conducted the second leg of this examination. At the request of the Commandant of the Marine Corps, the IG evaluated the Marine Corps in relation to the other services and intelligence agencies so as to acquire an external, higher level perspective.*

*This report, provided to the Commandant of the Marine Corps on 24 September 1993, identified the following six deficiencies in Marine Corps intelligence:*

*(1) Inadequate doctrinal foundation;*

*(2) shortcomings with the intelligence occupational field;*

*(3) insufficient tactical intelligence support;*

*(4) insufficient joint manning;*

*(5) insufficient language capability;*

*(6) inadequate imagery capability.*[\(45\)](#)

*In March 1994 as a result of these examinations of Gulf War intelligence, the Marine Corps approved and subsequently began to implementing a series of changes and improvements to its intelligence structure. The Corps' leadership developed a plan seeking to 'revitalize and professionalize' the intelligence community and service architecture as a whole.*[\(46\)](#)

## **Doctrine**

*In "The Plan" (as it will be referred to in this chapter), the Corps' leadership recognized that the lack of a doctrinal framework contributed to the problem; hence, developing an appropriate doctrine was fundamental to rebuilding the Marine Corps intelligence infrastructure.*[\(47\)](#)

*The doctrine developed must address the multi-faceted role Marine forces could play in both amphibious operations and sustained operations ashore as part of a naval task force or separate from it, in both a*

*joint and combined environment. In addition, this doctrine must be interchangeable with joint intelligence doctrine because all future combat operations will undoubtedly be multi-service.*

## **Organization**

*The Plan discusses specific increases to existing structure. For instance, the numbers of personnel assigned to infantry battalions and regiments will be increased to "process and integrate...intelligence products received" from the MAFC. Also, it creates a new structure in the form of direct support teams who will act as an interface between major subordinate elements and the MAFC.[\(48\)](#)*

*For all the changes, there is no mention about repairing the SRIG. The SRIG idea is generally sound in theory. The U.S. Army has employed a similar concept with great success in its Military Intelligence units. The Marine Corps needs to focus significant emphasis on developing an effective, well-trained intelligence support organization for the MEF.*

*There is much discussion in The Plan about organizations that conduct business with the MAFC, but little dialogue concerning its structure. By inference, the plan calls for the MAFC to continue to be the hub of intelligence processing and dissemination for the MEF. If that is the case, then the organizational structure requires significant refinement. The Army's Military Intelligence Brigade (which supports a corps) allocates 82 personnel to the analysis function alone as compared to the MAFC's A&P Section table of organization of 48.[\(49\)](#)*

*For operating Marine forces (i.e., those under the operational control of a theater CINC), there still is no existing service or FMF level organization that can provide a direct pipeline to the national intelligence apparatus. Headquarters Marine Corps fielded a Marine Corps Intelligence Activity (MCIA) in 1993 at the National Maritime Intelligence Center in Suitland, Maryland.[\(50\)](#)*

*Although the MCIA has direct access to the entire national intelligence system, it is not organized and manned nor permitted by charter to directly assist operational units. It can provide direct, pre-planned exercise support, but to provide operational support, requirements must be validated through the respective CINC's chain of command.[\(51\)](#) As a result, the problem still exists.*

## **Manpower**

*Besides issues concerning increasing the existing structure, The Plan calls for reshaping the intelligence officer military occupational specialties (MOS'). The field used to rely primarily on officers to laterally moved from a combat arms MOS into the intelligence field. This process sent inadequately trained and experienced intelligence officers to operational units who often performed (or were perceived to perform) unsatisfactorily. Manpower at Headquarters Marine Corps will now assign officers to the intelligence specialty straight out of The Basic School. These officers will enter an entry level operational and training track to produce a more professional and competent individual who will be assigned to positions commensurate with their skills.[\(52\)](#)*

## ***Training and Education***

*To develop the skills of intelligence officers, The Plan establishes a new training regimen stressing a multi-disciplined, phased approach. This educational track, which will be in addition to career level professional military education, targets the intelligence officer at specific periods to receive formal training throughout his professional development.* [\(53\)](#)

