# OPERATIONAL LEVEL INTERDICTION:
## Joint or Dis-Jointed Operations?

A Monograph
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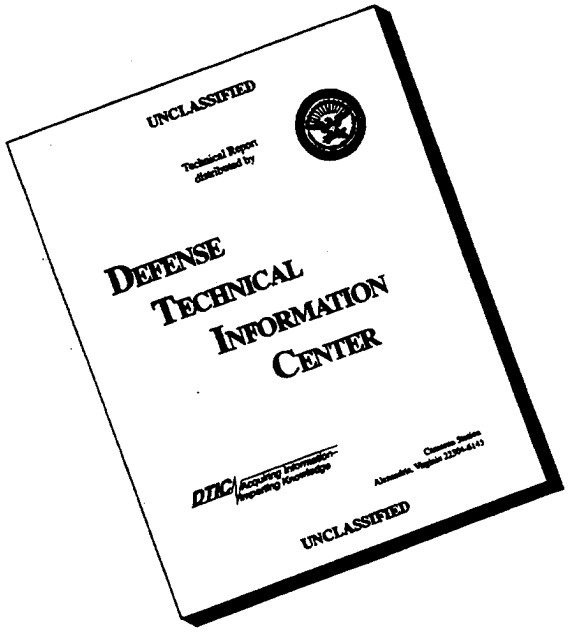


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## ABSTRACT

OPERATIONAL LEVEL INTERDICTION: JOINT OR DIS-JOINTED OPERATIONS?
by MAJ David C. Fowles, USA, 50 pages.

Successful interdiction operations are critical to the achievement of the Joint Force Commander's operational objectives and can significantly affect the outcome of war. Joint Pub 3-0, Doctrine for Joint Operations, defines interdiction as an action that diverts, disrupts, delays, or destroys the enemy's surface military potential before it can be used effectively against friendly forces. Joint Pub 3-0 also states that when interdiction is synchronized with maneuver, it "provides one of the most dynamic concepts available to the joint force." Joint interdiction, due to its significant impact upon the outcome of theater operations, its inherently joint nature at the operational level of war, and its challenging coordination requirements, is the focus of this monograph.

Many elements of the joint force can conduct interdiction operations. Joint Pub 3-03, Doctrine for Joint Interdiction Operations, states that "all subordinate commanders possess resources that can contribute to interdiction. The capabilities of all joint forces. . . must be considered in planning and conducting interdiction." Although all forces can contribute to the interdiction effort, Joint Pub 3-0 clearly establishes the joint force air component commander (JFACC) as "the supported commander for the JFC's overall interdiction effort." The purpose then of this examination is to provide some answers to the research question: How can the U.S. Army support the JFACC in his role as the supported commander for the JFC's overall interdiction effort?

The methodology used to address the research question will consist of two parts. The first part will examine joint interdiction during the Gulf War and how well Army capabilities were integrated into the interdiction effort of that war. The second part will be a comparison of Army and Air Force interdiction doctrine to approved joint interdiction doctrine. It will compare the Army's keystone doctrinal manuals, FM 100-5, Operations, and FM 100-7, The Army in Theater Operations, and Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, with joint interdiction doctrine as outlined in Joint Pub 3-0, Doctrine for Joint Operations. Joint Pub 3-0 will serve as the standard for this comparison due to its nature as the keystone joint publication and because it is the only approved joint publication that addresses interdiction operations. This examination will demonstrate the integration of Army capabilities into the joint interdiction effort during the Gulf War and the support of current joint interdiction doctrine by Army interdiction doctrine.

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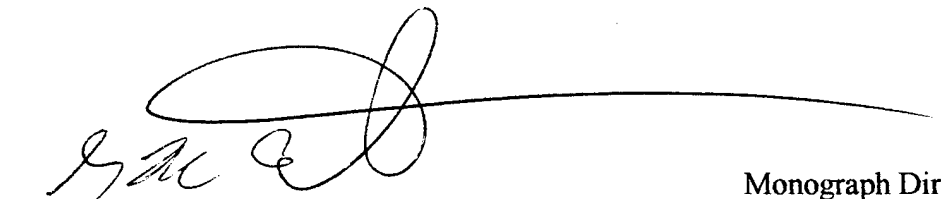

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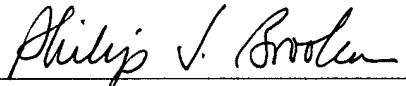

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# CHAPTER 1

## INTRODUCTION

Successful interdiction operations are critical to the achievement of the Joint Force Commander's (JFC) operational objectives and can significantly affect the outcome of war. When interdiction is synchronized with maneuver, it "provides one of the most dynamic concepts available to the joint force."[1] Interdiction, defined in Joint Pub 3-0, Doctrine for Joint Operations, is "an action to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be used effectively against friendly forces."[2] Joint interdiction, due to its significant impact upon the outcome of theater operations, its inherently joint nature at the operational level of war, and its challenging coordination requirements, is the focus of this monograph.

Many elements of the joint force, air, land, sea, space, or special operations, can conduct interdiction operations. Joint Pub 3-03, Doctrine for Joint Interdiction Operations, for which the Air Force is the proponent, states that "**all subordinate commanders** possess resources that can contribute to interdiction. The capabilities of **all joint forces**, as well as the magnitude of their potential contribution, must be considered in planning and conducting interdiction" (emphasis added).[3] Although all forces contribute to the interdiction effort, Joint Pub 3-0 clearly establishes the joint force air component commander (JFACC) as "the supported commander for the JFC's overall interdiction effort."[4] The purpose then of this examination is to provide some answers to the research question: How can the U.S. Army support the JFACC in his role as the supported commander for the JFC's overall interdiction effort?

In addition to establishing the JFACC as the supported commander for theater interdiction, Joint Pub 3-0 also states that land force commanders are the supported commanders in their area of operations and must "designate the target priority, effects, and timing of interdiction operations within their AOs."[5] However, the doctrinal differences between the Air Force and the Army and how they define their role in conducting interdiction, often result in opposite approaches to conducting interdiction in the same geographical area. As a result, the land component commander can be presented with the apparent dilemma of supporting the JFACC in interdiction operations throughout the theater while simultaneously conducting his own interdiction operations as he shapes the battlefield to support his future operations. These requirements, coupled with the basic doctrinal differences between services, require a close examination of the Army's role in joint interdiction.

This monograph will provide a clearer understanding of joint interdiction doctrine and how the land component commander can support both the overall joint interdiction effort and his own interdiction operations. It will clarify joint, Army, and Air Force interdiction doctrine, looking specifically at the approach each service takes to interdiction and its impact upon the development of the joint doctrine. The monograph will determine what fundamental differences exist, if any, and if these differences are truly valid concerns or imagined and created issues resulting from service parochialism. It will also examine the interdiction capabilities of the Army that have been incorporated into the planning and execution of interdiction at the joint operational level and how well these efforts support the established joint doctrine.

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## BACKGROUND

Prior to the Gulf War, joint interdiction doctrine was limited. The Army and Air Force were working together in the 1980's on AirLand Battle doctrine and had been developing techniques and procedures to interdict second echelon forces in a conflict with the Warsaw Pact (also known as follow-on force attack or FOFA).[7] However, FOFA essentially disappeared with the end of the Cold War and the Goldwater-Nichols Department of Defense Reorganization Act of 1986 brought a renewed effort to establish joint doctrine. What little

joint interdiction doctrine that did exist was contained in a test publication, Joint Pub 3-03, released just prior to the Gulf War. The Air Force was the proponent for this publication, and as such, it largely reflected Air Force interdiction doctrine. Service doctrine clearly showed that the Army and the Air Force saw the role of interdiction from vastly different extremes. The approach and methods used by each service to conduct interdiction operations during the Gulf War appeared to be more a reflection of how the Army and the Air Force were thinking about joint interdiction and their own particular role rather than an adherence to established joint doctrine.

