

AD-A233 510

2

**The Iraqi Way of War:
An Operational Assessment**

**A Monograph
by
Lieutenant Colonel Gary B. Griffin
Field Artillery**



**DTIC
ELECTE
APR 5 1991
S B D**

**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

First Term AY 90-91

Approved for Public Release; Distribution is Unlimited

91 1 08 007

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 08/01/90		3. REPORT TYPE AND DATES COVERED MONOGRAPH
4. TITLE AND SUBTITLE THE IRAQI WAY OF WAR: AN OPERATIONAL ASSESSMENT			5. FUNDING NUMBERS	
6. AUTHOR(S) LTC GARY B. GRIFFIN, USA				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) SCHOOL OF ADVANCED MILITARY STUDIES ATTN: ATZL-SWV FORT LEAVENWORTH, KANSAS 66027-6900 COM (913) 684-3437 AUTOVON 552-3437			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) SEE ATTACHED				
14. SUBJECT TERMS OPERATIONAL ASSESSMENT-IRAQI ARMY HISTORY OF THE IRAQI ARMY			15. NUMBER OF PAGES 45	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED
20. LIMITATION OF ABSTRACT UNLIMITED				

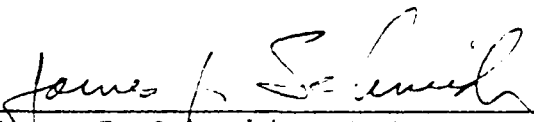
SCHOOL OF ADVANCED MILITARY STUDIES

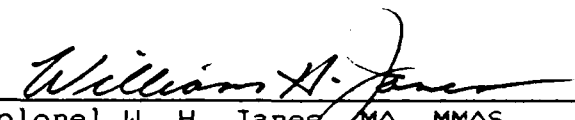
MONOGRAPH APPROVAL

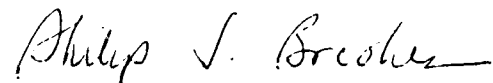
Lieutenant Colonel Gary B. Griffin

The Iraqi Way of War: An Operational Assessment

Approved by:


James J. Schneider, M.A. Monograph Director


Colonel W. H. Janes, MA, MMAS Director, School of
Advanced Military Studies


Philip J. Brookes, Ph.D. Director, Graduate
Degree Program

Accepted this 28th day of January 1991.

ABSTRACT

THE IRAQI WAY OF WAR: AN OPERATIONAL ASSESSMENT
by Lieutenant Colonel Gary B. Griffin, USA, 45 pages.

This monograph is an assessment of the performance of the Iraqi Army in selected major operations from 1941 to 1988. Focused primarily at the operational level, this study first describes the Iraqi Army's performance in an abbreviated 1941 conflict with Britain. Next, there is an analysis of the role the Iraqis played in the Arab-Israeli Wars of 1948/56/67 and 1973. The historical review of Iraqi operations ends with a more detailed account of the opening and closing campaigns of the Iran-Iraq War.

The operational performance of the Iraqis is measured against the six Operational Operating Systems (OOSs) described in Training and Doctrine Command Pamphlet 11-9, Blueprint of the Battlefield. Serving as the analytical criteria for this study, the OOSs include: operational movement and maneuver, fires, protection, command and control, intelligence, and support.

Even though the Iraqis represent a formidable military challenge to the United States, this study finds that historically, with the final campaign of the Gulf War being the single exception, the overall operational performance of the Iraqi Army has been generally poor. The conclusions reached in this study also suggest that Iraqi operational weaknesses far outweigh their strengths, especially in the areas of maneuver, command and control, and protection.

Finally this monograph closes with recommendations on how these operational vulnerabilities can be exploited by US Forces in the Persian Gulf in the event the current crisis leads to war with Iraq.

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

TABLE OF CONTENTS

INTRODUCTION-----	1
METHODOLOGY-----	3
THE IRAQI ARMY, 1932-41-----	6
THE ANGLO IRAQI WAR, 1941-----	8
THE ARAB-ISRAELI WARS-----	11
THE IRAN-IRAQ WAR-----	16
I. First Campaign-Invasion-----	17
II. Iraqi Defensive-----	20
III. Karbala-5-----	23
IV. The Final Offensive-----	26
OPERATING SYSTEMS ASSESSMENT-----	30
CONCLUSIONS-----	40

INTRODUCTION

We awakened to see the Iraqi Army, the Arab Prussia,
the force able to realize our dreams.

Mahmud Dura
Baghdad, 1936

Since its first challenge to Western strategic interests in 1941, the nation of Iraq has been a major political, economic, and military player in the Middle East/Persian Gulf region. The frequent use of its armed forces in the active pursuit of its national objectives, both foreign and domestic, indicates that the military is a vital, if not overriding component of Iraqi national strategy. The possibility of conflict between Iraq and the United States, therefore, demands of military planners a fundamental understanding of the Iraqi "way of war" as it has evolved over the past fifty years. In that regard, this monograph is of obvious contemporary significance.

Iraq's desire to become the undisputed leader of the Arab world was first expressed over half a century ago.¹ It was, however, with the increasing hold of the Ba'th (an Arab nationalist, socialist, and secular political party) over the army, political, and economic structure in the late 1950's that the Iraqi dream began to materialize. Subsequently, the seizure of power by Saddam Hussein in 1979 marks the beginning of Iraq's drive for regional hegemony. The Iraqi path to military mastery of the Persian Gulf can be divided into three

periods: the post-Yom Kippur War arms buildup, the Iran-Iraq War, and the invasion of Kuwait.

Beginning in 1973, Iraq set itself on the course of achieving military dominance in the region. Iraq's embarrassing performance in the Yom Kippur War was only one motivation to improve its armed forces. More important was its goal of matching its arch enemy, Iran, in a "man for man, plane for plane, tank for tank," Middle East arms race.² This task was undertaken to challenge the Shah's role as an American appointed "policeman" of the Gulf region. It was also undertaken to secure Iraq's position in ongoing border disputes with its Persian neighbor. Secondly, the 1980-1988 Iran-Iraq War was an attempt on behalf of Hussein to take advantage of the domestic turmoil in Iran caused by the Islamic revolution. His objective was to prevent the export of Islamic fundamentalism (diametrically opposed to Ba'thist ideology) to Iraq and neighboring Arab states.³ Success in that endeavor by Iran would deny Iraq its goal of regional dominance. The third phase was Iraq's intimidation and invasion of Kuwait in 1990.

The role of the Iraqi armed forces in the pursuit of power, however, is not the subject of this monograph. Its focus, instead, is on the characteristics of Iraqi military operations in support of the nation's political-strategic ambitions. This study will first look at the Iraqi Army's performance in a brief war against Britain in 1941. An assessment of Iraq's role in the Arab-Israeli Wars will follow.

Finally, the opening and closing offensive and defensive campaigns of the Iran-Iraq War will be analyzed.

In this context, the purpose of the study is to determine what institutional characteristics exist in the Iraqi's conduct of major operations. In doing so, one of its more important objectives is to identify operational strengths and weaknesses, and suggest means by which they can be exploited in the event of war between Iraq and the United States.

METHODOLOGY

Several definitions, and the methodology itself, are drawn from US Army publications. Field Manual (FM) 100-5, OPERATIONS definition of the operational level of war will be used in this monograph. Because the Iraqi experience with operational art is severely limited, it is important to keep in mind that "no particular echelon of command is solely or uniquely concerned with operational art."⁴ Regardless, the analysis will concentrate on the employment of Iraq's forces in the accomplishment of strategic objectives through campaigns and major operations. Division-level joint and combined operations will be the center of interest up until the Iran-Iraq war. Corps and "front" level operations will then be discussed.

The Six Operational Operating Systems (OOS's) described in Training and Doctrine Command Pamphlet 11-9, Blueprint of the Battlefield, will be the principal means of analysis. Referred to simply as "The Blueprint", the pamphlet describes a "comprehensive hierarchical listing of Army battlefield

functions and their definitions".⁵ The Blueprint was designed to support the Concept Based Requirements System (CBRS) and has great additional utility in combat development studies. It applies to the entire operational continuum and addresses Battlefield, Operational, and Strategic Operating Systems (BOS, OOS, and SOS). The six OOSs used for this analysis include:

- Movement and maneuver
- Fires
- Protection
- Command and Control
- Intelligence
- Support

Operational movement and maneuver are simply the timely and decisive employment of forces (joint and/or combined) in defensive or offensive operations. This OOS includes operations facilitating mobility and countermobility, as well as the control of air, sea, and land areas (see Appendix A).

Operational fires are the decisive application of firepower. They are not fire support of tactical or operational movements. In fact, operational fires are normally conducted separately, albeit in an integrated and coordinated manner. Operational fires include attacks on air, sea, and land targets that through their neutralization or destruction will have a positive impact on the conduct of overall operations. Targeting, distribution of assets, and command and control of fires are all key elements (See Appendix B).

Concerning itself with the preservation of fighting strength through a variety of means, operational protection

preserves plans and forces through operations security (OPSEC), deception, dispersal, air defense, and health and welfare of soldiers. Operational air defense is equally concerned with both the protection of forces, as well as key points on the battlefield (See Appendix C).⁹

Command and control at the operational level includes control of forces throughout a theater to ensure a coordinated effort in accomplishing the operational objective. Operational command and control will normally include joint forces. It may also involve combined operations under fixed or ad hoc coalitions like Desert Shield. Vital to the operational level is its relationship to both the strategic and tactical levels of operations. This linkage ensures the overall effectiveness and continuity of both operational thought and action (See Appendix D).¹⁰

Operational intelligence addresses the collection and processing of information on the operational situation. Concerning itself with the collection, identification, and analysis of significant information that will facilitate recognition of enemy vulnerabilities, capabilities, and intentions. Its most important function, however, is the identification of the enemy center of gravity. Strategic and tactical linkage is also a key component of this OOS (See Appendix E).¹¹

Although focused on the theater army sustainment base, or COMMZ, operational support still consists of fueling, fixing, and arming the force. It is, nevertheless, distinguished

from tactical logistics by the scale of planning and time required for execution. Concerned primarily with the establishment of a joint intratheater sustainment infrastructure, its principal objective is to provide materiel to support operations at a required tempo (See Appendix F).¹²

There are, however, several difficulties in analyzing Iraqi operations using the above OOS criteria. Two of the most critical problems are quantity and accuracy of information. Accordingly, this lack of detailed knowledge on Iraqi operations, especially in the areas of intelligence and logistics, will result in educated assumptions being made.