*While The Plan has addressed the educational needs, it has ignored the real world professional development the intelligence officer misses when not employed in the Fleet Marine Forces. As is done in the Navy (and similarly in the other services), when not assigned to ships or battle groups, intelligence officers are employed in theater level Fleet Ocean Surveillance Information Facilities (FOSIFs). The Navy has these organizations stationed throughout the world and tasks them to provide direct support to forward deployed fleet commanders.*

*The analysts stationed at a FOSIF receive the constant experience of fighting the intelligence war and working within the national, theater and fleet architectures despite not being deployed. The benefit to the Navy's fleet units is accurate, timely intelligence support tailored to their operating needs. The Marine Corps does involve its SIGINT personnel in a similar arrangement with the Navy as part of the Naval Security Group Command. Although the new plan will seek to feed officers into similar joint billets, the Marine Corps has wasted the potential of the MCIA. A CONUS based MCIA in the FOSIF model could provide both Marine operating forces and intelligence personnel with the same added benefits.* [\(54\)](#)

## ***Commander and Staff Training***

*The plan acknowledges the requirement to increase the commander's direct participation in the intelligence process. The general corrective action seeks to use career level schools, such as the Amphibious Warfare School or the Command and Staff College, as the forum for increased intelligence training, primarily for combat arms officers.* [\(55\)](#)

*Although this tactic will have an affect on the small percentage of Marine Corps officers attending career level schools, it is inadequate. Commanders must be as proficient in employing their intelligence assets as they are in employing supporting arms. There is no training available in the Fleet Marine Force to teach officers how to organize and plan intelligence operations (similar to the training officers receive at FMF schools on fire support coordination). Until the Marine Corps trains "operators" on how to conduct intelligence operations, their warfighting skills will be incomplete.*

## ***Systems***

*Although The Plan doesn't directly address systems, since the Persian Gulf War the Marine Corps has taken several major steps in providing more capable processing and dissemination capabilities. FMF units have begun to receive the first improved Intelligence Analysis Systems (IAS). Unlike data base*

*systems employed by the MAFC in 1991, the IAS will link subordinate and adjacent units of the MEF (down to battalion level). This system will provide participating units with the ability to rapidly exchange data and digitized imagery. It also is compatible with the Joint Deployable Intelligence Support System (JDISS) which will be resident in the MAFC. JDISS provides the CINC or JTF Commander direct access to the Joint Intelligence Center and other intelligence agencies in the continental United States.* [\(56\)](#)

## **Summary**

*The Desert Storm experience has resulted in numerous innovative and productive enhancements to the Marine Corps intelligence architecture. Commitments to improvements in doctrine, increases in manning structure, enhanced educational concepts and modernized systems should all have a profound affect on future Marine Corps combat operations. Although these new concepts appear to be a great step forward, the self examination needs to continue*

*to ensure the intelligence field can keep step with an ever-changing battlefield and intelligence environment.*

## **Chapter 6**

### **Conclusion**

*Operation Desert Storm was a low point for Marine Corps intelligence. It revealed an antiquated architecture that was unresponsive to the needs of the I MEF Commanders, his Staff and the major subordinate elements. The 1989 addition of 1st SRIG, whose concept was still in an evolutionary phase, had not matured to the level that would allow it to be a relative factor in the campaign. Aside from the issues of insufficient manning, training and systems, the Marine Corps fielded the SRIG without a sufficient doctrinal foundation. As stated in FMFM-1, Warfighting, "...doctrine provides the basis for harmonious actions and mutual understanding." This doctrinal foundation did not exist for the I MEF and SRIG commanders and their staffs.* [\(57\)](#)

*The problems associated with I MEF intelligence were exacerbated by a series of CINC imposed cross border restrictions and by J-2 staff limitations. With a staff that was under manned and trained, the J-2 focused on providing support to the CINC and not on assisting the major subordinate commands. As a result, this lack of downward focus created clogs in the dissemination process. An almost identical situation occurred at the MEF level as the G-2 and the MAFC struggled to meet the day-to-day requirements of its own headquarters.*