The Army's approach to interdiction prior to the Gulf War was reflected in FM 100-5, Operations, dated 5 May 1986, and the preliminary draft of FM 100-7, The Army in Theater Operations, dated 31 August 1990. FM 100-5 recognized the importance of interdiction, but using its own term, deep operations, explained:

> Such operations are not new to warfare nor to the American Army. The concept of interdicting the enemy's supplies, follow-on forces, reserves, and communications . . . is a familiar feature of modern war. . . . recent history . . . furnish[es] numerous examples of successful . . . efforts to isolate the battlefield, paralyze the enemy's support and command and control systems, and to prevent, delay, or disrupt the closure of uncommitted enemy formations.[8]

FM 100-5 further defined deep operations as activities "at any echelon . . . directed against enemy forces not in contact designed to influence the conditions in which **future close operations** will be conducted. . . . to isolate current battles and to influence where, when, and against whom future battles will be fought" (emphasis added).[9] In its description of deep operations, FM 100-5 established that deep operations were conducted by Army elements and were not a joint operation and that interdiction's contribution to the success of

a campaign was solely related to its positive influence on the outcome of the Army's close fight .[10]

Perhaps the doctrinal statement that best reflected the Army's position towards interdiction is not one that addressed interdiction directly, but one that discussed the role of close operations. FM 100-5 stated that "Close operations bear the ultimate burden of victory or defeat. The measure of success of deep and rear operations is their eventual impact on close operations."[11] This same type of thinking continued throughout FM 100-5, being applied to the use of air and its role in interdiction. In its discussion of air interdiction operations, the field manual stated that the "air interdiction effort is developed to limit the enemy's mobility to maneuver forces, while forcing the enemy into high rates of consumption, and to create opportunities for friendly forces to exploit the disabilities produced by interdiction attacks."[12]

The same theme continued in the preliminary draft of FM 100-7, The Army in Theater Operations. Although the timing of its release did not allow Army commanders to directly implement its doctrine during the Gulf War, the manual did represent the Army's thinking at the time about interdiction at the operational level of war. FM 100-7 emphasized the importance of the Army operational level commander (i.e., the joint force land component commander or JFLCC) being involved at the joint level in deciding how air forces would be used to support land forces. He was to be an "active participant in the development of supporting air operations as devised by the joint force air component commander and the theater of operations commanders."[13]

FM 100-7 went to great lengths to explain how the Army operational level commander could ensure his joint role in determining the use of air to support his ground operations. It stated that

> Joint interface is maintained through the joint commander's staff: 1. The Army provides staff as appropriate to the joint C3CM [command, control, and communications countermeasures] Cell. This cell meets daily to disseminate the JFC's targeting guidance and objectives, monitor the effectiveness of targeting efforts, coordinate and deconflict all JTF targeting operations, validate no-fire areas, and approve new target nominations for including in the joint target lists (JTL). 2. Representatives from the Army serve on the JFC's Joint Targeting Coordination Board (JTCB) if one is organized. The JTCB coordinates targeting information, provides targeting guidance and priorities from the JFC, prepare or refine JTLs, and deconflict lethal/nonlethal assets.[14]

This statement demonstrated the significant role that the Army felt it should have in determining joint operations, ranging from targeting guidance to target selection.

Continuing its discussion of interdiction at the operational level, FM 100-7 reconfirmed the previous statement by saying that the Army commander needed to be involved early in planning, identifying needs for air assets and influencing air apportionment through participation in the targeting process. The manual established a clear relationship between the Army commander and his own supporting air forces, demonstrating the Army's view that a significant role of air forces was to support the Army directly. It stated that "the Army operational-level commander has similar interface with his supporting tactical air force commander [which is] more coordinated and detailed than between himself and the air component commander."[15]

Even with the significant emphasis on Army commanders ensuring that their operations were adequately supported by air forces, FM 100-7 recognized that "the Army commander's primary mission [was to] contribute to the joint/combined commander's major operation or

campaign."[16] While not specifically recognizing a responsibility to support the Air Force in conducting theater interdiction operations, FM 100-7, in discussing operational fires,[17] did state that "the Army may find itself in a supporting role to its sister services. "[18] However, in describing this supporting role, the focus still seemed to remain on Army operations, rather that on subordinating itself to another service. Included in this definition of support was the need by the Army to select targets that contributed to the Army's operational objectives and complimented the joint commander's plan. The continued focus of the support was to ensure proper coordination between the services so that resources were not wasted and that the effort did not become an obstacle to Army forces.[19]

Placing air forces under Army control was clearly in opposition to Air Force doctrine that stated the importance of keeping air force assets under the command of a single authority. Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, March 1984, stated:

> Unity of command is imperative to employing all aerospace forces effectively. The versatility and decisive striking power of aerospace forces places an intense demand on these forces in unified action. To take full advantage of these qualities, aerospace forces are employed as an entity through the leadership of an air commander. The air commander orchestrates the overall air effort to achieve stated objectives. . . . The air commander, as the central authority for the air effort, develops strategies and plans, determines priorities, allocates resources, and controls assigned forces to achieve the primary objectives.[20]

The Air Force also saw a more significant role for interdiction than just supporting the close fight. Air Force doctrine, contained in AFM 1-1, explained the importance of attacking the enemy's warfighting potential which included "actions against the will of an enemy, and actions to deny him the time and space to employ his forces effectively."[21] A requirement for

success was the effective attack of the enemy in depth, both strategically and tactically. Tactically, the "air commander must attack not only those enemy forces in contact, but enemy forces in reserve or rear echelons as well."[22]

The Army and Air Force, however, did agree fundamentally on the role of interdiction. The objectives of the Air Force mission of air interdiction were not much different from the Army's objectives for interdiction operations. "Air interdiction (AI) objectives are to delay, disrupt, divert, or destroy an enemy's military potential before it can be brought to bear effectively against friendly forces."[23] AFM 1-1 stated that in order to maximize the effects of interdiction, air and land commanders had the responsibility to coordinate their efforts.

> The purpose is to make the enemy react in a predictable manner and to generate situations where friendly surface forces can then take advantage of forecast enemy reactions. This systematic and persistent plan of attack should be considered a continuum that exerts a connected series of actions and reactions that are closely coordinated between air and surface commanders.[24]

AFM 1-1 additionally stated that "air and surface commanders must remain committed to their coordinated actions and must not allow the full impact of aerospace power to be diverted away from the main objective."[25] However, as a result of air interdiction efforts usually being conducted at great distances from friendly land forces, the "detailed integration of specific actions with the fire and movement of friendly forces is normally not required."[26] Still, the air commander was encouraged to coordinate interdiction with the surface force commander.[27]

Joint interdiction doctrine prior to the Gulf War was contained in a test publication, Joint Pub 3-03, Doctrine for Joint Interdiction Operations, which was released in December 1990. The Air Force was the lead agent and the publication was basically a reflection of Air Force

interdiction doctrine. The base joint doctrinal manual for operations, Joint Pub 3-0, Doctrine for Unified and Joint Operations, dated 1990, was also a test publication, but had little to say about interdiction.[28] Interdiction was not in the glossary and was only mentioned once in the entire publication.[29] As a result, joint interdiction doctrine was in its infancy, and like the Army's FM 100-7, the timing of the release of the these documents likely prevented field commanders from directly applying the doctrine to the Gulf War.

Joint Pub 3-03, as a reflection of Air Force doctrine, reaffirmed the strategic, operational, and tactical nature of interdiction and the importance of interdiction operations supporting the JFC's campaign plan. In supporting the overall campaign plan, the publication recognized that "to have the greatest impact, . . . interdiction operations must compliment surface operations." [30] Joint Pub 3-03 also included a list of 10 predominant lethal and non-lethal weapons, systems, and forces to use in the conduct of interdiction. Included among them were: fighter and attack aircraft and bombers, conventional airborne, air assault, or other ground maneuver forces, special operations forces, various types of rockets, missiles, munitions, and mines, artillery and naval gunfire, and attack helicopters.[31] Joint Pub 3-03 also stated that the JFC may assign either an organization within his staff or a subordinate commander the broad planning functions required for interdiction operations. In either case,

> Whoever is designated this responsibility must possess a sufficient command and control infrastructure, adequate facilities, and ready availability of joint planning expertise. The organization of a joint targeting cell or board has proven to be an efficient mechanism to facilitate this process.[32]

However, Joint Pub 3-03 also stated that " a commander will normally be designated the JFACC by the JFC and assigned the responsibility to conduct detailed execution planning

and coordination of the overall interdiction effort."[33] Whether using an internal staff or a subordinate commander, "this broad planning [was] a joint process reflecting JFC guidance and objectives and involving all applicable subordinate commands."[34]

Prior to Desert Storm, the Army's position on interdiction, as previously described in the discussion of FM 100-5, was that while interdiction was critical to effective operations, it was executed by Army assets conducting deep operations and air forces conducting air interdiction in support of ground operations. Edward C. Mann, in Thunder and Lightning: Desert Storm and the Airpower Debates, stated that according to FM 100-5,

> airpower is an integrated but subordinate element of the AirLand Team. Throughout the document, air operations are depicted as fire support for ground maneuver. Although planners must coordinate 'air and naval support of ground maneuver', ground maneuver never supports air operations.[35]

At the joint level, the Army saw the need for the JFLCC to be involved in the planning and targeting process. But to the Army, the process was a staff function, executed by cells and boards at the joint level, not by other commands subordinate to the JFC. The Air Force, however, saw a different application of interdiction. Air assets were to be centrally controlled by an Air Force commander and the role of interdiction was to support the JFC's campaign plan.

As a result of these doctrinal differences, interdiction during the Gulf War became a reflection of how the services saw their role in conducting campaign plans rather than being an attempt to follow established doctrine. The following section will show the significant impact of these differences upon the war's joint interdiction effort and the resulting difficulty that the Army had in supporting and integrating its assets into the joint interdiction effort.