THE IRAQI ARMY

1932 - 1941

League of Nations' agreements in 1921 led to Iraq's being established as a British Mandate. The Iraqi Army, highly politicized from its beginning, was officered largely by Sunni Moslem and ex-Ottoman Empire officers. Designed as a means of enforcing monarchical rule and maintaining internal stability, the early army resembled a police force more than a military formation. Nevertheless, the desire of political leaders was for expansion of the force as a means of gaining early independence.¹³

In essence, the officer corps was the only educated, bureaucratically experienced segment of society, and as the governmental infrastructure grew, more and more officers entered politics and public service. Beyond its roles of

preserving security and stability, the army was also, and remains, a school of citizenship designed to instill a sense of pan-Arabism and national unity in the rank and file.

Tactics and doctrine were largely Turkish until the late 1920's when British training began to have an impact. The army was augmented by British officers in key command and staff positions until independence in 1932. It also contained separate units (with Iraqi resentment) of Assyrian levies under British control. Britain's Royal Air Force provided the armed forces its air component.

By 1930 the army was organized, equipped, and trained along British lines. Iraqi officers attended schools at home and abroad in England as well as India. Although a healthy relationship appeared between the Iraqis and their British mentors, Iraqi leaders "rankled" at the restraints imposed upon them on a number of issues -- expansion being one of the greatest.

The first campaign undertaken by the army, one that formed the roots of its counterinsurgency tradition, was against the Kurds shortly after independence. An embarrassing failure, the army's defeat manifested itself in two ways. First, it created an inferiority complex among soldiers and second, it fostered a desire on behalf of the leadership to seek another chance to prove itself without British advice and assistance.¹¹

The following year provided the army just such an opportunity against the pro-British Assyrian Christian minority. No longer trusting their British advisors, the

Iraqis did not permit them to participate in the campaign. Vastly outnumbering the Assyrians, the Iraqi Army undertook operations against them during the summer of 1933. The campaign turned into a bloodbath, wiping out the Assyrian minority in some portions of the country.¹⁵ The army, emerging from its first victory, was hailed by government and press alike as heroes. However, overconfidence bred by the Assyrian defeat would backfire on the Iraqis less than a decade later when they faced their first conventional adversary...the British.

THE ANGLO-IRAQI WAR

MAY 1941

The British Armed Forces, primarily the Royal Air Force (RAF) remained in Iraq after independence as a result of agreements made under a 1930 treaty.¹⁶ Although the Iraqis hold the dubious distinction of conducting the first coup in the Arab world in 1936, it was a 2 April 1941 coup that brought about the conflict with Britain.¹⁷ Conducted by radical pan-Arab politicians and Anglophobic elements of the Iraqi General Staff known as the "Golden Square", it severely challenged British strategic interests in the region.

With promises of Axis support, the new Iraqi government under Prime Minister Ali Al-Gaylani took advantage of British military weakness in the Gulf and unilaterally abrogated important conditions of the treaty.¹⁸ Assuming British preoccupation with the war in North Africa would prevent a military response, Gaylani ordered the closing of the RAF base

at Habbaniya. He then shut down the port of Basra to British military traffic. With the arrival of elements of the German Luftwaffe, Churchill immediately ordered reinforcements to Basra from India (the 10th Indian Infantry Division under command of BG W. J. Slim).¹⁹ Other forces were flown directly into Habbaniya in the event of a siege. Slow to react, the Iraqis stood idly by, either unable or unwilling to prevent the British buildup. It was well within their means to do so, however, considering the size and disposition of their armed forces (See Figure 1).

Under the guise of maneuvers, the Iraqi Army surrounded the air base in late April. The British refused to surrender the base and on 1 May 1941, mounted over 200 preemptive sorties against the surrounding Iraqi positions and airfields near Baghdad.²⁰ The Iraqis responded with poorly coordinated, ineffective airstrikes and shelling. Iraqi infantry remained entrenched and never attacked the lightly defended British air base.

Within a week, Britain's Middle East Command launched a 470 mile deep attack into Iraq from Jordan (See Figure 2). Operating under a strategic and operational deception plan which hid the relative weakness of the force, a lightly armed but well organized and balanced British brigade-sized task force moved in two columns into Iraq.²¹

Fighting several engagements on the way to Habbaniya, the first column arrived to discover that a night attack by the base defenders had succeeded in driving the larger Iraqi force