*The period also exposed a generation of "operators" who were out of touch with and lacked an understanding of the intelligence discipline. Many commanders for too long were leaving the unit's intelligence activities entirely to the specialists, and thus were not providing necessary guidance and direction to the effort. This command and staff breakdown diminished the effectiveness of intelligence operations within I MEF.*

*The new Marine Corps emphasis on correcting the problems recognized during Operation Desert Storm has many ambitious aspects that will undoubtedly provide a basis for great improvement. To be productive, it must be a concerted effort over the long term and must survive the constant turnover of service leadership. In addition, during the current era of downsizing, it will be a significant challenge to maintain and grow the necessary structure to support a credible intelligence apparatus when all elements of the Marine Corps are being constantly cut, piece by piece, due to fiscal constraints.*

*The Marine Corps' intelligence problems are far from over. The problems identified during Operation Desert Storm need to serve as a watershed for future Marines to improve upon. As recent examples in Somalia and Haiti have shown, the battlefield of tomorrow will be more complex and as lethal as the one that I MEF fought for in 1991.<sup>(58)</sup> The intelligence community and those whom it will support, need to continue to refine the discipline from all angles. Future generations of Marines do not need to relearn the lessons of Operation Desert Storm.*

## **APPENDIX A**

### **ACRONYMS**

*ACE -- Air Combat Element*

*A&P -- Analysis and Production Center,*

*ANGLICO -- Air and Naval Gunfire Liaison Company*

*CENTCOM -- Central Command*

*CINC -- Commander-in-Chief*

*CINCENT -- Commander-in-Chief, Central Command*

*CONUS -- Continental United States*

*CP -- Command Post*

*DF -- Direction Finding*

*EPW -- Enemy Prisoner of War*

*FOSIF -- Fleet Ocean Surveillance Information Facility*

*HF -- High Frequency*

*HUMINT -- Human Resources Intelligence*

*IAC -- Intelligence Analysis Center*

*IAS -- Intelligence Analysis System*

*IG -- Inspector General*

*JDISS -- Joint Deployable Intelligence Support System*

*LAN -- Local Area Network*

*MAFC -- MAGTF All-Source Fusion Center*

*MAGTF -- Marine Air Ground Task Force*

*MCIA -- Marine Corps Intelligence Activity*

*MEF -- Marine Expeditionary Force*

*MEWSS -- Mobile Electronic Warfare Support System*

*MOS -- Military Occupational Specialty*

*NBC -- Nuclear, Chemical, Biological*

*OP -- Observation Post*

*ROE -- Rules of Engagement*

*RPV -- Remotely Piloted Vehicle*

*SARC -- Surveillance and Reconnaissance Center*

*SIGINT -- Signals Intelligence*

*SOCCENT -- Special Operations Command, Central Command*

*SRIG -- Surveillance, Reconnaissance, Intelligence Group*

*USMC -- United States Marine Corps*

## **APPENDIX B**

### **GLOSSARY**

*ALL-SOURCE INTELLIGENCE FUSION -- Analysis that uses all available intelligence from tactical, theater and national sources, and from multiple disciplines (SIGINT, HUMINT, IMINT etc.) to form a single intelligence picture on a specified target.*

*CENTER OF GRAVITY -- An aspect of a force that, if destroyed, will cause it to lose its will to fight. (Schwartzkopf, It Doesn't Take a Hero)*

*COMBINED -- Two or more forces or agencies of two or more countries. (Joint Pub 1-02)*

*DOCTRINE -- (NATO) Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgment in application. (Joint Pub 1-02)*

*G-DAY -- Non-doctrinal term used during Operation Desert Storm designating the day offensive ground operations will begin. G minus or plus a number designates the number of days before or after G-Day, respectively.*

*HUMAN INTELLIGENCE (HUMINT) -- A category of intelligence derived from information collected and provided by human sources. (Joint Pub 1-02)*

*IMAGERY INTELLIGENCE (IMINT) -- Intelligence information derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro-optics, and radar sensors such as synthetic aperture radar wherein images of objects are reproduced optically or electronically on film, electronic display devices or other media. (Joint Pub 1-02)*