## CHAPTER 2

## JOINT INTERDICTION DURING THE GULF WAR

Interdiction operations in the Persian Gulf region were first considered in the Spring of 1990 when the focus of USCINCCENT OPLAN 1002 shifted from a general defense of the region towards the specific threat of an Iraqi invasion of Saudi Arabia.[36] The first phase of the new OPLAN was deterrence, followed by the second phase consisting of defensive and counterair/interdiction operations. The purpose of this phase was to "gain air superiority, protect U.S. forces and divert, disrupt, [and] delay enemy forces."[37] The third and last phase, the counteroffensive, was to "begin when the enemy's combat power had been sufficiently reduced to the unspecified level where the correlation of forces changed to favor the U.S."[38] The objectives of this phase were to recapture lost facilities and territory, and end the war. Only vague guidance for this phase was provided by General H. Norman Schwarzkopf, Commander in Chief (CINC) of US Central Command (CENTCOM).[39]

Operations across the phases were clearly ground oriented. This was reinforced by Lt Gen Charles A. Horner, Commander of US Air Forces, Central Command (CENTAF). Briefing the OPLAN in April 1990, Lt Gen Horner keyed on defensive operations, making no mention of strategic attack, nor of targeting leadership, industry, or centralized command and control. The focus was entirely on CAS and interdiction and can best be summed-up by a handwritten comment by General Horner at the bottom of a briefing slide titled "Mission Flow" which said: "Build a hose and point it where the ground commander sees that it's needed."[40]

Keaney and Cohen, in the Gulf War Air Power Survey, provide a detailed account of the deliberate planning that occurred prior to the invasion of Kuwait. The planning outlined a use of air power that was focused entirely on ground operations. Knowing that the Air Force would be the first combat force to reach the theater, they would first provide defensive protection for deploying ground forces. If ground forces were attacked, these aircraft, along with available ground forces, would delay enemy advances until U.S. and allied ground forces could begin a counterattack.

> The Air Force would support the ground campaign through traditional offensive counterair, close air support, and interdiction missions. In essence, the Air Force participated in traditional roles, providing indirect (interdiction) and direct (close air support and counterair) support for ground forces. Independent air campaigns, . . . simply were never mentioned.[41]

This all changed when, shortly after the invasion, GEN Schwarzkopf asked for assistance from Air Staff planners at the Pentagon. This group of officers, known as Checkmate and headed by Colonel John A. Warden III, began developing a plan based upon the concepts that Col Warden had presented in his 1988 book, The Air Campaign. The plan called for intense air operations against five centers of gravity, starting with the most important at its center: leadership. Leadership was followed by key production facilities, such as electricity and oil facilities, which was then followed by infrastructure: communications, roads, and railroads. The last two centers of gravity were population, and finally, fielded military forces.[42]

The plan, named Instant Thunder, was initially an Air Force plan using Air Force assets. However, following a briefing to General Colin Powell on 11 August 1990, Powell directed that Warden include planners from other Services and the Joint Staff in the planning process.

Assets also expanded to include Navy and Marine air and the Navy's Tomahawk land attack missiles (TLAMs). This expanded plan was accepted by GEN Schwarzkopf as a basis for further planning.[43]

The Gulf War Air Power Survey continues to explain that Lt Gen Horner was not as impressed and felt the plan had several significant flaws. In a March 1991 taped response to a CENTAF Historian, Lt Gen Horner expressed his concern that Instant Thunder had been out of touch with the regional realities, neglecting the Iraqi forces in Kuwait. He had seen the plan as a strategic bombing effort that focused too much on strategic level targets. He needed a more acceptable plan, one that would not see the entire campaign as an air operation capable by itself of bringing Iraq to its knees. Lt Gen Horner decided to place several of the key Checkmate planners on his own planning staff, but did not include Col Warden. Lt Gen Horner selected an Air Force Brigadier General, Buster Glosson, to direct the planning effort. Brig Gen Glosson's Special Planning Group, known as the Black Hole, developed a four phase plan that was briefed to General Schwarzkopf on 25 August 1990.[44]

> The first phase, called the strategic air campaign, was essentially the Instant Thunder plan, with an added aim of preventing reinforcement of Iraqi forces in Kuwait; the second phase would gain air superiority over Kuwait; the third phase consisted of air operations to reduce Iraqi ground forces capability before the ground attack; and the fourth phase, . . . was a ground attack into Kuwait.[45]

Army exclusion from campaign interdiction planning, because of the focus on air power, continued with the establishment of Lt Gen Horner as the JFACC. Doctrine prior to the Gulf War established the JFC's authority to assign either an organization within his staff or a subordinate commander the planning functions for interdiction operations.[46] In making Lt Gen Horner the JFACC, GEN Schwarzkopf also gave him the responsibility for coordinating

interdiction planning.[47] Lt Gen Horner initially lacked a joint staff, only possessing the staff that supported him in peacetime as commander of Ninth Air Force. In order to meet the wartime responsibilities of both CENTAF and the JFACC, that staff was expanded. However, most new members were Air Force officers with only a few liaison officers from the other Services and allies. Planning was still conducted by the Air Force planners in the Black Hole, headed by Brig Gen Glosson, which was kept separate and apart from the rest of the CENTAF staff.[48]

The Black Hole planners began target development early and continually refined it. Interdiction targets, those targets aimed to divert, disrupt, delay, or destroy the enemy's surface military potential, were a significant part of the targeting process. Even during Phase I, the strategic air campaign, interdiction targets were developed that were intended to act against Iraqi ground forces. Target sets included military support facilities, naval ports and facilities, railroads and bridges, oil facilities, and electric power, all of which contained targets that either directly or indirectly degraded the Iraqi military's potential. Two additional target sets were leadership and command and control, which when attacked would hinder communication to field units and delay their coordination. Because of the attention that was paid to the Republican Guards, it was later added as a target set. [49]

Interdiction planning was also an important part of the Battlefield Preparation Phase. Because of the CINC's deception plan and the initial placement of the FSCL along the Saudi/Kuwaiti border, interdiction was really the only method left in which to prepare the battlefield for future ground operations. In order for the ground offensive to be successful with a single corps, GEN Schwarzkopf's combat analysis group had determined in August

1990, that enemy ground forces would require fifty percent attrition during the preceding air operations. Even though a second corps was later added to the equation, the 50 percent criteria did not change because intelligence sources had reported that Iraq had likewise increased their forces. Defining fifty percent attrition became very difficult, but planners finally agreed that tanks, armored personnel carriers, and artillery were the focus and that 1200 sorties a day would be required in order to achieve the stated attrition. Additionally, this attrition rate was not focused on any particular units or areas of the theater, but was left as a theater-wide goal. In any case, interdiction efforts against Iraqi ground forces were to be significant.[50]

Unclear guidance also presented the planners with targeting challenges. As Edward Mann explains in Thunder and Lighting: Desert Storm and the Airpower Debates, the CINC's guidance was not always understood. In an interview with the U.S. Air Force Historical Research Agency on 4 March 1992, Lt Gen Horner stated that GEN Schwarzkopf had said prior to the war to "put more [effort] on the Republican Guards." As a result, planners targeted the Republican Guards with some B-52s during the opening moments of the war. GEN Schwarzkopf, however, thought that the staff understood that they were to annihilate the Republican Guards. "Just before the air campaign commenced, Schwarzkopf became incensed that [in fact they] weren't [planning on] annihilating the Republican Guards."[51] Planners knew that a huge effort would be required to destroy the Republican Guards, if it were possible at all, and felt that keeping pressure on the Guard was following the CINC's guidance. According to Horner, the CINC had never explicitly talked of annihilation and felt that he had been misled.[52]

Secrecy surrounding the campaign plan and the lack of a formalized ground plan continued to limit the Army's ability to significantly impact interdiction planning. However, as the plans for the ground war began to take shape, the Army began to become more involved and concerned with the interdiction effort. Keany and Cohen, in Gulf War Air Power Survey, explain that Army and Marine commanders continued to be concerned that too much emphasis remained with strategic targeting and that battlefield shaping and preparation was receiving too little attention. This concern was further reflected after the air campaign started. In a message dated 31 January 1991, GEN Schwarzkopf told Horner that

> Target development and nomination during the early phases of the campaign were clearly led by the . . . (JFACC). As we move into battlefield preparation, maneuver commander input into the target selection process becomes even more important. Therefore, the opportunity for corps and other subordinate commanders to plan for and receive air sorties to fly against targets of their choosing must increase.[53]

In order to facilitate maneuver commander input regarding battlefield preparation, Lt Gen Horner met daily with the deputy CINC, LTG Calvin Waller. Their job was to allocate sorties among the ground commanders and review change requests for allocation from the ground commanders. However, ground commanders had already approached LTG Waller, who essentially became the spokesman for the ground force commanders.[54] He became "responsible for integration and priority ranking of the target nominations by ground force commanders,"[55] especially "targeting Iraqi forces of interest to U.S. ground commanders."[56] The DCINC's role was still very limited, focusing only on those targets that were short of the FSCL. The result was a DCINC target list, separate from the master target list developed by Gen Horner and his planners. The DCINC list included those "targets of special interest to ARCENT and MARCENT."[57] The development of a separate target list, representing only

the interests of ground forces and with targets short of the FSCL, is another indication of the Army's limited and somewhat unintegrated participation in the joint interdiction planning effort.