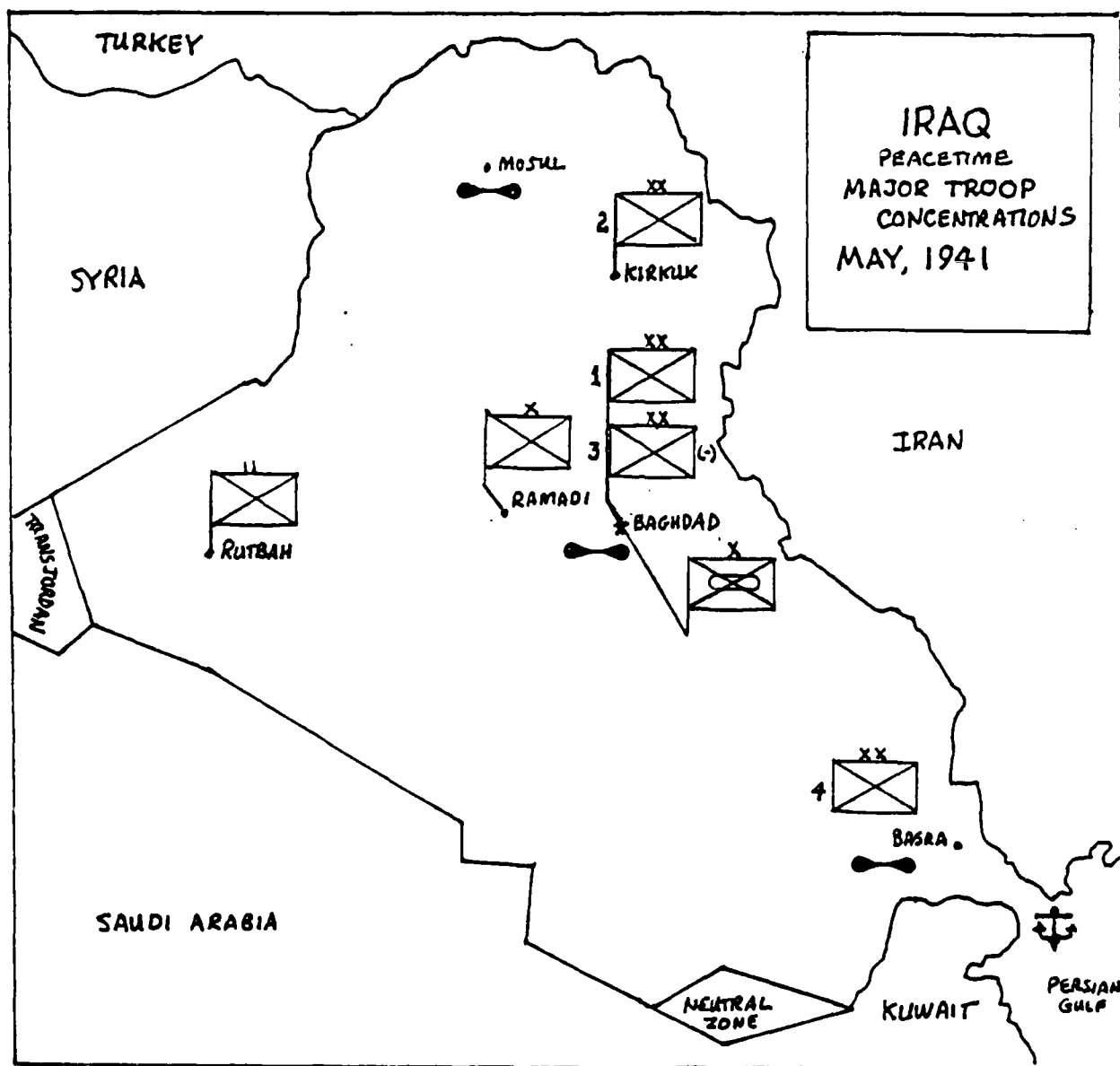


FIGURE 1

SOURCE: Christopher Buckley, The Second World War - Five Ventures

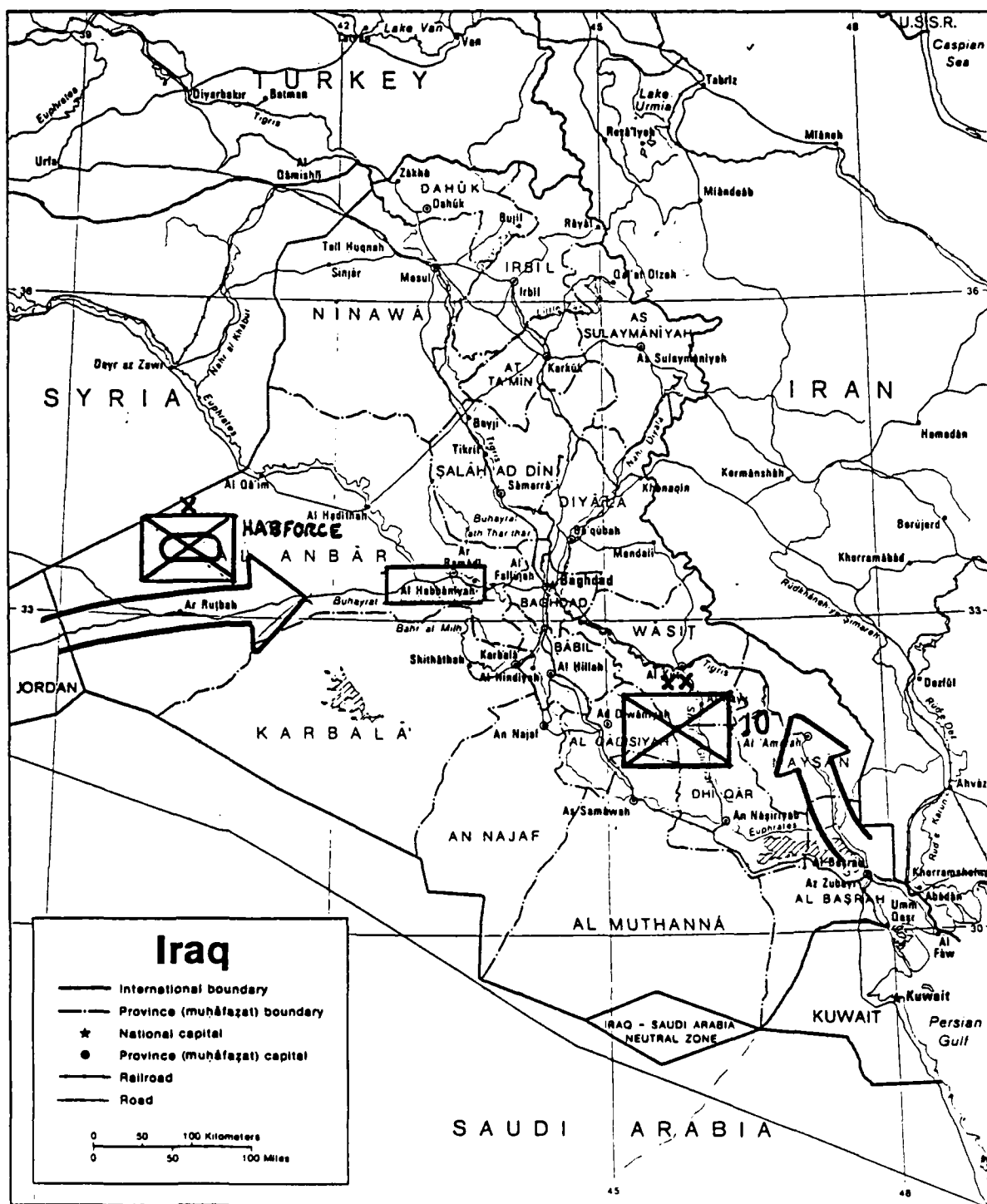


FIGURE 2

SOURCE: Simmon Rigge, War in the Outpost, page 50 - 57.

out of the high ground surrounding the base. With the relief of the base thereby effected, Churchill ordered the task force to proceed to Baghdad.

Meanwhile, the Indian division, which fixed the Iraqi 4th Division, preventing it from contributing to the siege of the RAF base, broke out of its Basra perimeter. Driving through Iraqi defenses, they headed toward Baghdad from the south. The Iraqi high command was thrown into confusion. Two weeks later, Iraqi resistance collapsed and Gaylani's pro-Axis government surrendered.²²

Although greatly outnumbering the British, and with German and Italian air support, the Iraqi Army was unable to contain the dual-pronged British attack. Through aggressive maneuver, combined arms, superior command and control, and most of all airpower, an Indian division and British brigade, both untested in combat, defeated the Iraqi Army. The Iraqi armed forces, supremely confident at the war's outset, had suffered a humiliating defeat. The "Arab-Prussia" had been crushed. Iraqi political and military leadership pledged that it would never happen again.

THE ARAB-ISRAELI WARS

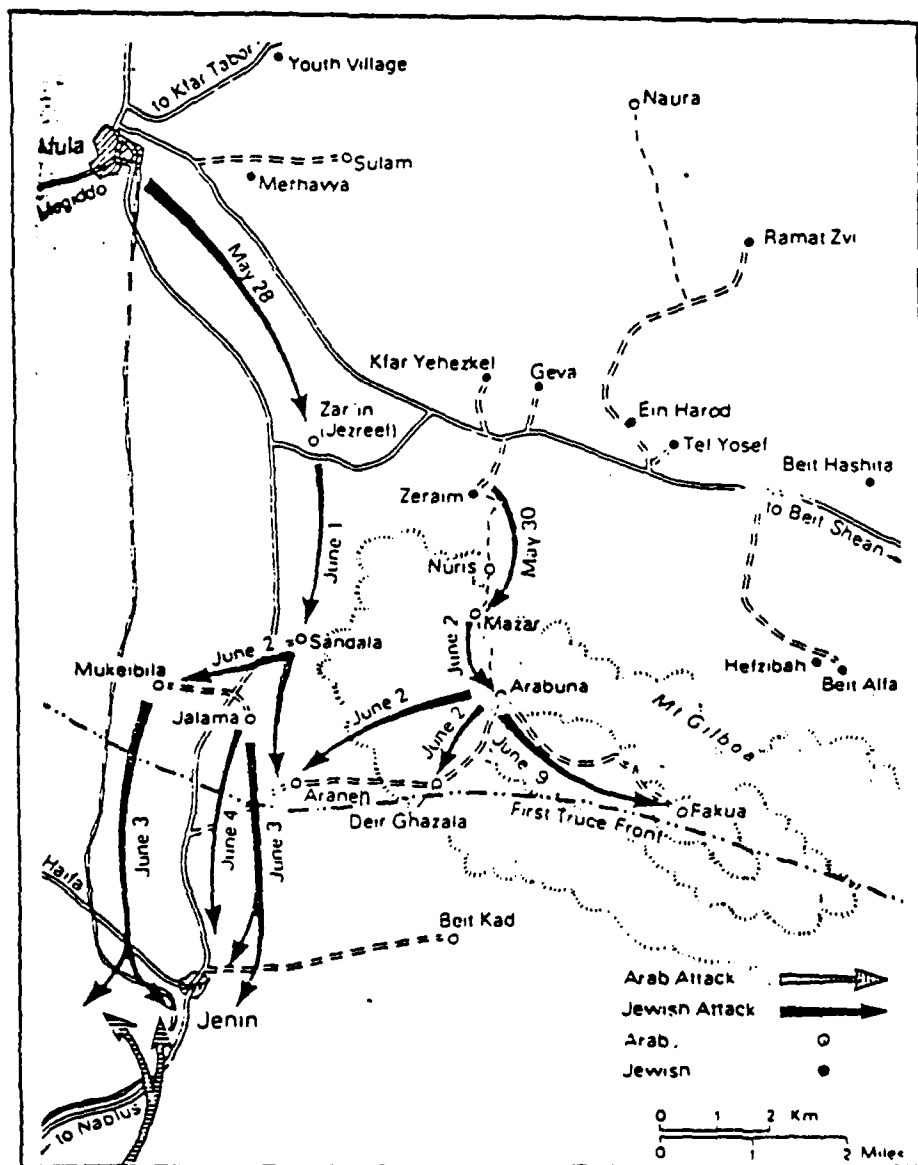
1948-1956-1967-1973

During the Arab-Israeli wars the Iraqis found themselves the tactical executors of their allies' operational plans. Regardless, they were given missions of both operational and strategic significance. Consequently, an overview of important

engagements offers insight into the army's overall operational capabilities during the period. More pertinent to the focus of this study, however, were the movements of Iraqi divisions from bases in Iraq to areas of operations in Jordan and Syria. Clearly operational in scope, these moves were important in terms of the command and control, protection, and logistics challenges they presented to the Iraqi General Staff.

Iraq contributed a division of two infantry brigades and an armored brigade, plus elements of its air force, to the Arab forces fighting in Israel's 1948 War of Independence. Moving into its West Bank assembly areas on 14 May, the Iraqi Expeditionary Force (IEF) was given the mission of crossing the Jordan River near the village of Gesher. Despite a week of heavy fighting the IEF was unable to bridge or ford the river. Under heavy pressure, the Iraqis withdrew to secure crossing sites established by the Jordanians.²³

Ten days later, the IEF was given the vital mission of conducting a division-level attack northwest of the city of Tulkarem. The objective of cutting the state of Israel in half by seizing the coastal city of Netanya was of great strategic significance. Attacking along two axes of advance, the relatively heavy Iraqi force was halted outside the city by a lightly equipped Israeli brigade (See Figure 3). The Iraqis retreated to the town of Jenin. Unable to hold the city against determined Israeli attacks, they abandoned it. The subsequent Israeli occupation of the city was made untenable by constant Iraqi air and artillery attack. After several hours



The Battles for the Approaches to Jenin , 28 May—9 June 1948

FIGURE 3

SOURCE: Chaim Herzog, Arab - Israeli Wars, page 57.

the Israelis withdrew from the town and controlled access to it from the surrounding high ground.²⁴

Jenin was the only major battle the Iraqi Army participated in during the 1948 war. The Israelis gave high marks to the Iraqi Air Force and its field artillery. They also rated the Iraqis as effective in the defense, but indifferent and inflexible in the conduct of offensive operations.²⁵

In the 1956 Suez War, the Iraqis sent a division to Jordan, but it arrived too late to see action. Nevertheless, a brigade remained in Jordan as the nucleus of a second IEF that would be reinforced in the event of another war.

As tension mounted in Spring 1967, the Iraqis promised Jordan an armored division. Two Hawker Hunter squadrons and six Ilyushin fighter bombers were also pledged. The squadrons were positioned near the Jordanian border at an Iraqi air base known as H-3. Despite being put on full combat alert, the Iraqi Air Force claimed "technical problems" when called upon to conduct counterstrikes on Israeli airfields the morning the war began.²⁶ Hours later, the Iraqis mounted a largely ineffective and half hearted strike on the Israeli airfield near Netanya. Returning from the attack, Iraqi aircraft were caught refueling on the ground and were destroyed. Though readily available, no additional Iraqi aircraft were committed to the war. Israeli airstrikes continued with impunity against H-3 and the nearby Al-Rutbah and Al-Wahlid airfields.

As a result of the Israeli success, the lead brigades of the Iraqi division moved without air cover across Jordan. To make matters worse their mile for mile progress was reported by Arab radio propaganda announcements. Targeted by the Israelis through their monitoring of the broadcasts, the brigades arrived at their east bank assembly areas near Jericho so heavily attrited that they could not be committed.²⁷

The Iraqi Army would, however, make its presence felt on the Golan Heights in the 1973 Yom Kippur War. This was Iraq's first exposure to high intensity operations. Surprised by the war, the Iraqis had to hastily patch up relations with Iran in order to pull their best formations off the Iranian border.