*INTELLIGENCE CYCLE -- The steps by which information is converted to intelligence and made available to users. There are five steps in the cycle:*

*1. Planning and direction*

*2. Collection*

*3. Processing*

*4. Production*

5. Dissemination (Joint Pub 1-02)

Intelligence Dissemination -- Conveyance of intelligence to a user in a suitable form. (Joint Pub 1-02)

INTELLIGENCE DATA BASE -- The sum of holdings of intelligence products at a given organization. (Joint Pub 1-02)

INTELLIGENCE REQUIREMENT -- Any subject, general or specific, upon which there is a need for the collection of information, or the production of intelligence. (Joint Pub 1-02)

OPERATING FORCES -- Those forces whose primary missions are to participate in combat and integral supporting elements thereof. (Joint Pub 1-02)

OPERATORS -- Non-doctrinal term. References to operators specifically speaks to those military members who work in the combat arms specialties.

Photographic Intelligence -- The collected products of photographic interpretation, classified and evaluated for intelligence use. (Joint Pub 1-02)

REMOTELY PILOTED VEHICLES (RPV) -- An unmanned vehicle capable of being controlled from a distant location through a communications link. It is normally designed to be recoverable. (Joint Pub 1-02) Note: the RPV's discussed in the paper are the aerial version.

RULES OF ENGAGEMENT (ROE) -- Directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. (Joint Pub 1-02)

SIGNALS INTELLIGENCE (SIGINT) -- A category of intelligence information comprising of either individually or in a combination all communications intelligence, electronics intelligence, and foreign instrumentation signals intelligence, however transmitted. (Joint Pub 1-02)

THEATER -- The geographical area outside the Continental United States for which a commander of a unified or specified command has been assigned military responsibility. (Joint Pub 1-02)

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3. LtCol Michael Ennis, "Summary -- Intelligence in the Persian Gulf (Part 2)," *Marine Corps Lessons Learned System (Quantico, VA: MCCDC), 23 Sep 1991, number 92435-47187, 3.*

4. Col Charles Quilter, *U.S. Marines in the Persian Gulf, 1990-1991: With the I Marine Expeditionary Force in Desert Shield and Desert Storm (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C.), 1993, 15-16.*

5. For more background information regarding the CG, I MEF's decision to change from a one to a two Division breach see: LtGen Walter Boomer, "Special Trust and Confidence Among Trailbreakers," *Naval Institute Proceedings*, November 1991, 47-50.

6. U.S. Congress, House, Committee on Armed Services, 103d Congress, *Intelligence Successes and Failures in Operations Desert Shield/Storm, 16 August 1993, Committee Print, 5-6; Majs F.D. Houston and P.J. Nagy, "Intelligence," unpublished research paper sponsored by the USMC Battlefield Assessment Team (Quantico, VA.: MCCDC), July 1991, 4. Note: A source assigned to the CENTCOM J-2 staff a year prior to the 1991 Persian Gulf War indicated that the J-2's staff was over 100 while he was stationed there. Evidently, only a small portion of the J-2 staff deployed to Saudi Arabia while the rest provided CONUS based support.*

7. Houston and Nagy, 4.

8. U.S. Congress, 4.

9. Ltcol Walter McTernan III, "Intelligence: You Get What You Pay For," *Marine Corps Gazette*, March 1992, 23.

10. The source of these views spoke in an environment that allowed him non-attribution for his comments. Therefore, I shall only identify him as a member of the I MEF Staff and the location and time of his comments will not be identified.

11. FMFM 2-1, *Intelligence (Washington, D.C.: United States Marine Corps, 30 September, 1980) 5-7 to 5-10.*

12. During the Persian Gulf War, all services, less the Marine Corps, had a direct link back to intelligence centers that were plugged into the national intelligence apparatus. This connectivity allowed the components direct access to information that otherwise may have been unavailable to them in the competition for support within CENTCOM.

13. LtCol Michael Ennis, "Intelligence: Surveillance and Reconnaissance Center (SARC) Operations." *Marine Corps Lessons Learned System* (Quantico, VA: MCCDC), October 1991, number 92554-63279, 1.