Ground commanders, however, continued to be concerned about their abilities to shape the battlefield in preparation for the upcoming ground war. Although these commanders had targets to nominate for attack, Generals Horner and Glosson, with Schwarzkopf's approval, still controlled all targeting north of the Saudi border. General Schwarzkopf was especially adamant about targeting the Republican Guards, and Horner's efforts became focused on "tank plinking." The ground commanders, however, felt that enemy artillery posed the greatest threat. BG Steve Arnold, the Army's operations officer, stated in a Commander's Situation Report dated 18 February 1991, that "too few sorties [were] made available to VII and XVIII Corps and, while air support missions [were] being flown against first-echelon enemy divisions, Army nominated targets [were] not being serviced."[58] According to Rick Atkinson's account in Crusade, it was Glosson's belief, later confirmed to be accurate,

> that many nominated armor and artillery targets had been destroyed without the ground commander's knowledge, because pilots often struck targets of opportunity that did not appear on the formal air-tasking order. Every night allied pilots reported killing another hundred or more enemy tanks and armored personnel carriers.[59]

Although targets were being attacked, ground commanders remained concerned that target selection was now a pilot decision rather than the ground commanders' and that the Army often had no way of knowing what was attacked and what wasn't. According to the ARCENT MI History, ARCENT submitted a total of 3,067 targets for the ATO and 1,241

(about 40 percent) were flown. An additional 1,582 targets were submitted directly to Air Force wings and were flown as non-ATO targets.[60]

Part of the Army's difficulty in having their nominated targets included in the ATO was the result of validating targets to ensure they were still accurate. This proved especially difficult for the Army. According to BG Robert H. Scales' account in Certain Victory: United States Army in the Gulf War, the ARCENT G2, BG John Stewart, Jr., and BG Steve Arnold, began the Army's target selection process up to four days before a particular target would be attacked. In order to make the ATO, targets had to be located to within 100 meters, and there were few assets available to the Army that were that precise. Not only was extreme accuracy required, but the Air Force also required the revalidation of targets eight hours and again at four hours prior to attack.[61] Atkinson, in Crusade, stated that as a result, only 20 to 30 targets out of an average of 110 nominations would appear on the ATO for any given day, and those that were attacked were quite often the lowest priority.[62]

The makeup and structure of the CENTCOM planning staff also contributed to the lack of integration of Army capabilities into the joint interdiction effort. This was especially evident during the weaponeering/assessment and force application steps of the targeting process.[63] This assessment was generally conducted by Black Hole planners as they determined the best method to attack particular targets and with what forces. As a result, very few Army assets were used to conduct interdiction, but when they did, they proved effective.

During the Gulf War, one of the Army's newest assets, the Army Tactical Missile System (ATACMS), demonstrated its potential value to the joint interdiction effort. BG Scales, in

Certain Victory: The US Army in the Gulf War, stated that the Army launched 32 ATACMS prior to the commencement of the ground war. Their use was not restricted by ATO requirements, did not require SEAD, and was effective against deep, time-sensitive targets. However, the ATACMS flew higher and further on the battlefield than previous Army rockets or missiles, requiring a corridor through which it could safely pass without affecting the hundreds of sorties that were already planned and being flown. As a result, the new and complex clearance procedures actually resulted in less responsiveness. Additionally, few missiles were available in theater and by comparison to the thousands of sorties flown, their contributions were relatively insignificant and largely unnoticed.[64]

A significantly different report on ATACMS use during the Gulf War is contained in the Secretary of Defense's Final Report to Congress, Conduct of the Persian Gulf War. Although no figures are given on the quantities of missiles fired, the report states that ATACMS was a highly responsive system. In one case, A-10 pilots requested an ATACMS strike against an air defense target and the target was destroyed within minutes. Another ATACMS strike destroyed over 200 unarmored vehicles attempting to cross a bridge. The report also stated that electronic emissions from air defense sites ceased following ATACMS strikes and that coalition aircraft reported no air defense radar activities along corridors where ATACMS had first provided suppression of enemy air defense (SEAD) fires.[65]

However, BG Scales supports his earlier claim that while very effective, ATACMS use was generally unresponsive during the Gulf War. He relates in Certain Victory that the first use of ATACMS during the Gulf War occurred on the afternoon of 17 January 1991, when A Battery, 1-27th Field Artillery received the mission to strike an Iraqi surface-to-air missile

100 kilometers away. Although the crew was prepared to fire the mission within a very short time, it took until after midnight for the ARCENT staff and the Air Force to clear an air corridor for its safe delivery. The Air Force had never had to deal with an Army asset that could fire over 100 kilometers. Once fired, the Iraqi missile site was destroyed within two minutes.[66]

Another Army capability that contributed to the joint interdiction effort, but perhaps was not fully utilized, was the AH-64, Apache helicopter, one of the Army's most lethal attack assets. The Apache helicopter was instrumental in the success of interdiction operations from the very beginning of the Gulf War. Richard Mackenzie, in his article, "Apache Attack", explained in great detail the decision to use Apaches and the training and operations that resulted in Army Apaches firing the very first shots of Desert Storm.

As early as August, planners determined that a hole in Iraq's early warning air defense system was required in order for allied planes to attack targets deep within Iraq. The main reason Apaches were chosen for the mission was because of the ability of the helicopter pilots to see the targets and engage them repeatedly until they were sure of their complete destruction. Conventional aircraft or missiles could not provide the same capability. Apaches also had the capability to fly low to the ground at night, had a reduced radar signature, and a very accurate main weapon, the Hellfire missile. Two Iraqi radar sites, linked to four Iraqi fighter bases and to Baghdad's Intelligence Operations Center, were selected for attack. The attack proved to be very successful, completely destroying the radar sites with no loss of friendly life or equipment. "In the four and a half minutes it took to complete the task, the Apaches had, in the words of Gen. H. Norman Schwarzkopf, 'plucked

out the eyes' of Iraq's Soviet-supplied air defenses." Twenty minutes later, nearly 100 allied airplanes raced north through the hole to their targets.[67]

BG Robert Scales likewise goes into great detail illustrating another operation in which the Apache helicopter was very effective in "destroy[ing] the enemy's surface military potential before it [could] be used effectively against friendly forces."[68] During the ground war, the Apache was VII Corps' main deep attack asset and General Frederick Franks planned on using it to interdict moving armored targets up to 150 kilometers in front of the Corps. However, on 26 February, when no such moving targets could be located, he decided to conduct a deep attack against the stationary Iraqi 10th Armored Division. Kill boxes 100 kilometers inside Iraq were used to orient the attack and CENTCOM air planners established the 20 north-south grid line as a separation between Army air assets and the Air Force, restricting the Army from firing east of that line.[69]

Scales recounts that attacks that night were extremely successful. Apaches destroyed T-62s, BMPs, and everything else in their path out to the 20 north-south grid line. Frustration was great, however, as Apache pilots observed in their FLIR hundreds of Iraqi vehicles moving north on the east side of the 20 north-south grid line. Joint Surveillance Target Attack Radar System (JSTARS) readouts back at the corps headquarters showed thousands of moving vehicles on both sides of the grid line. A recommendation was made to reattack and the second mission turned into a free-for-all. In two separate 30-minute attacks, the deep attack by 18 Apaches resulted in the destruction of "33 tanks, 22 armored personnel carriers, 37 other vehicles, a bunker, and an undetermined number of Iraqi soldiers."[70]

On the east side of the 20 north-south grid line, the Air Force carried out their attacks with a series of FB-111s, dropping 2,000-pound laser guided bombs. Scales concluded that

> when the air tasking order had been prepared more than 24 hours earlier, any targets east of this line were assumed to be well beyond the concern of the VII Corps commander. The methodical F-111 bombing sequence was never intended to blunt the mass withdrawal of several Iraqi armored divisions. If every bomb hit a vehicle, only 12 of several thousand would be knocked out each hour.[71]

The JSTARS information caused VII Corps to try to get permission from ARCENT to attack across the grid line into the armored formations. A single strike by a battalion of Apaches could destroy 100 vehicles in half an hour, compared to the 12 vehicles in an hour by the Air Force. However, the Air Force was already attacking the identified armor formations and it was practically impossible to shut off the ATO once it was in the execution phase. In the limited time available, ARCENT was unable to convince CENTCOM of the opportunity that was presented.[72]