Undoubtedly, the greatest operational accomplishment in the history of the army until that time was the 300-400 mile movement to Syria of up to two armored divisions with over 700 tanks. This operational movement earned them the immediate attention and positive recognition of many Western military analysts.

The first division arrived less than a week after the outbreak of war. Additional Iraqi brigades continued to arrive throughout the conflict. Although closing dates of major subordinate units vary, what eventually arrived constituted an Iraqi corps. The contribution was substantial from the outset and included the 3d Armored Division, 6th Armored Division, a special forces brigade and three squadrons of MIG 21 fighters.²⁸

Unlike 1967, with improved air cover and air defense, the Israelis were unable to decisively delay the 1973 Iraqi movement. Regardless, the Iraqis once again experienced problems during the move in support, transportation, and command and control.²⁹ The division's conduct of a night attack, hours after their 12 October arrival, displayed unexpected flexibility.

The following week, the Iraqis conducted no less than five major division sized attacks on the southern sector of the Israeli held Saassaa Salient (See Figure 4). Each attack failed.³⁰ In fact, the Iraqis were attrited to the point of being combat ineffective. When called upon to participate in a final 19 October attack by combined Syrian and Jordanian forces, they were unable to do so. Although their presence on the Saassaa Salient provided the force necessary to prevent a further penetration towards Damascus (political conditions being the deciding factor), their overall performance on the battlefield left much to be desired.

Assessments of the Iraqi performance throughout the 1948-1973 period of Arab-Israeli wars are far from complimentary.³¹ It appears that the Jordanians especially held the Iraqis in low esteem. The Israelis rated them a distant fourth behind their other Arab adversaries. These assessments of the Iraqi Army and Air Force appear accurate. During the 1973 war, they conducted maneuver operations without coordination and failed to synchronize their air and artillery attacks. The Iraqis

also gained a reputation for artillery fratricide by inflicting numerous friendly fire casualties in their own sector as well as in the zones of units on their flanks. The Iraqis lost numerous aircraft to Syrian surface to air missiles due to inoperative or miscoded Identify Friend or Foe (IFF) and even engaged in dogfights over the battlefield...with other Arab aircraft.³² Most telling, however, was their slow, overcautious and half hearted attacks of which none were successful. In fact, their ground attacks were so predictable that the Israelis grew to expect them at 1000-1100 hours daily. Although not operationally significant, the overall performance of the Iraqi Army during the Arab-Israeli Wars reflected serious problems at all levels in planning, coordination, fire support, and combined arms maneuver.

Alarmed by their poor showing, the Ba'th Party called for a congress to overhaul the entire Iraqi military establishment.³³ Ambitious force expansion, modernization and training programs were undertaken. The Iraqis also sought greater assistance from Soviet advisors. Hoping that sheer quantity of material would offset the poor quality of their past performance, the Iraqis used oil revenues to rapidly expand their arsenal (See Figure 5). Significant among Iraqi purchases, and a bad omen for the future, were tanks, bridging, heavy equipment transporters, and other offensive related material.

Year	ManX103	Corps HQ	Armd Divs	INF/ MTN Divs	MECH/ MTR Divs	Rep Gd Bde/Div	SF Bde	Res
1973	102		1	4	1			?
1980	200	3	4	4	4	1/	2	250K?
1981	210	3	4	4	4	1/	3	250K?
1982	300	4	6	4	3	1/	3	?
1983	475	4	6	6	4	2/	3	?
1984	600	4	6	9	5	2/	3	?
1985	?	4	6	9	5	4/	6	?
1986	800	7	5	10	3	5/	6	?
1987	955	7	5	30	3	5/	6	?
1988	1035	7	7	39	*	/4	20/1 Mar**	?
1989	1000	7	7	42	*	6/	20+	850K

NOTES

This table displays the growth of the Iraqi ground forces although it portrays only a best estimate. They have a three brigade per division structure on paper, but, operationally, one division headquarters may control more brigades. The Republican Guard structure is even more flexible.

*The seven armored divisions figure represents a combination of armored and mechanized division equivalents. The decline in armored divisions from six to five in 1986 probably reflects a rearrangement of armored and mechanized brigades rather than the destruction of divisions although the Iraqis suffered enough casualties in the attempt to recapture Al Faw to raise that possibility.

**The Special Forces (SF) and Marine (Mar) brigades are actually believed to be under Republican Guard control which effectively raises the total Republican Guard structure to about 25 Bdes.

Figure 5

SOURCE: S. Pelletiere, K. J. Johnson, L. R. Rosenberger, Iraqi and U.S. Security in the Middle East, Page 16.

THE IRAN-IRAQ WAR

1980-1988

The Iran-Iraq War was the Iraqi armed forces' first exposure to the operational level of war as we define it. With this war's opening phase much criticized, military analysts should not have expected any better performance on behalf of the Iraqis than what was delivered. With the opposing forces in relative balance (See Figure 6), strategic surprise appeared to be the most decisive factor in early Iraqi successes. Despite surprise and overwhelming strength, Iraq's failure to exploit operational conditions precluded an even greater, perhaps decisive, victory being achieved.³⁴ Nevertheless, the greatest Iraqi accomplishment was the undertaking of an offensive on such a grand scale in the first place. This was specially remarkable for an army that had no past experience in operations of that magnitude.

In order to gain an understanding of the operational abilities of the Iraqis during the Gulf War, and how much they improved from its outset to its completion, four campaigns will be assessed. First, the invasion itself, and the conduct of selected follow-on operations from September to December 1980, will be looked at. These operations serve as examples of Iraq's early operational level offensive capabilities. An evaluation of initial defensive operations will follow. It will be conducted through a description of the 1981-82 defensive campaign. Karbala 5, the 1987 Iraqi defense of

Year	Military Manpower (1,000s)		Military Expenditure \$M		Arms Imports \$M		Military Spending as % of GDP		Military Spending as % of CGE		Arms Imports as % of Total	
	Iraq	Iran	Iraq	Iran	Iraq	Iran	Iraq	Iran	Iraq	Iran	Iraq	Iran
1973	105	285	1486	3112	625	525	25.5	8.3	57.7	30.2	69.9	15.4
1974	110	310	2453	6732	625	1000	21.6	11.8	45.1	29.0	26.3	18.4
1975	155	385	2390	9417	675	1200	16.9	14.3	29.0	31.9	28.8	11.6
1976	190	420	2882	11549	1000	2000	17.2	13.5	37.5	32.0	28.8	15.5
1977	140	350	3621	9928	1500	2500	18.7	11.3	42.1	25.1	38.4	17.0
1978	140	350	4006	12066	1600	2200	17.0	15.8	24.7	35.5	37.9	16.2
1979	212	415	5129	6045	2300	1600	14.9	6.2	24.9	19.1	31.8	16.4
1980	350	305	8629	6737	1900	400	21.7	7.3	NA	19.7	13.5	3.2
1981	400	440	11823	7403	3700	1000	48.2	7.8	NA	20.7	17.6	8.0
1982	450	470	12541	8499	4300	1500	49.7	8.2	NA	21.7	19.7	8.2
1983	500	470	11900	5520	5100	750	47.2	5.0	NA	14.9	42.3	4.1

FIGURE 6

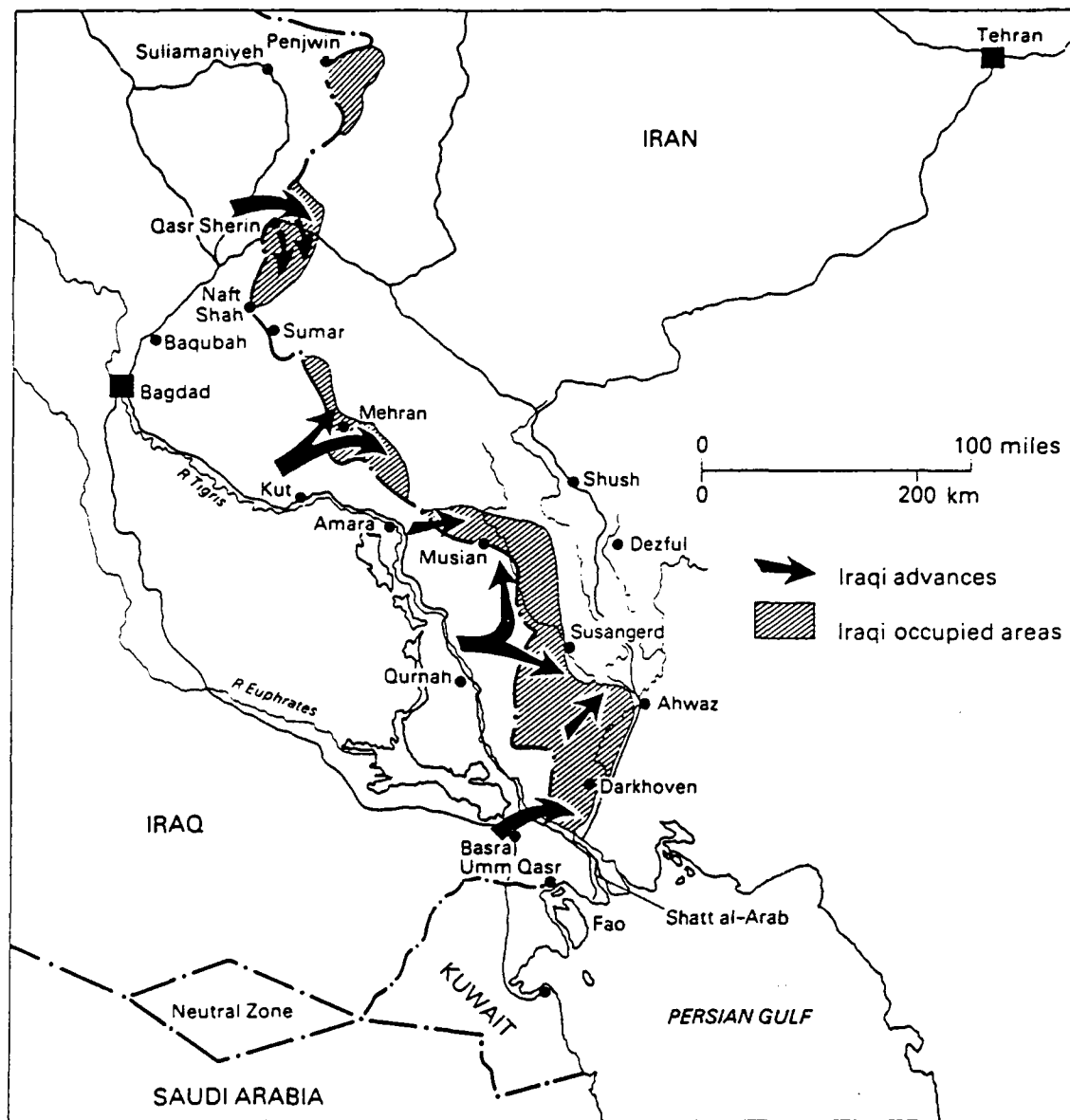
SOURCE: Anthony Cordesman, The Iran - Iraq War, Page 39.