14. Maj P. Nagy, "Manpower: Intelligence and Production in Southwest Asia," *Marine Corps Lessons Learned System* (Quantico, VA: MCCDC), 20 Sep 1991, number 82059-13190, 5.

15. I attributed my conclusion that the MEF staff acquired a good picture of the Iraqi Defenses in sector to a key I MEF staff member who spoke in a non-attribution environment. His comments centered around the clear picture of the enemy situation that he felt MEF intelligence provided him prior to the ground war. I have also interviewed several key officers from the 1st Marine Division Staff whose opinion was the exact opposite of the MEF Staffer. This opposing conclusion was also common throughout source material on the topic.

16. Houston and Nagy, 6. The reasoning for this loss of access is unclear. I assume that SOCCENT felt there was a threat to operational security and convinced the CINC accordingly.

17. Gen H. Norman Schwarzkopf, *It Doesn't Take A Hero* (New York: Bantam Books, 1992), 319.

18. Maj H. Peterson Jr., "Intelligence: Fix It or Forget It," *Marine Corps Gazette*, March 1992, 19.

19. McTernan III, 23.

20. 1stLt S. Sullivan, "Desert Shield/Desert Storm, After Action Report," unpublished report to the 1st Marine Division G-2 (Camp Pendleton, CA), 1 March 1991, 4.

21. LtCol Michael Ennis, "Perception Versus Reality: Intelligence in the Persian Gulf," unpublished paper prepared for the USMC Battlefield Assessment Team (Washington, D.C.), 25 June 1991, 6. The volume and type of national level imagery are a hotly contested point between those within the Marine Corps intelligence community who supported I MEF. One source, who was directly responsible for providing national level imagery directly to the I MEF G-2 during the war, stated that his element provided over 5000 hard copy photos to I MEF during the course of Desert Shield and Desert Storm. This source directly blamed the poor dissemination structure within the MEF for not distributing the photos to subordinate elements. That General Boomer sent a liaison team back to CONUS for current, accurate imagery lends credence to the argument that the imagery support provided in theater was not what he needed.

22. For more information on the contributions of RPV's, see: MajGen J.M. Myatt, "The First Marine Division in the Attack," *Naval Institute Proceedings*, November, 1991, 71-75.

23. This information comes from direct experience during the Gulf War. My unit, the 1st Battalion, 5th Marines, Task Force Ripper, 1st Marine Division, was desperate to get any type of imagery available on our perspective zone of attack. Our higher headquarters made an RPV tape available to us for a very limited period of time (about an hour). Because someone to interpret the mission data was not available, the video meant very little.

24. Houston and Nagy, 7.

25. LtCol Charles Cureton, *U.S. Marines in the Persian Gulf, 1990 - 1991: With the 1st Marine Division in Desert Shield and Desert Storm* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C.), 1993, 48.

26. Myatt, 73.

27. Quilter, 54. Note: There is very little information available in open sources regarding the contribution of SIGINT.

28. Ennis, 10.

29. Nagy, "Manpower," 6.

30. Quilter, 68.

31. Nagy, "Manpower," 6.

32. Ennis, "Perception Versus Reality," 14-15.

33. Sullivan, 6. Although this piece served as the basis for this topic, the articles by LtCol Ennis and Maj's Houston and Nagy echo the same sentiment on the overall MEF analyst capability.

34. Since attending the Command and Staff College, I have heard no less than three separate speakers, all in the intelligence community, refer to these two topics. Since the College provides the speakers with an environment of non-attribution, I can not disclose their names. Also refer to: Ennis, "Perception Versus Reality," 8.

35. Sullivan, 7.

36. Maj P. Nagy, "Communications and ADP: Intelligence Operations in Southwest Asia," *Marine Corps Lessons Learned System*, (Quantico, VA: MCCDC), 20 August 1991, number 82552- 71347, 1. Note: Unreliable HF Communications is either a result of poor frequency management or of unskilled operators.

37. Peterson, 19. Note: To quote Major Peterson on "stovepipe" dissemination -- "As with a wood-burning stove's exhaust vent that takes smoke directly up and out from the furnace without letting any of it escape along the way, much intelligence dissemination goes straight by the chain of command and must be readdressed, if not re-written, before it goes to all users. This can cause fatal delays."