While the integration of the Army Tactical Missile System (ATACMS) and the AH-64, Apache helicopter into the theater interdiction effort proved partially successful, the dispute over the proper use of the Fire Support Coordination Line (FSCL) resulted in significant interdiction failures during the ground offensive. According to Keaney and Cohen in their Gulf War Air Power Survey, land forces used the FSCL to coordinate fires with maneuver and to protect their forces from fratricide by friendly air attack. In order to attack between the forward line of the Coalition forces and the FSCL, aircraft had to be under the direction of ground or airborne controllers. By the same token, the JFACC required control of Army assets, helicopters and missiles, beyond the FSCL. Lt Gen Horner stated very clearly his policy: "If it's inside the Fire Support Coordination Line, don't bother to tell me. If it's not,

put it in the ATO. Get the air cover; get the ECM support; get the TOT; get the coordination; get all the benefits from being in the ATO."[73] Ground commanders, however, considered fires beyond the FSCL as permissive, thus not requiring coordination and saw attempts to place employment of Army systems in the ATO as an effort by the JFACC to take control of their organic assets.[74]

In order to avoid JFACC imposed restrictions, on 27 February 1991, the XVIII Airborne Corps placed the FSCL well north of the Euphrates River. However, this action created a sanctuary for the enemy short of the FSCL but beyond the range of Corps deep attack assets. According to Keany and Cohen, by doing so, the Corps "reserved an area for attack helicopter operations unconstrained by any requirement to coordinate with the JFACC. The effect of this use of the FSCL was to hamper air power's ability to destroy escaping Iraqi ground forces until the FSCL was finally pulled back after several hours."[75]

Briefings and conversations with Lt Col Perozzi, a member of the CENTAF Staff, point out that the JFACC had developed time-phased FSCLs in order to support the ground commanders and prevent them from being attacked by friendly forces. However, Lt Gen Horner and his staff still found it very difficult to track the movement of ground forces. According to Lt Col Perozzi, the problem was that the Army's Battlefield Coordination Element (BCE) that was located in the Tactical Air Control Center (TACC) could not speak for both Army corps, resulting in an inability to know exactly where friendly ground forces were located.[76]

## ANALYSIS OF JOINT INTERDICTION DURING THE GULF WAR

By most accounts, the interdiction effort during the Gulf War achieved its objectives. However, this was largely due to coalition forces possessing overwhelming combat power, maintaining air supremacy, and having a seemingly endless supply of ordinance. It was not a result of following the existing joint interdiction doctrine. The preponderance of systems and forces used to conduct interdiction were Air Force, while many other interdiction capable assets were used very little or entirely ignored. Army support and the integration of Army interdiction assets into the joint interdiction effort were limited.

Initial interdiction planning for the Gulf War was almost completely an Air Force effort with little attention given to surface forces or maneuver. This was mostly due to the initiative of Col John A. Warden III, who, with his staff known as Checkmate, began developing an air campaign designed to eject Iraqi forces from Kuwait shortly after their invasion. They "developed military objectives, a concept of operations, and a targeting scheme designed to accomplish the President's objectives using air power alone."[77] Air power was the most readily available combat resource for the theater and lacking other options, GEN Schwarzkopf turned to air power as his initial defense and then as his first offensive option. Warden's initial plan was adopted, and although it was later refined, air power had became the central element of the theater campaign plan.[78]

The Gulf War Air Power Survey stressed that from the beginning of the plan until execution, planners continued to focus and refine the initial phase, the strategic air campaign, "at the expense of planning for the later phases. This raised concerns by other component commanders and their planners as to just how well-prepared CENTAF was for

the entire campaign."[79] By focusing on the initial phase of the campaign, Air Force planners "implicitly stated their vision that air power alone would prevail and victory would come within the first week."[80] This approach was clearly a reflection of how certain Air Force planners saw the role of the Air Force, rather than an attempt to follow established doctrine. As a result, air operations and the interdiction effort were largely planned without Army support or regard to surface operations.

Although a JFACC was appointed in accordance with joint doctrine, interdiction planning was not a joint process. The Black Hole, within the CENTAF staff, was not a joint staff and did not use joint procedures. Not only did the planning staff perform JFACC duties, it also performed CENTAF duties.[81] An in-depth study of U.S. air power during the Gulf War conducted by RAND concluded that "The JFACC staff was from top to bottom an Air Force staff: organized on USAF lines, using USAF staffing practices, supported for the most part by single-service Air Force systems, and buttressed by a supreme confidence in the effectiveness of air power."[82]

In addition to not being a joint process, interdiction planning did not always accurately reflect the CINC's guidance and objectives as joint doctrine said that it must. As was discussed in the previous section on Gulf War interdiction, misunderstandings occurred between the CINC and the JFACC about the magnitude of attacks against the Republican Guards. Concerns were also raised by Army commanders that too much effort was being focused on the destruction of tanks and not enough effort was being focused on enemy artillery. The difference between the Army's close-fight mentality and the Air Force's strategic campaign approach, likewise led to the CINC's guidance not being followed as

required by joint interdiction doctrine.

During the air operations of the campaign, but prior to the ground offensive, GEN Schwarzkopf told BG Glosson that the air focus was shifting from the strategic targets to the upcoming ground war. This was significant in light of another objective stated as early as 14 August 1990 by the CINC that he wanted Iraqi ground forces reduced in half prior to commencing the ground attack.[83] Glosson was told by Schwarzkopf that "if any flights are not attacking the Iraqi land army, [he wanted] to know why."[84] Atkinson's account stated that Glosson was not pleased with what he felt was a premature shift from the strategic focus and warned Schwarzkopf that his objectives in the strategic air campaign had not been met. To quote Atkinson:

> Rather than fight the green suiters head-on, Glosson resisted obliquely. Schwarzkopf's targeting directives, . . . might require "interpreting" -- the results often at odds with Army expectations. Or airplanes would suddenly be diverted to strategic targets because of last minute intelligence information. Or Glosson might convince Schwarzkopf of the need to batter a particular target above the Euphrates one more time.[85]

The JFACC possessed the command and control infrastructure, the facilities, and planning expertise, as joint doctrine says it must. However, it did not always follow the JFC's guidance nor was it a joint process. According to draft joint doctrine prior to the Gulf War, a method of facilitating the joint process was to organize joint targeting boards. Such a board reflected the Army's doctrine, and although an early imitation of today's Joint Targeting Coordination Board (JTCB)[86] was eventually formed during the Gulf War, its function was limited to ensuring that ground commanders' needs were being addressed prior to the ground offensive.[87] The board never really performed its doctrinal functions: it did not

represent all subordinates; it was not involved in developing or transmitting joint targeting guidance or objectives; it did not oversee the joint targeting process; and, it was organized just prior to the ground offensive, not at the beginning of the campaign. As a result of JFACC and JTCB shortcomings, the ability of the Army to integrate its interdiction capabilities or support the joint interdiction effort to its full extent was again severely limited.

Numerous issues developed during the Gulf War concerning the FSCL. One significant issue was the Air Force requirement to include Army assets in the ATO when they were operating beyond the FSCL. However, ground commanders considered fires beyond the FSCL as permissive and felt that the Air Force was attempting to gain control of Army assets by placing them in the ATO.[88] While a certain amount of control was inherent in the ATO process, it also provided numerous benefits.[89] However, by refusing to be a part of the ATO, ground commanders lost an important opportunity to integrate Army assets into the joint interdiction process.

At the same time, however, those opportunities that the Army did have to participate in the JFC's interdiction effort were generally well executed and demonstrated the significant interdiction capabilities of the Army. The ATACMS and Apache, when properly planned for and integrated into the overall joint interdiction effort, provided timely, accurate, and flexible interdiction options for the joint force commander. ATACMS proved its effectiveness, without being restricted by the ATO or requiring the benefits that the ATO provides. The Apache, according to Conduct of the Persian Gulf War, demonstrated its versatility, survivability, and mobility. Not only was it very successful in conducting

interdiction operations, it was also a valuable asset during joint ground operations. The capabilities that allowed the Apache to operate during periods of limited visibility and in adverse weather conditions made it an especially important asset during the Persian Gulf War.[90]

This discussion and analysis of the Persian Gulf War has shown that the inability of the Army to support the JFACC in his role as the supported commander for the JFC's interdiction effort was caused by a multitude of reasons. One reason was that the actions that occurred in support of the interdiction effort were a reflection of service doctrine rather than being based upon joint interdiction doctrine, which at this time, really did not exist. As a result, the Army competed with the JFACC for air power assets, seeking additional air support, rather than providing support to the JFACC for theater interdiction. Another reason for the Army's minimal support of interdiction is that the interdiction effort was never a joint process conducted by a joint staff. The Army was never really involved in the joint interdiction planning or execution process. Planners were almost entirely Air Force personnel and their plan focused on the use of air power from the very beginning. Only when the ground war approached did the Army have any real involvement, and even then it was focused on support of ground forces and not on the theater interdiction effort. The establishment of joint interdiction doctrine following the Gulf War would solve some of these shortcomings.