Basra, and the final 1988 campaign of the war will then be studied. These two operations serve as examples of Iraqi defensive and offensive operational capabilities late in the war. Additionally, it is the closing "Tawakalna ala Allah" campaign that analysts mark the Iraqi war machine's coming of age.³⁵

FIRST CAMPAIGN - INVASION

Based in part on a 1941 British staff exercise taught at the Baghdad War College, Iraq's invasion of Iran began on 22 September 1980 with preemptive airstrikes on ten Iranian air bases.³⁶ The Iraqi Army crossed the border on three operational axes. Six divisions with over 70,000 soldiers and 2000 tanks were deployed along a 450 mile front. Some advances were up to 65 kilometers deep (See Figure 7).³⁷ The ability of the Iraqis to conduct an attack on such a large scale clearly reflected the professional and materiel improvements the armed forces had made since the end of the Yom Kippur War. Nevertheless, the invasion was less than a model performance.

The main effort was directed in the south by the Iraqi III Corps consisting of three armored and one mechanized infantry division. Its strategic objective was seizure of Iran's main oil refinery at Abadan and "liberation" of the Khuzistan Arab population. The primary operational objectives of the two pronged attack were the cities of Susangerd and Ahwaz and the east bank of the Karun River. On the central front, one



Iraqi Advances: September–December 1980

FIGURE 7

SOURCE: Edgar O'Ballance, The Gulf War, page 34.

mechanized division, and one mountain division attacked to capture the city of Mehran. In doing so, routes leading from the Zagros Mountains were blocked to prevent Iranian reinforcements from coming into the area of operations. In the north, a mechanized division moved to seize Qasr-e-Shirin to preclude an Iranian counteroffensive toward Baghdad.³⁸

Within a month, when it became clear that the attack had reached its culminating point, Saddam Hussein declared that all territorial aims had been met. With the exception of attacks on Khorramshahr and Abadan (the latter never taken), forward movement ceased. The Iraqis had seized 4,126 square miles of Iranian territory and were confident they could retain it.³⁹ Protected by an armor screen, the army went on the defensive. Official pronouncements to that effect were made by Hussein on 7 December. From that point, the strategic and operational initiative passed to the Iranians.

With the front stabilized, a year long "Sitzkrieg" followed. Both sides experienced moderate battlefield successes and failures. The Iranians expected the Iraqis to renew the offensive in early 1981 when Iran would have been hard pressed to defend against it. The failure of the Iraqis to do so gave the Iranians the much needed time to gear up for a counteroffensive. For example, at the beginning of the invasion the Iraqis enjoyed an overall force ratio of six to one.⁴⁰ By the end of 1980 the ratio was only two to one and rapidly diminishing. Once again, as in its previous wars, the

Iraqi Army failed to measure up to expectations. The multi-corps, three-front Iraqi invasion had been contained by only four understrength Iranian divisions. Iraqi predictions of a two to three week war and some US estimates that the war would last only days, never came to pass.

The Iraqi offensive failed for a number of strategic, operational and tactical reasons. Strategically, the plan was flawed on four counts.⁴¹ First, Iraq grossly misjudged popular sentiment among the Arabs living in the westernmost Iranian provinces seized by the Iraqis. Seen as invaders versus liberators, the Iraqis enjoyed little popular support. This made occupation more difficult than anticipated. Second, the fighting capabilities and morale of the Iranian Army and militia were sorely underrated. Third, the popularity of Ayatollah Khomeini and the control his regime exercised over the Iranian military were underestimated. Finally, the Iraqis' military means did not match their political ends of toppling the Ayatollah from power.

On paper the Iraqi Army appeared formidable. In practice, however, its lack of operational expertise and tactical skill were readily apparent. Operationally, the offensive was marred by excessively centralized command and control, poorly chosen objectives, faulty tailoring of forces, ineffective combined arms, and lack of joint coordination. Tactically, in the words of the Strategic Studies Institute report, Iraqi Power and US

Security, they were the same "Old Iraqis", with a performance in keeping with that displayed in the Golan in 1973.⁴²

IRAQI DEFENSIVE

SEPTEMBER 1981-JULY 1982

Even though the Iranian's first major offensive did not take place until January 1982, they experienced operational success against the Iraqis in their attack across the Kharkheh River in September 1981.⁴³ Validating their successful, albeit costly offensive tactics, the battle gave the Iranians the confidence to undertake larger operations three months later.

The objective of the September offensive was to break the siege of Abadan. With the exception of a narrow corridor in the southwest, the city was surrounded by an Iraqi corps. Through night infiltration, the Iranians moved two divisions on the flanks and rear of the Iraqis and attacked with total surprise. With the siege broken, the Iraqis withdrew, abandoning over 200 tanks and countless other pieces of equipment.⁴⁴

In the following months, using the same pattern of infantry heavy frontal attack preceded by heavy artillery bombardment and armor on the flanks, the Iranians took Bostan and large segments of the Susangerd Salient.⁴⁵ Four Iraqi attempts to retake Bostan failed. Despite Iraq's small scale

defensive successes on the northern front, the Iranian victories in the central and southern sectors during the closing months of 1981 paved the way for even larger offensives the following year. These operations recovered Iranian territory and set the stage for an Iranian invasion of Iraq.⁴⁶

Known as Operation Fatah, Iran launched its first major offensive in the war against the Iraqi IV Corps which consisted of eight divisions. Attacking in six different columns, the Iranians overwhelmed the Iraqi defenders. Within hours, numerous penetrations were made in the 50 mile long Iraqi line. The Iranian plan was to encircle the corps. Accordingly, Iranian units began to move along the flanks towards the Iraqi rear. The Iraqi reaction to the crisis was best expressed by analyst Edgar O'Ballance as, "rigid and constrained by binding orders from HQ IV Corps and the overriding ones from the High Command at Baghdad".⁴⁷ Despite reinforcements, by the fourth day of the offensive it was clear to the Iraqis that they were confronting a military disaster of the first order -- an operational defeat with great strategic implications. Regardless of this recognition, by the time orders were issued to withdraw on 29 March, the better part of the corps was surrounded with the loss of three divisions.

A month later on 30 April, a second major Iranian offensive called Operation Quds was launched. Its objective was the recapture of Khorramshahr. Operation Quds was more sophisticated than the operation of the previous month. It

involved an airborne attack into the Iraqi rear as well as division level river crossings.⁴⁸ Iraqi counterattacks supported by tanks, attack helicopters, and close air support failed. Fearing a second operational defeat through encirclement, Saddam Hussein ordered a general withdrawal and the establishment of a tighter defensive ring around the city. The redeployment was a costly one in terms of materiel as trucks and tanks alike were abandoned.⁴⁹

The Iranians then took a two week operational pause. This afforded the Iraqis the opportunity to dig in constructing what was called the "Wall of Persia".⁵⁰ The defensive fortification effort was to no avail, for when the Iranians resumed the attack, Iraqi cohesion collapsed and in 48 hours the city fell.

As a result of the fighting in the first six months of 1982, Saddam Hussein announced a withdrawal of all Iraqi forces in Iran.⁵¹ Through the remainder of the year, and well into the winter of 1982-83, the Iraqis built defensive fortifications on a level not seen since World War One. Meanwhile, the Iranians reconstituted and trained for an invasion of Iraq. The prolonged static defensive phase of the war was about to begin. This period of bloody deadlock would grow to characterize the entire nature of the war and would not be broken until the Iranians initiated the Karbala series of offensives three years later.

KARBALA-5

The February 1986 Iranian attempt to block Iraq's access to the Gulf by seizure of the Faw Peninsula, is looked upon as a turning point in the history of the war. The Iranian success in that battle proved how vulnerable the infamous multi-layered Iraqi defensive system was to an attack by forces equal in equipment and superior in numbers. Of greater importance, however, was that the Iraqi defeat resulted in major reorganization and reforms within the armed forces that ultimately enabled it to undertake a decisive strategic offensive in 1988.⁵² Regardless, the fall of the Faw Peninsula was not the last Iraqi defensive engagement of the war, for it would be severely tested again a year later.

The failure of the Iranian offensive Karbala-4 in December resulted in the Iraqi Army's ending the year on a high note. The Iranian defeat was attributed to Iraqi firepower and unusually effective counterattacks.⁵³ Nevertheless, it remained to be seen if Iraq's army really had improved to the point it could inflict a decisive operational defeat upon the Iranians.

On January 9, 1987, the Iranians struck west toward the major Iraqi city of Basra. The attack was supported by operations in both the central and northern sectors of the front. The 200,000 man, 1000 tank operation was significant in that it was far better planned, rehearsed, and executed than

previous Iranian offensives. The attack took place east of the city along a sixteen-mile line north of a flooded area known as Fish Lake. This man made lake was at the southern tip of a large moat that virtually surrounded the northeast quadrant of the city. A one-half-mile canal divided the area and served as a boundary between the Iraqi III and VII Corps. Covered by mines, sensors and barbed wire, the 120-square-mile water barrier formed a difficult operational obstacle. Less formidable, however, were the marshy areas along the Shat al-Arab waterway south of the lake. Assuming the Iranians could not work their way through this marshy area, even though they had displayed the ability to do so in the loss of the Faw peninsula, the Iraqi defenses there were thinly manned. The Iranians recognized this vulnerability and took full advantage of it.⁵⁴

Although warned of the attack, Iraq failed to pinpoint its direction, main effort, or timing. It appears that the Iraqis overrelied on American intelligence information.⁵⁵ When it was not forthcoming, other indicators were ignored. The failure of the US spy satellite to identify the Iranian buildup was later attributed to cloud cover. Regardless, within four hours of the attack, two of the five Iraqi defensive belts protecting Basra were penetrated.