38. FMFM 3-22, 1-5.

39. Examples: Maj Kent Leonhardt, "All the Intelligence In the World is Useless Without the Means to Disseminate It," *Marine Corps Gazette*, March 1992, 21-22; and Houston and Nagy, 9-10.

40. Boomer, 50.

41. LtGen William M. Keys, "Rolling With the 2d Marine Division," *Naval Institute Proceedings*, November 1991, 80; and Myatt, 77 .

42. Houston and Nagy, 9. Comments regarding imagery come from Quilter, 52-53.

43. Houston and Nagy, 1-2.

44. *Houston and Nagy, V.*

45. Col Michael Ennis, "Introduction to Marine Corps Intelligence," lecture presented at the Marine Corps Command and Staff College, MCCDC, Quantico, VA, 23 January 1995. Note: Information corroborated by: Assistant Chief of Staff for Command, Control, Communications, Computers and Intelligence, Headquarters, United States Marine Corps letter, 3800/C4I, subject: "Plan for Revitalization of Marine Corps Intelligence," no date.

46. Van Riper, 1-2. MajGen Van Riper is the Assistant Chief of Staff for Command, Control, Communications, Computers and Intelligence, at Headquarters Marine Corps. Immediately after the Gulf War he was a central figure in criticizing the Intelligence Community for its performance in combat (ref: BGen P.K. Van Riper, "Observations During Operation Desert Storm," *Marine Corps Gazette*, June 1991, 58).

47. Specifically, Joint Pub 2-0, *Joint Doctrine for Intelligence Support to Operations* (Washington, D.C.: Joint Staff), 12 October 1993.

48. Van Riper, 7-8.

49. Houston and Nagy, 3-4. Note: The A&R table of organization varies depending what source used. The coordinating draft of FMFM 3-22 uses the number of 48 whereas as the Nagy and Houston article uses the total of 33 with a barely readable administrative message from MCCDC as a reference.

50. C4I, Headquarters, United States Marine Corps, "United States Marine Corps Intelligence Road Map 1993 - 1998" (Washington, D.C.: Headquarters, U.S. Marine Corps), no date, 9.

51. The Director, MCIA provided this information through a briefing at which I was present on 6 march 1995. As an example: Doug Schultz, analyst at the Office of Naval Intelligence, interviewed by the author, 14 April 1995. Mr. Schultz is a former Navy Lieutenant Commander and intelligence officer who was stationed last year on CINC, Europe's J-2 staff. His current position at the Office of Naval Intelligence places him in regular contact with Fleet Ocean Surveillance Information Facility (FOSIF) Rota, Spain which provides tailored, all-source intelligence support to the 6th Fleet in the Mediterranean. He stated that Navy task forces operating either independently or as part of a Joint Task Force, can, as a matter of routine, request direct intelligence support from a FOSIF strictly through Navy channels without going through the CINC's chain of command.

52. Van Riper, 5.

53. Van Riper, 6.

54. Doug Schultz.

55. Van Riper, 4.

56. C4I, 18-20.

57. FMFM-1, *Warfighting* (Washington, D.C.: Headquarters, U.S. Marine Corps, 6 Mar 1989), 43.

58. Marines learned several new intelligence related lessons during Operation Restore Hope when I MEF served as the nucleus of and lead a Joint Task Force in Somalia. Major issues centered around problems with joint interoperability of multi-service systems and personnel operating within a fully integrated Joint Intelligence Center. Additionally, fulfilling the support needs of the U.N. civil/military command greatly increased the complexity of the in-theater intelligence apparatus. The unique environment associated with operations in and around third world urban areas revealed the necessity for a more robust HUMINT capability within the FMF operating forces. For more information see: Capt David A. Rababy, "Intelligence Support During a Humanitarian Mission," *Marine Corps Gazette*, February 1995, 40-42, and; Major David L. Shelton, "Intelligence Lessons Known and Revealed During Operation RESTORE HOPE Somalia," *Marine Corps Gazette*, February 1995, 37-40.