# CHAPTER 3

## INTERDICTION DOCTRINE

Carl H. Builder in The Masks of War: American Military Styles in Strategy and Analysis, puts forth the argument that the military services have distinct and enduring personalities that govern their behavior.[91] Accepting his premise, it is not difficult to understand that distinct differences in service personality lead to dramatic doctrinal differences between the Army and the Air Force. While the Army states that its current doctrine is compatible with joint doctrine, it still sees itself as the key to victory. According to the current version of FM 100-5, dated June 1993, "actions by ground force units, . . . will be the decisive means to the strategic ends."[92] On the other hand, current Air Force doctrine, contained in AFM 1-1, March 1992, focuses on "the aerospace campaign [fulfilling] the intent of the operational commander."[93]

These fundamentally different approaches to the conduct of war are a major source of the problems that the Army faces in supporting the joint interdiction effort. Because the Air Force is the lead agent for joint interdiction doctrine, much of that joint doctrine is a reflection of Air Force doctrine. The ever increasing emphasis on joint warfare and the recently acquired capabilities of the Army through technology to influence campaigns in ways only previously possible by the Air Force, demand a better understanding of joint interdiction doctrine and how the services, especially the Army, can integrate and synchronize their resources to support the JFC.

Joint Pub 3-0, most recently published in February 1995, is the only approved joint doctrinal manual that discusses interdiction. The purpose of interdiction is inherent in the

definition that it gives: "Interdiction diverts, disrupts, delays or destroys the enemy's surface military potential before it can be used effectively against friendly forces."[94] While the publication states that "interdiction is a powerful tool for JFC'S,"[95] and that "synchronizing interdiction and maneuver provides one of the most dynamic concepts available to the joint force,"[96] the role of interdiction in the theater campaign depends upon the strategic and operational situation that the JFC is facing.[97] Joint Pub 3-0 also states that forces from all components, to include land and sea-based fighters and bombers, airborne, air assault, or other ground maneuver forces, missiles, rockets, and non-lethal systems, can all conduct interdiction operations. Depending upon the target and the force used to attack it, interdiction can have tactical, operational, and/or strategic effects.[98]

The level at which interdiction is planned and executed is determined by its desired effects, its relationship to the campaign plan, and the area of operations where it will be conducted. "JFC'S may choose to employ interdiction as a principle means to achieve the intended objective . . . ."[99] However, Joint Pub 3-0 also states that "when maneuver is employed, JFC'S need to carefully balance doctrinal imperatives that may be in tension, including the needs of the maneuver force and the undesirability of fragmenting theater/JOA air assets."[100] In this explanation, both Army and Air Force concerns are addressed; ground requirements are considered and aerospace forces are keep together. The real challenge is figuring out how to balance both in a manner acceptable to both services.

A closer examination of Joint Pub 3-0 shows that while "the JFACC is the supported commander for the JFC's overall air interdiction effort,"[101] land commanders are given few tasks to support interdiction outside of their assigned AO. Within their AOs, however,

> land and naval operational force commanders are designated the supported commander and are responsible for the synchronization of maneuver, fires, and interdiction. To facilitate this synchronization, such commanders designate the target priority, effects, and timing of interdiction operations within their AOs.[102]

The challenge for the land force commander in conducting interdiction operations within his AO is that his interdiction target priorities are considered along with the theater/JOA-wide interdiction priorities established by the JFC.[103] As a result, the ground commander finds himself competing for air assets and might not be apportioned all of the interdiction assets he desires.

The Army's keystone doctrinal manual, FM 100-5, Operations, June 1993, has very little to say concerning interdiction and the Army's role in it. It recognizes the definition of interdiction as found in joint publications, but adds that "interdiction is a means to direct combat power simultaneously throughout the depth of enemy forces . . . ."[104] While stating that all forces are capable of interdiction, FM 100-5 leaves the reader with the impression that interdiction is a joint operation, not only an Army operation, a change from the previous manual. In fact, the one paragraph on interdiction concludes with the statement that "Joint Publication 3-03 discusses interdiction,"[105] as if to say "it's a joint concept and therefore needs no more discussion in an Army publication."

When discussing its own interdiction efforts, FM 100-5 chooses to use the term deep operations rather than interdiction. The Army defines deep operations as "operations designed in depth to secure advantages in later engagements, protect the current close fight, and defeat the enemy more rapidly by denying freedom of action and disrupting or destroying the coherence and tempo of its operations."[106] While different than the definition

of interdiction, deep operations are the closest that Army doctrine comes to discussing interdiction-type operations. According to Army doctrine, deep operations use Army forces and may lead to outright defeat of the enemy, although the enemy is best defeated through simultaneous close and deep attack. The focus is clearly on "Army forces employ[ing] long-range . . . targeting assets," and "airborne and air assault forces, attack aviation units, and high-speed armor forces" conducting deep maneuver.[107] FM 100-5 does recognize, however, that supporting assets of other services do need to be synchronized with maneuver in order for deep operations to be successful. While joint operations use interdiction, Army forces conduct deep operations with the purpose of supporting the eventual close operations that are normally required to obtain decisive battlefield effects.[108]

FM 100-5 also discusses air operations as though they are merely another way of supporting Army operations. It states that a primary consideration in employing joint forces is to gain and maintain freedom of action against the enemy. It continues by stating that "control of the air gives commanders the freedom to conduct successful attacks . . . . Control of the air enables land forces to execute operations without interference from an enemy's air forces."[109] Even the "ultimate goal of counterair is to control the airspace to allow commanders to execute their operational plans,"[110] not to allow friendly air operations or to prevent the enemy from conducting strategic bombing or interdiction.

Although the Army's keystone doctrinal manual, FM 100-5, does not adequately discuss interdiction, FM 100-7, Decisive Force: The Army in Theater Operations, goes to great lengths to describe the importance of synchronizing interdiction and maneuver, even including interdiction in its glossary. It states:

> Synchronizing interdiction and maneuver is critical to the successful execution of the campaign or major operation. Interdiction and maneuver should not be considered separate operations against a common enemy, but rather complementary operations designed to achieve the JFC's campaign objectives.[111]

However, FM 100-7 still sees interdiction largely as an operation that supports maneuver. When ground operations are the decisive operations "interdiction operations and target prioritization must be based on the ground commander's concept of operations."[112] While this doctrine is in accordance with joint doctrine, FM 100-7 ignores any requirements the Army might have to support the JFC's interdiction effort. The Army continues to emphasize the importance of interdiction supporting the ground commander, referencing the specific joint doctrine that supports the Army position. "According to Joint Pub 3-0, the operational land commander is the supported commander for air interdiction in his AO, and he therefore specifies the target priority, effects, and timing of interdiction operations therein."[113] Even FM 100-7's discussion of integrating interdiction and maneuver turns its focus to the support of Army's operations, not the Army supporting the JFC's campaign.[114]

The Army's key doctrinal manuals applicable to the operational level of war, FM 100-5 and FM 100-7, make it clear that the Army views its deep operations as an interdiction effort separate, and perhaps more important, than the theater interdiction operations in support of the JFC's overall interdiction effort. Statements such as "A well-orchestrated deep battle may cause the enemy to be defeated outright . . .", but, "The enemy is best defeated by fighting him **close** and deep simultaneously"[115] (emphasis added) clearly indicate the Army's position on interdiction.

Air Force doctrine likewise states that ground operations and interdiction must be planned and executed to reinforce and complement each other in order to achieve the theater commander's objectives. But like the Army, the Air Force sees interdiction as a separate operation. In fact, the Air force turns the tables and explains that in certain cases maneuver should support interdiction: "Air and surface commanders together should consider how surface forces can be employed to enhance the ability of air interdiction to support the campaign's objectives."[116] While there is nothing inherently wrong in this statement, it reinforces the different perspective that each service brings to the joint arena.

Additionally, Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, uses the joint terms "interdiction" and "air interdiction" interchangeably while Joint doctrine clearly distinguishes between the two. Air interdiction differs from interdiction in that air interdiction is an air operation conducted at such a distance from friendly forces that detailed coordination is not required. The synonymous use of these two terms indicates that the Air Force sees interdiction solely as an aerospace operation. This particular view is reinforced by the Air Force advocating that the separation between interdiction operations and friendly forces should be increased, thus reducing "the coordination required between components."[117] This last point is perhaps not that much different than Army doctrine; both services tend to be seeking less coordination rather than increased joint coordination.