The traditional armor and air superiority of the Iraqis were neutralized by Iranian TOW-equipped Cobra helicopters, tanks, and Hawk air defense missiles. Against a force of four

Iraqi divisions, supported by five brigades of Republican Guards, the Iranians were able to establish two bridgeheads, one across the border in the north and the other on the eastern side of the Shatt al-Arab, 12 miles from Basra. Every Iraqi counterattack failed. By 26 February, the fourth defensive belt was penetrated. The Iraqi's political and military leadership were convinced that the Iranian's long-threatened "final offensive" was underway. Instead, as a result of heavy losses, the Iranians declared a victory and brought the offensive to a close without taking the city.⁵⁶

It appeared that despite attempts at improvement, the Iraqis were still plagued by recurring problems in command and control, fire support, use of reserves, and counterattacks.⁵⁷ Exhausted in the south, Iranian offensives continued elsewhere until April with the completion of Karbala-9 on the northern front. Just as it did in 1983, the ground war came to a halt and a deadlock ensued. Meanwhile, unlike that period of stalemate, the air, missile, and tanker war intensified.⁵⁸

THE FINAL OFFENSIVES

APRIL-AUGUST 1988

The final Iraqi offenses of the war played a decisive role in bringing about an armistice. Rumors of impending chemical attack and the firing of over 120 SCUD missiles into Tehran also had an impact.⁵⁹ In fact, Iraqi air and missile attacks

had a devastating effect on Iranian morale on both the home and fighting fronts. The military results of the attacks could be seen in less volunteers for the militia, increased no-shows for conscription, and a rise in the number of deserters. In terms of a severely weakened Iranian national will the time was ideal for an Iraqi offensive.

Operation Tawakalna ala-Allah, the closing Iraqi offensive campaign of the war, consisted of five major battles (See Figure 8) conducted along the entire front. The largest and most decisive engagement took place on the Faw Peninsula in April. Significant, however, is that none of the battles of this campaign were simultaneous.

The attack on Faw involved over 200,000 Iraqis against a force of some 15,000 dispirited and poorly equipped Iranians, the majority of whom were old men or young Pasadran militia-men.⁶⁰ The two-pronged Iraqi attack involving the VII Corps in the north and the greatly expanded Republican Guard in the south (See Figure 9) took place along a 16 mile front with amphibious operations in the rear.

In order to achieve greater surprise and effect, the attack began on a religious holiday. The operation was supported by a deception plan involving the movement of units throughout Iraq. These movements were designed to create the impression of major formations being shipped north. In further support of the plan, a highly publicized visit was conducted by

FIGURE 8

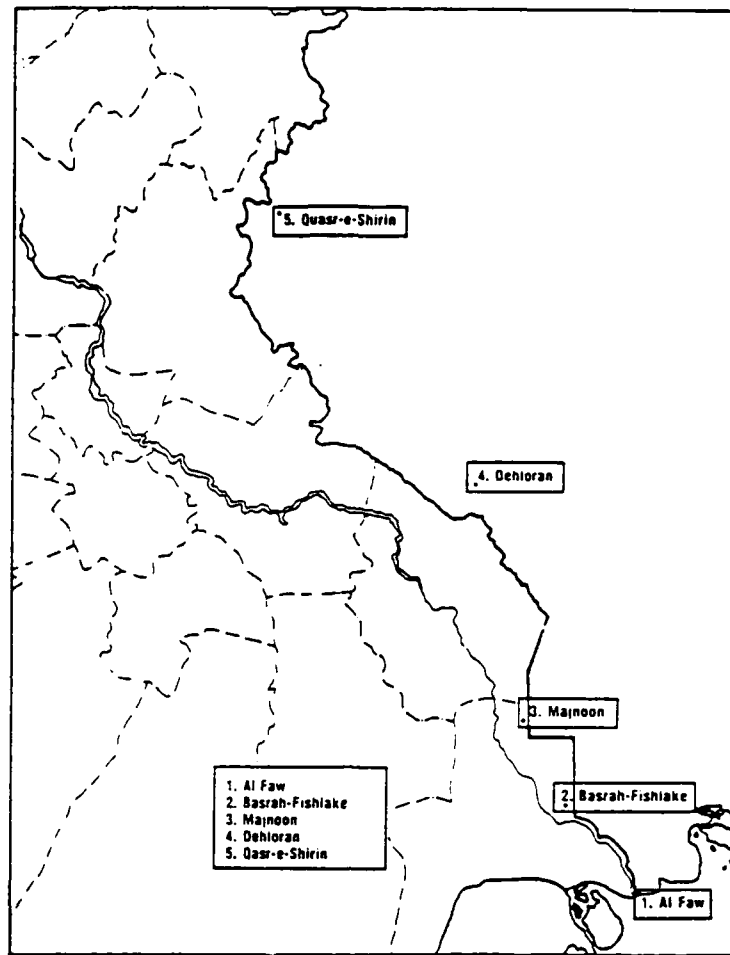
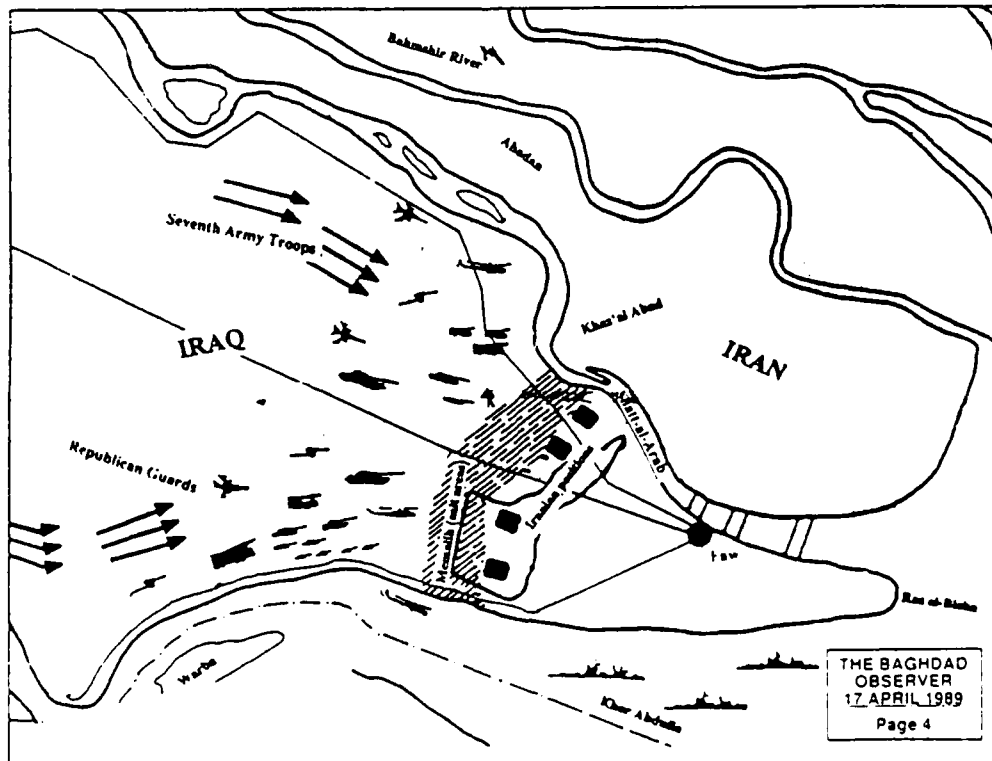


FIGURE 9



SOURCE: S. Pelletiere, K. J. Johnson, L. R. Rosenberger, Iraqi and U. S. Security in the Middle East, page 26-27.

President Hussein to the northern sector of the front. It was customary before beginning an offensive that Hussein would visit the troops to boost their spirits. The Iranians mistook both the troop movements and Hussein's visit as meaning a major offensive would take place in the northern sector. The Iraqis also appeared to have maintained effective operations security.⁶¹

Contrary to previous practice, the offensive began with a short, one-hour artillery preparation. The barrage caught the Iranians off guard and inflicted heavy casualties because they were concentrated for religious services. Virtually every asset the Iraqis could muster was thrown into the attack, including "swarms" of attack helicopters and close support aircraft. Non-persistent nerve gas was used extensively on Iranian strong points. In order to reduce casualties a single pontoon bridge across the Shatt al-Arab was left open to allow the Iranians an escape. Planned to last several days, the battle was over in only 36 hours. A complete and total victory was accurately claimed by the Iraqis.⁶²

As mentioned earlier, the next four operations took place sequentially, at about one-month intervals, beginning at Fish Lake on 25 May and extending north with an August attack in the Qasr-E-Shrin sector (after the cease-fire). During these operations, the Iraqis enjoyed overwhelming advantages in morale, men and materiel, often outnumbering the Iranians 50 to 1. At Fish Lake, for example, they employed intense

artillery, attack helicopters, chemical weapons, and thousands of tanks.⁶³ The Fish Lake battle was also supported by operational deception designed to convince the Iranians that Iraq was preparing to retake Majnoon. Sweeping maneuvers and deep penetrations characterized the closing battles on the central front. Virtually all the engagements involved the Republican Guard, often supported by the III, IV, or VII Corps. Many of the operations were commanded by one of Iraq's best field commanders, General Maher Rashid.⁶⁴

There is no doubt this final campaign of the Gulf War marked a distinct improvement in Iraqi operations. Although the April-August 1988 battles demonstrated increased Iraqi operational flexibility, it must be emphasized that they were well-rehearsed, set piece, sequential engagements involving virtually every bit of combat power the army could muster.⁶⁵ They also involved elite troops directed toward an outnumbered, under-equipped and demoralized force of light infantrymen.