Planning and coordinating interdiction at the joint level is essential to effective interdiction operations, but the manner in which it is accomplished is not readily agreed upon. In FM 100-7, the Army identifies a requirement to coordinate targeting information,

provide targeting guidance, and develop joint target lists (JTLs) at the joint level. This coordination occurs by establishing the Joint Targeting Coordination Board (JTCB). The board consists of members of the joint staff and each of the subordinate components and is usually chaired by the J3 or his representative. The JTCB

> normally meets daily to ensure that JFC targeting and EW guidance is disseminated, to monitor the effectiveness of lethal and nonlethal targeting efforts, to coordinate and deconflict joint force operations, to validate fire support coordination measures, and to approve new target nominations for inclusion in the JTL.[118]

The Air Force's JFACC Primer, which is a reflection of the latest Air Force doctrine on joint operations, gives an entirely different outlook on targeting requirements at the joint level. For the Air Force, targeting is a command function that is accomplished by the JFACC. The Air Force sees no need to create additional organizations to do what it is already trained and equipped to do. "Targeting boards that constrict the operations of any commander or duplicate the actions of any staff are a burden on the joint force."[119]

Joint Pub 3-0 also recognizes the need for targeting coordination at the joint level. Joint doctrine, however, accommodates both services by saying that the JFC "may establish and task an organization within their staffs to accomplish these broad targeting oversight functions [a JTCB] or may delegate the responsibility to a subordinate commander."[120] Whether the JFC forms a JTCB or delegates the responsibility to the JFACC, joint doctrine makes it clear that it must be a joint activity, including members of the joint staff, all components, and subordinate commands if required. The organization must also possess or have access to adequate command and control facilities and joint planning expertise.[121]

# CHAPTER 4

## CONCLUSION

The purpose of this monograph has been to identify how the U.S. Army can support the JFACC in his role as the supported commander for the JFC's interdiction effort. It has examined interdiction operations during the Gulf War and current interdiction doctrine to provide some of those answers. This investigation has shown that the interdiction effort during the Gulf War required little support from the Army and that integration of Army assets into that effort were limited. It has likewise shown, partly because of the success of the Gulf War, that current interdiction doctrine has not resolved many of the interdiction issues of that war. In some cases, current joint interdiction doctrine appears to be merely a formalization of the doctrine that existed in each of the services prior to the Gulf War.

Many of the most difficult decisions affecting interdiction never had to be made during the Gulf War because of an abundance of air power resources, complete control of the air, unparalleled intelligence capabilities, and unlimited time. Other factors, to include superior training, soldiers, leaders, command and control, and overwhelming combat power, likewise contributed to victory. While disagreement existed over apportionment and allocation of air resources, the air effort achieved its objectives and no one went without its support. The really tough decisions, like who received support and who did not, never had to be made. As a result, many difficulties in conducting joint interdiction, and other joint operations, have been overlooked or ignored in the wake of the success.

The manner in which the initial Gulf War campaign planning began and the overabundance of air support resulted in an initial focus on airpower to achieve strategic victory. Interdiction

was not a joint effort, nor did it use joint processes. It began as an Air Force effort and remained that way. Although a targeting board was eventually formed, it did not serve the doctrinal purposes for which it was designed. As a result, Army involvement in the planning effort was minimal. The airpower focus on strategic attack resulted in ground maneuver being an after-thought, creating the near impossibility of integrating interdiction and maneuver.

Army resources were only used in the Gulf War interdiction effort on a limited basis. The limited use of Army assets was not only due to their minimal involvement in the interdiction planning process, but was also due in part to the reluctance of Army commanders to include Army systems on the ATO. Army commanders feared that, by placing Army assets on the ATO, they would lose control of those assets. However, the few times Army assets were employed as part of the interdiction effort, they proved their effectiveness and made significant contributions.

Current interdiction doctrine is a reflection of the different doctrinal approaches of each service. The Army addresses interdiction very little, and when it does, it sees interdiction largely as an effort to support decisive ground operations. The Air Force approaches interdiction just the opposite. It sees interdiction is a separate operation that can be supported by maneuver forces, but designed to support the CINC's overall theater campaign. Meanwhile, joint doctrine recognizes both approaches and states that the interdiction effort must provide support to maneuver while not fragmenting the air effort. In this mannner, joint doctrine addresses the basic doctrines of the services, leaving the JFC commander with not only flexible options, but more importantly, with the responsibility to provide specific guidance for the use of interdiction in the theater.

One of the single most important steps that can be taken to increase the Army's contribution to the theater interdiction effort is to involve all services early in the planning effort. Interdiction planning must be a joint effort, purple in the true sense, not an Air Force effort with token liaison officers from the other services. Winnefeld and Johnson in Joint Air Operations: Pursuit of Unity in Command and Control, 1942-1991, conclude that the services must have the capability to form a JFACC that represents all the services, but that creating a standing JFACC is probably not justified.[122] Others contend that the solution is to stand up a purple JFACC or create a joint air component staff in each theater.[123] Whether a purple JFACC can, or will, be organized in each theater during peace-time remains to be seen. In any case, the Army must become involved in the initial planning and stay involved.

Just as a purple JFACC needs to exist in order to have an integrated, joint interdiction effort, so must a Joint Targeting Coordination Board exist. Winnefeld and Johnson likewise conclude that in most cases a targeting board is needed and should be a part of the pre-conflict planning.[124] The issue should not be which of the two should be in charge, but how the two organizations can support each other in maximizing available interdiction assets. Properly functioning, a JTCB will ensure that the CINC's interdiction objectives are clearly understood and properly executed. It would not only serve as a check and a balance for the JFACC staff, but more importantly, would ensure that targeting, especially interdiction targeting, was integrated with the theater campaign plan and synchronized with maneuver.

While the formation of joint staffs and boards are critical to an integrated joint interdiction effort, the key to success lies with the basic doctrines and philosophies that each service brings to the joint arena. No organizational structure can overcome the Army's

fundamental belief that victory in war must eventually be won on battlefields; that ultimately, the other services exist in order to support ground maneuver. The same holds true for the Air Force, wherein many believe that wars can be won through airpower alone. Both services must be more willing to put jointness before service parochialism, develop joint doctrine that truly capitalizes on the strengths and contributions of each service, and then follow that doctrine.

In addition to different doctrinal approaches to warfare, the services exhibit a basic lack of trust, especially apparent when discussing the ATO and the use of it. Army commanders are very apprehensive to place Army assets on the ATO, for whatever purpose. The belief is that to do so would result in the loss of control of Army assets and indicates a basic mistrust of the Air Force. The Air Force on the other hand, while needing to use technology in order to reduce their target submission and validation requirements, has shown more flexibility in not being directly tied to the ATO. At the same time, the Air Forces' demand that they maintain control of air assets at all times demonstrates an equal distrust of the Army.

If the Army is to support the JFACC in his role as the supported commander for the JFC's theater interdiction effort, joint doctrine must provide the Army with the opportunity to be involved with the planning and execution of it. If no changes in the current joint doctrine occur, the Army will likely find itself without a joint interdiction mission, and the joint effort will lack the contributions of numerous Army interdiction assets. Likewise, the Army must be willing to adapt its fundamental warfighting philosophies so that it will be able to support the interdiction effort when the opportunity arises.

ENDNOTES

1. The Joint Chiefs of Staff, Joint Pub 3-0, Doctrine for Joint Operations. (Washington, DC: US Government Printing Office, 1995), p. IV-13.

2. Ibid., p. GL-7.

3. The Joint Chiefs of Staff, Joint Pub 3-03, Doctrine for Joint Interdiction Operations, Test Pub. (Washington, DC: US Government Printing Office, 1990), p. IV-4.

4. Joint Pub 3-0, p. IV-11.

5. Ibid., p. IV-15.

6. Ibid., p. i, and inside front cover. John M. Shalikashvili, Chairman of the Joint Chiefs of Staff, stated in reference to Joint Pub 3-0 that "this vital keystone publication forms the very core of joint warfighting doctrine and establishes the framework for our forces' ability to fight as a joint team. It is the linchpin of the joint doctrine publication hierarchy; and for good reason. The fundamental concepts and principles contained in Joint Pub 3-0 provide a common perspective from which to plan and execute joint and multinational operations." Other joint doctrinal publications that address interdiction are Joint Pub 3-03, Doctrine for Joint Interdiction Operations, Test Pub, which has been in its initial form since 1990, and Joint Pub 3-09, Doctrine for Joint Fire Support, Final Draft, dated 1991. The Air Force is the agent for Joint Pub 3-03 and the Army is the agent for Joint Pub 3-09. Due to disagreements between the services, neither publication has been approved. As a result, Joint Pub 3-0, being the only approved joint publication that addresses interdiction, serves as the standard in this monograph for comparing interdiction doctrine.

7. The Joint Chiefs of Staff, Joint Pub 3-03.1, Doctrine for Joint Precision Interdiction, Proposed final Pub, (Washington, DC: US Government Printing Office, no date, received by library 17 Oct 91), pp. I-1 - I-4.

8. Headquarters, Department of the Army, FM 100-5, Operations, (Washington, DC: US Government Printing Office, 1986), pp. 19-20.

9. Ibid., p. 19.

10. Ibid., p. 20.

11. Ibid., p. 19.

12. Ibid., p. 48.

13. Headquarters, Department of the Army, FM 100-7, The Army in Theater Operations, Preliminary Draft, (Washington, DC: US Government Printing Office, 1990), p. 6-19.

14. Ibid., pp. 6-20 - 6-21.

15. Ibid., p. 6-20.

16. Ibid., p. 6-15.

17. Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, does not recognize the term operational fires. However, FM 100-7 defines operational fire as "the application of lethal and non-lethal firepower to achieve a decisive impact on the conduct of a campaign or major operation. Operational fires are by their nature joint and combined activities. They are a separate component of the operational plan, integrated with, and the coequal of operational maneuver." p. 2-40.

18. FM 100-7, p. 5-10.

19. Ibid.

20. Headquarters, Department of the Air Force, AFM 1-1, Basic Aerospace Doctrine of the United States Air Force. (Washington, DC: US Government Printing Office, 1984), p. 2-8.

21. Ibid., p. 2-13.

22. Ibid.

23. Ibid., p. 3-3.

24. Ibid., p. 2-14.

25. Ibid.

26. Ibid., p. 3-3.

27. Ibid.

28. The failure of Joint Pub 3-0, dated 1990, to address interdiction, was corrected in the current version, dated 1995. Joint Pub 3-0, 1995, discusses both the role of interdiction and the synchronization of interdiction with maneuver at the joint level. It emphasizes its importance to include stating that "synchronizing interdiction and maneuver provides one of the most dynamic concepts available to the joint force." Joint Pub 3-0, p. IV -13.

29. The Joint Chiefs of Staff Pub 3-0, Doctrine for Unified and Joint Operations, Test Pub. (Washington, DC: US Government Printing Office, 1990), p. III-10. The only use of the term interdiction is to describe one of several activities that a CINC can perform within his theater.

30. The Joint Chiefs of Staff Pub 3-03, Doctrine for Joint Interdiction Operations, Test Pub. (Washington, DC: US Government Printing Office, 1990), pp. II-1 - II-2.

31. Ibid., p. II-5.

32. Ibid., p. IV-2.

33. Ibid., p. IV-3.

34. Ibid., p. IV-2.

35. Mann, Edward C., III, Thunder and Lightning: Desert Storm and the Airpower Debates, (Maxwell Airforce Base, AL: Air University Press, 1995), p. 29.

36. Keaney, Thomas A. and Eliot A. Cohen, Gulf War Air Power Survey, (Washington, DC: US Government Printing Office, 1993), Vol I, Part I, p. 27. Hereafter referred to as GWAPS.

37. Ibid., p. 29.

38. Ibid.

39. Ibid.

40. Mann, p. 28.

41. GWAPS, Vol I, Part I, p. 41.

42. Winnefeld, James A., Preston Niblack, and Dana J. Johnson, A League of Airmen: U.S. Air Power in the Gulf War, (Santa Monica, CA: RAND, 1992), pp. 65-67 and GWAPS, Vol I, Part I, pp. 35-36.

43. GWAPS, Summary, p. 37.

44. Ibid., p. 38.

45. Ibid.

46. Joint Pub 3-03, p. IV-2.

47. (S) Msg, 101100Z Aug 90, OPORD/USCINCCENT, "Task Organization," as noted in GWAPS, Vol I, Part II, p. 42.

48. GWAPS, Summary, pp. 147-148.

49. Ibid., pp. 43-47.

50. Ibid., pp. 48-49.

51. Transcript of interview, 4 Mar 1992, pp. 82-83, Desert Story Collection, US Air Force Historical Research Agency, Maxwell AFB, Ala. As noted in Mann's Thunder and Lightning, p. 78.

52. Ibid., p. 79 and Rick Atkinson, Crusade: The Untold Story of the Persian Gulf War, (Boston, MA: Houghton Mifflin, 1993), pp. 105-106. According to the Atkinson account, the Republican Guards weren't scheduled for attack until the second night of the war. Because of the surface-to-air threat, BG Glosson had never planned to bomb the Guard until some of the surface-to-air threat could be lessened. Schwarzkopf reportedly said that he had wanted them bombed at the very beginning and that Glosson had lied to him, misled him, and had failed to obey orders.

53. GWAPS, Vol I, C2, pp. 57-58. From a Secret message from USCINCCENT, to COMUSCENTAF, subject: "Air Apportionment Planning," 31 January 1991.

54. Ibid., pp. 58, 63.

55. Winnefeld, James A. and Dana J. Johnson, Joint Air Operations, Pursuit of Unity in Command and Control, 1942-1991, (Annapolis, MD: Naval Institute Press, 1993), p. 126.

56. Winnefeld, Niblack, and Johnson, p. 84.

57. Ibid.

58. Message, 180300Z Feb 91, FM COMUSARCENT MAIN, . . . , GENTEXT/ COMMANDER'S EVALUATION. As noted in: Swain, Richard M., "Lucky War": Third Army in Desert Storm, (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1994), p. 189.

59. Atkinson, p. 339.

60. ARCENT MI History, p. 6-74. As noted in: Scales, Robert H., Certain Victory: The US Army in the Gulf War. (Fort Leavenworth, KS: US Army Command and General Staff College Press, 1994), p. 188-189.

61. Ibid., p. 178.

62. Atkinson, pp. 218-219.

63. Weaponeering/assessment "determines the quantity, type, and mix of lethal and nonlethal weapons required to produce a desired effect. Weaponeering is an analysis of the best weapon combination for economy of force (that is the best 'bang for the buck')." Force application is the selection of forces to attack previously established targets. It takes into consideration the forces

available and their capability of achieving the commander's objectives. FM 90-36, Targeting Procedures for Coordinating, Deconflicting, and Synchronizing Attacks Against Time-Critical Targets, Second Draft, (Washington, DC: US Government Printing Office, 1995), p. I-12 - I-13.

64. Scales, p. 369.

65. Department of Defense, Conduct of the Persian Gulf War, Final Report To Congress, Pursuant to Title V of the Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 (Public Law 102-25), (Washington, DC: US Government Printing Office, 1992), p. 753.

66. Scales, pp. 193-194.

67. Richard Mackenzie, "Apache Attack", Air Force Magazine, (October 1991), pp. 54-58.

68. Joint Pub 3-0, p. GL-7.

69. Scales, pp. 287-289.

70. Ibid., p. 290.

71. Ibid.

72. Ibid.

73. Interview with Lt Gen Horner, 4 Mar 92, as noted in GWAPS, Vol I, Part II, p. 64.

74. GWAPS, Summary, pp. 156-157.

75. Ibid., p. 157.

76. Briefing by and conversation with Lt Col Perozzi, CENTAF Staff, 9 Mar 92, Shaw AFB, SC, as noted in GWAPS, Vol I, Part II, p. 64.

77. GWAPS, Summary, p. 35.

78. Ibid., pp. 35-37.

79. GWAPS, Vol I, Part I, p. 230.

80. Ibid., p. 232.

81. Glosson, in fact, was later put in command of all CENTAF's fighter wings. Ibid., p. 148.

82. Winnefeld, Niblack, and Johnson, p. 105.

83. GWAPS, Vol I, Part I, p. 170.

84. Atkinson, p. 221.

85. Ibid., p. 222.

86. The Joint Targeting Coordination Board formed during the Gulf War was much different than the current JTCB as defined in Joint Pub 1-02: "A group formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and preparing and/or refining joint target lists. The board is normally comprised of representatives from the joint force staff, all components, and if required, component subordinate units." Joint Pub 1-02, p. 207.

87. Winnefeld and Johnson, p. 110, and endnote 25 on p. 192.

88. GWAPS , Summary, pp. 156-157.

89. Interview with Lt Gen Horner, 4 Mar 92, as noted in GWAPS, Vol I, Part II, p. 64.

90. Conduct of the Persian Gulf War, pp. 669-670.

91. Builder, Carl H., The Masks of War: American Military Styles in Strategy and Analysis, (Baltimore, MD: John Hopkins University Press, 1989), p. 3.

92. FM 100-5, p. 2-0.

93. AFM 1-1, p. 9.

94. Joint Pub 3-0, P. IV-11.

95. Ibid.

96. Ibid., p. IV-13.

97. Ibid., p. IV-14.

98. Ibid., pp. IV-11 - IV-12.

99. Ibid.

100. Ibid., p. IV-13.

101. Ibid., p. IV-11.

102. Ibid., p. IV-15.

103. Ibid.

104. FM 100-5, p. 2-18.

105. Ibid.

106. Ibid., p. Glossary-2.

107. Ibid., p. 6-14.

108. Ibid.

109. Ibid., p. 2-18.

110. Ibid.

111. FM 100-7, p. 7-6.

112. Ibid., p. 5-8.

113. Ibid., p. 7-6.

114. Ibid.

115. Ibid., p. 6-14

116. AFM 1-1, p. 12.

117. Ibid.

118. FM 100-7, p. 7-9.

119. U.S. Department of the Air Force, JFACC Primer, (Second Edition), (Washington, DC: U.S. Government Printing Office, 1994), p. 32.

120. Joint Pub 3-0, p. III-26.

121. Ibid., pp. III-26 - III-27.

122. Winnefeld and Johnson, pp. 135, 170.

123. Hurley, Marcus, "JFACC, Taking the Next Step", Joint Force Quarterly, (Spring 95), p. 63 and J.L. Whitlow, "Who's in Charge", Joint Force Quarterly, (Summer 94), p. 69.

124. Winnefeld and Johnson, p. 136.

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