When measured against the Operational Operating Systems, the Tawakalna ala-Allah campaign showed great improvements in Iraq's ability to conduct large scale joint operations involving corps and army-sized formations. Iraqi skill in operational movement was evident in the rapid concentration of forces throughout the campaign.⁶⁶ Coordinated deep attacks with airborne, air assault, and amphibious units displayed a degree of operational expertise that up until that time appeared almost non-existent. Support of these operations also

reflected improvements in the areas of operational logistics and command and control. A combination of combined arms and military decision making free from political influence clearly made a difference.⁶⁷

Strategic bombing and missile attacks during this period were used to great political, economic, and psychological advantage. With improved accuracy, missiles could have also been employed to great operational effect. They appeared, however, to be too expensive a weapon for operational fires. Air-ground operations showed improvement and some operational interdiction efforts appear to have been undertaken, although with only marginal success. Operational deception was conducted and involved considerable amounts of transportation, supply, and ammunition stocks to make it credible.⁶⁸ Improved OPSEC and the use of secure communications at operational headquarters were also introduced. Improved photographic reconnaissance was apparent and the reporting of intelligence to higher level headquarters was streamlined.⁶⁹

The fact remains, however, that the battles of the 1988 campaign were fought separately, linked in neither time, space, nor operational objective. In that regard, it can be argued that the Iraqis have yet to exercise the operational art as we understand it. Some analysts claim that these "campaigns" were simply a loosely connected series of tactical engagements of monumental proportion. It also appears that they were conducted with no operational aim other than bringing the Iranians

to the negotiating table through attrition. Nevertheless, the leading question for today's military planner is whether or not these last operations of the Iran-Iraq war are truly indicative of the Iraqi Army's operational capabilities. How these final operations fit when measured against the army's overall performance, both past and present, also demands an answer.

OPERATING SYSTEMS ASSESSMENT

Two schools of thought exist as to the true operational capabilities of the Iraqi armed forces. One school dismisses the Iraqis as overrated, primarily due to the nature and capabilities of their latest adversaries, the Iranians and Kuwaitis.⁷⁰ This school argues that, although numerous and dangerous, the Iraqis are no match for a well-armed, equipped and trained Western army. They assert that despite the 1988 performance, the historical record shows that the Iraqis have always looked better on paper than in battle. The second school, however, is convinced the Iraqis have achieved their ambition of becoming an Arab Prussia. These analysts rate the Iraqi Army as one of the best in the world with some of their formations equal to any American force. In fact, one journalist claims the Iraqis are the most "lethal force the American military has ever faced".⁷¹ It is likely that the reality lies somewhere in between these two assessments. An overall evaluation of the Iraqis, using the TRADOC OOSs, may

aid in developing an accurate determination of Iraq's present operational capabilities.

The first Operational Operating System, operational movement, clearly appears to be an Iraqi strength. Operational maneuver, on the other hand does not. During the Arab-Israeli Wars, the Iraqis moved divisions (and later corps-sized elements) on 300-400 mile overland deployments three times with increasing effectiveness on each successive occasion. The speed and efficiency of the 1973 move shocked the Israelis and made a strategic difference in the outcome of the war on the Golan.⁷² The relative ease of its Kuwait invasion also supports this assessment. However, the 1973 move was not driven by a well coordinated joint/combined plan, nor was it tied to what was going on in the war at the time. It was instead, for the Arab forces, a fortunate coincidence.⁷³ It is also interesting to note that three of the four moves were made with Iraqi air superiority or parity. The single move in 1967 without air cover proved to be a disaster. Similarly, with allied air superiority, operational movements from one point to another (Syrian border to Kuwait for example) would likely produce the same result.

Operational maneuver, as stated earlier is a weakness. Rapid reinforcement, concentration and operational withdrawals have generally been poorly executed. Operational counterattacks have for the most part been ineffective, poorly timed, and conducted with little flair or imagination.

Exceptions to their relatively poor use of maneuver do exist, however, and the performance of Iraqi armor in the only two true tank battles of the Gulf War (at Dezful in September 1980 and a year later at Susangerd) is a case in point. During these engagements, the Iraqis did to the Iranians what the Israelis did to them in 1973, using division-sized engagement areas ringed with tanks and antitank guided missiles. The Iraqis' demonstrated ability to conduct deep operations is also questionable and is limited to two of the closing battles of the Iran-Iraq war against an already defeated and exhausted enemy postured for an armistice.⁷⁴

Use of other means of maneuver, including amphibious, airborne or heliborne was isolated, poorly orchestrated and largely ineffective. Problems still appear to exist in these areas in that the initial Iraqi amphibious assault on Kuwait was conducted without air cover, and despite its surprise and strength, was initially repulsed.⁷⁵

As mobility and countermobility relate to operational movement and maneuver, another clear strength has been Iraqi engineer operations. Their field fortifications capabilities are reknowned. The Fish Lake defenses, for example, were significant operational obstacles. Regardless, it is notable that even the best Iraqi fortifications were flanked, or breached, by the Iranians in 1982 and again in 1986. These

Iranian successes, albeit costly, occurred when the Iranians were equally armed and equipped as the Iraqi defenders.

Hasty construction of entire road nets across deserts and pontoon bridges across waterways, often with significant tidal fluctuations, is noteworthy.⁷⁶ These capabilities have a positive impact on the Iraqi's ability to conduct both operational movements and maneuver. Once again, however, these complex operations were done for the most part without enemy interference, especially air attack or long range artillery. They were also thoroughly rehearsed and part of a detailed plan. How rapidly bridges and roads could be built as a result of unforeseen operational opportunities is unknown, but it would be out of character to expect a decisive reaction.

In summary, the Iraqis' ability to move large formations rapidly under pressure of attack and in response to multi-directional threats under different operational conditions and times is questionable. There have been operational successes, however, as in the Iraqis' rapid response to an Iranian offensive in March 1985. Nevertheless, the overall record supports the argument that the Iraqis would not be able to successfully execute a large scale decisive operational maneuver against a force equipped with the intelligence and attack assets able to counter it.⁷⁷

There is also little evidence that a comprehensive air supremacy or interdiction campaign has ever been successful

(the 1986 Faw interdiction of Iranian reinforcements being an exception).⁷⁸ Iraq's attempt to mount an Israeli style preemptive air strike on Iran's air bases in 1980, or more recently in Kuwait, failed primarily due to poor planning and haphazard execution. In fact, it is a commonly held opinion that Iraqi air power was not employed to any operational effect throughout the entire war with Iran.⁷⁹ Overall, efficiency in air ground coordination was sporadic. It is doubtful the Iraqis could mount and sustain an effective air campaign especially against a force equipped and trained to oppose and protect itself from the air threat.

There was no serious Iraqi attempt during the Gulf War to attack the Iranian Navy with a joint air and sea strike.⁸⁰ Even though outclassed by the Iranian Navy, a well orchestrated surprise attack would have precluded Iraq's surrendering control of the northern portion of the Persian Gulf and its loss of the Shatt al-Arab waterway.

Surface to surface missiles had greater political and moral effect than they had military. Their accuracy was also dubious. Additionally, there is no evidence of SCUDs being employed operationally even though FROG-7s were used with some effect against Iranian assembly areas early in the war.⁸¹ When pitted against the Patriot, the overall operational effectiveness of SCUDs is negligible (problems in targeting and the weapons notorious reputation for being inaccurate further supports this assertion).⁸² The possession of SS-12

Scaleboards, however, would greatly improve the range and accuracy of Iraqi operational fires.

Operational use of planned conventional artillery and rockets against large fixed area targets was effective, but the fire support system was slow to react to targets of opportunity.⁸³ Although the Iraqis possess cannon systems capable of up to 57 kilometers range, and shorter range cluster bomb multiple rocket launchers, there is little evidence of these weapons being used to great effect as deep operational fires systems.

Counterfire was generally unresponsive and inaccurate.⁸⁴ Even though the Iraqis displayed the ability to pinpoint launch sites of Iranian ballistic missiles, attacks on firing sites had mixed results. Massing outside corps boundaries, or "switched fire", took excessive time and was seldom effectively executed until late in the Gulf War. There is also no evidence that counterfire or suppression of enemy air defense (SEAD) fire plans could be executed to the point of their having an operational impact. Regardless of clear-cut shortfalls in speed and accuracy of Iraqi operational fire support and fire support coordination, when Iraqi artillery was successful against infantry it was devastating.

In summary, if measured by sheer mass, Iraqi fire support at the tactical level has been effective against fixed targets. Operational fires, however, appear non-existent. What evidence

there is of operational fires indicates that they failed to have meaningful impact on either the tactical or strategic aim.⁸⁵

The Iraqis have experienced difficulty in the area of operational protection, especially in air defense.⁸⁶ Stock MIG-25s are poorly equipped as interceptors, and IL-76 "mini-AWACS" aircraft are severely limited in range and look-down capability. Consequently, the Iraqi's "forward fighter screen" doctrine has proven unsuccessful. Iraqi export model MIG-29s represent a significant counter air threat, but their effectiveness is degraded by inexperienced pilots and the absence of "black boxes".⁸⁷

Soviet-made surface operational and strategic air defense systems are poorly netted and the Iraqis have frequently expressed their dissatisfaction with them. As late as 1988 the Iraqis were unable to keep SAM 2/3 systems operational due to maintenance demands. In fact, throughout the Gulf War, whenever the Iranians could muster the air assets to attack the Iraqis, the Iraqi air defense system was usually ineffective in preventing it.⁸⁸

Tactically, they are better off with numerous up to date air defense missile systems, both American and European. They are also skilled in small arms "curtain fire" and the use of light anti-aircraft guns and shoulder fired missiles like the Soviet Grail or American Redeye/Stinger.⁸⁹ Nevertheless, they

lack the training to cope with a large scale operational air attack and have no practical experience in dealing with one. Conversely, with questionable electronic countermeasures (ECM) capabilities their ability to conduct widespread attacks against allied operational air defense systems also appears negligible.²⁰ Considering American airpower, operational protection is clearly the Iraqi's greatest single weakness and principle vulnerability.

Much is said about how skilled the Iraqis are at deception. Regardless, there is little proof of it at the operational level other than the two 1988 operations described in this paper. Strategically, no doubt, they are masters of the bluff and lie, but operationally, other than feints and misinformation, they have had significant, almost chronic, problems concealing their intentions from their enemies. They would be especially vulnerable against an adversary equipped with sophisticated reconnaissance and electronic intelligence gathering systems.

The Iraqis have made significant improvements in operations and communications security in recent years. Nevertheless, experts feel they remain vulnerable in these areas.²¹ Analysts also believe that recent strict radio telephone procedures, and limited transmissions, may be as much a function of reducing wear and tear on equipment as they are COMSEC considerations. Even so, wire versus radio appears to be the preferred means of communication.

With more fixed defensive experience than offensive, the Iraqis make wide use of tactical telephone equipment and are accustomed to being "wired in". Higher headquarters make extensive use of commercial telephone systems and directional microwave communications. It is, however, unclear at what level these Iraqi communications systems are secure. It is assumed that automatic FM encryption is available only at corps level, or in the divisions of the Republican Guard.⁹² Despite these technical improvements, the Iraqis have had almost chronic command and control problems. It appears that their command systems are simply inadequate to the task of controlling widespread, rapidly developing operational situations.

In addition to technical problems with command and control, the Iraqis have also experienced difficulty in synchronization. Plagued by poor operational planning and coordination in the Arab-Israeli Wars, they missed numerous tactical and operational opportunities and delayed major joint/combined Arab attacks. Despite improvement and experience, the pattern repeated itself early in the Gulf War and persisted until the last year of the conflict.⁹³

It also appears that in order for major operations to be successful, they must be conducted sequentially...and always by an elite offensive force. Additionally, it appears that many past operations had to be heavily rehearsed, advised by Soviet

or Jordanian experts, and closely supervised. The failure of operations undertaken without these measures, including operational counterattacks and withdrawals, argues convincingly that successful operations are at risk without such measures.

Although there is evidence that Saddam Hussein reduced his control over the army as early as 1982, most analysts agree that he closely controlled operations until the 1986 Faw defeat.⁹⁴ He supposedly relinquished authority as a vote of confidence in his officers. Other analysts argue instead that he wanted to distance himself from what he saw as eventual defeat.⁹⁵ In a high stakes game of national survival, Hussein may again choose to get involved in operational decision making. This could adversely affect command and control as it did in the early phases of the Gulf War. Recent reports indicate that Hussein has indeed been taking a more active role.⁹⁶

Regardless of who controls operations, Iraqi military history is replete with campaigns and battles with poorly selected operational objectives, slow decision making, improper tailoring of forces, lack of combined arms, and most of all, inflexible command and control. It can be argued that the success of the closing campaigns of the Gulf War were as much exceptions to this pattern as they were a reflection of overwhelming Iraqi materiel superiority. Despite the 1988 Iraqi performance many analysts feel that high level command is still operationally inept and inflexible in controlling joint

operations.⁹⁷ They rate overall command, control communications, and intelligence (C3I) a distinct weakness.

Because operational intelligence is closely linked with strategic intelligence, a weakness at one level is likely to influence the other. Iraq's record of collecting, processing and preparing sound intelligence to make vital operational and strategic decisions is not good.⁹⁸ This weakness may be a function of the narrow political and diplomatic experience of their national leadership, as well as problems in coordinating information provided by several competing intelligence organizations. Intelligence failures at the outset of the Iran-Iraq War are well documented and failure to anticipate the world reaction to the Kuwait invasion reinforce this assessment. In fact, strategic blunders extend back as far as 1941 when the Iraqis misjudged the British reaction to the termination of their basing rights.

As previously stated, the Iraqis have also had distinct problems in obtaining and evaluating operational intelligence. They lack significant numbers of sophisticated technological intelligence systems and were highly dependent on US and Soviet strategic systems during the war with Iran. Simply stated, there appear to be serious gaps in Iraq's intelligence gathering system. Poor use of signal intelligence, little use of electronic intelligence, and photo reconnaissance limited to fair weather daytime operations, severely restrict operational

intelligence gathering. Information is generally processed too slowly and is often misinterpreted.⁹⁹

Operational and tactical reconnaissance also seem to be weaknesses. The Israelis and Iranians were both able to screen their operational intentions, often resulting in the achievement of decisive surprise as on the Golan in 1973 and in Karbala-5 in 1986. Intelligence integration and targeting is also a problem area. Attacks on mobile facilities and formations have been largely ineffective due to processing delays. Nevertheless, there are strengths in other areas of operational intelligence including analyzing terrain, identifying their own vulnerabilities and recognizing operationally situational hazards.

Iraqi commanders have generally been slow to react or respond to intelligence. There appear to be two reasons for this failure.¹⁰⁰ One is the professional incompetence of politically appointed commanders which are fewer in number than ever before. Second, and more important, is an unwillingness to be the bearer of bad news to the next level of command, let alone to President Hussein. As a result, operational decisions have been made late or avoided altogether. This appears to be a traditional problem as evidenced by the reaction to British attacks in May 1941, Israeli operations in 1973, and more recently, the abortive operational withdrawal from Bostan during the Gulf War. In summary, the Iraqis appear incapable

of establishing a strategically and tactically linked operational intelligence plan.

Although experiencing difficulties early in the war against Iran, operational support can be rated a distinct strength. Well respected for their performance in this area relative to other "Third World" armies, the Iraqis have seldom had to curtail major operations as a result of logistics difficulties. Using a Soviet style "supply system", they are highly skilled in supporting operations over great distances and have provided support through forward located depots spread throughout large areas of operations.¹⁰¹ Their use of skip echelon logistics facilitate both tactical and operational flexibility, and the existence of war reserve stocks and logistics clusters reflect positive lessons learned in the area of operational level force sustainment..

Recent media reports describing Iraqi soldiers going without food and water indicate problems exist in providing the fundamentals required for survival.¹⁰² However, they may just as well indicate austere rationing and a higher short term priority being given to ammunition and field fortification material.

Assertions in recent news magazines that maintenance will be adversely affected by the blockade overlook the fact that Iraq fought for some time in the Gulf War under a Soviet arms embargo. As a result of that experience, they obtained large

stockpiles of material after it was lifted and replenished stocks at the end of the war. The Iraqis also developed their own war industries, principally small arms and limited artillery ammunition facilities.¹⁰³

With generous increases in aid from Arab allies, the Iraqis have been more prone to buy new equipment rather than maintain old. This does not mean that they are necessarily "repair parts" vulnerable, for their reputation for innovative maintenance is legendary. Nevertheless, the great diversification of sophisticated equipment may well be the Iraqi's operational logistics "Achilles Heel". The maintenance demands of modern systems, especially those serviced by contractors who may have left the country, may go unanswered. As a result, key air defense, intelligence and command and control systems will be severely degraded if not totally crippled.¹⁰⁴

CONCLUSIONS

This analysis is by no means comprehensive. The Iraqi armed forces' performance against the Kurds, for example, has not been addressed, because of its irrelevance to the crisis at hand. This analysis is also somewhat speculative, for no one can be sure how the Iraqis will perform in operations against a well trained and equipped Western army. However, one assertion this study does support is that despite their being battle wise, tactically experienced and well equipped, the Iraqis are not operationally adept. Anthony Cordesman, a leading expert

on the Iraqi Army, described Iraqi operational capabilities in the Gulf War as follows:

Neither Iran nor Iraq began the conflict with any real mastery of the operational art and neither side developed a consistent capability to carry out combined-arms operations effectively, although Iraq made major improvements in 1987 and 1988.¹⁰⁵

Nevertheless, little doubt exists that the armed forces of Iraq represent the greatest active challenge to American arms since the Korean War. Recent studies of the final campaign in the Iran-Iraq War praise their capabilities. They are indeed a credible enemy, not to be underestimated, especially in the defense. However, as this study shows, the Iraqis have several operational weaknesses that can be exploited.

Simply stated, fixated on positional defense, with the Republican Guard as their only operational offensive force (their center of gravity, so to speak), the Iraqi Army is extremely vulnerable to a combined arms, joint, maneuver-based operational attack. They are equally vulnerable to deception.

In terms of specific OOS vulnerabilities, operational protection is one of the Iraqi's greatest weaknesses. It should be taken advantage of by concentrated air attack. In the words of political analyst Tom Marks, "Kuwait will not be liberated by slugging through that oil-rich chunk of land".¹⁰⁶ His point is that any ground offensive operation should be preceded by an intensive air war similar in scope to that conducted prior to Normandy.

This extended air battle, after neutralizing the Iraqi Air Force should attack military industrial targets, supply points, communications centers, naval and port facilities, operational assembly areas/firing platforms (SS-12s a priority) and command centers. A comprehensive interdiction effort would disrupt resupply and reinforcement of fixed positions. It would also break up Republican Guard counterattacks before they pose a serious operational threat. There are distinct political aspects of these military vulnerabilities as well.

Throughout the Gulf War, Saddam Hussein was preoccupied with the political implications of heavy casualties and morale on the home front. Today, he is faced with the loss of his greatest possessions, his army, his industrial infrastructure, and his political survival. Threatening these decisive points through an escalating "air campaign" may drive him to a withdrawal from Kuwait avoiding a ground war altogether.

Regardless, if the current situation leads to war of any kind it will be costly. In addition, its long-term strategic political costs to US interests in the Arab World may be greater than the short-term materiel costs of victory. Unfortunately, as with any conflict, war in the Persian Gulf will not be worth the human costs on either side. In closing, it is hoped that a first-hand assessment of Iraqi operational capabilities can be avoided rendering the contents of this study purely academic.

1. Paul P. J. Hemphill, "The Formation of the Iraqi Army, 1921 - 1933", The Integration of Modern Iraq, ed. Abbas Kelidar. (London: Croomhield LTD, 1979), p. 101.
2. John S. Wagner, "Iraq", Fighting Armies Antagonist in the Middle East a Combat Assessment (Westport, CT: Greenwood Press, 1983) p. 71.
3. Edgar O'Ballance, The Gulf War, (London: Brassey's Defense Publishers, 1988) p. 30.
4. FM 100-5, Operations (Washington, D. C.: May 1986) p. 10.
5. TRADOC PAMPHLET 11-9, Blueprint of the Battlefield, (Ft. Monroe, VA: April 1990) p. 2.
6. Ibid, p. 16.
7. Ibid, p. 12.
8. Ibid, p. 12.
9. Ibid, p. 13.
10. Ibid, p. 14.
11. Ibid. p. 11.
12. Ibid, p. 15.
13. Hemphill, p. 96.
14. Ibid, p. 105.
15. Ibid, p. 107.
16. Geofrery Warner, Iraq and Syria 1941, (Newark, N. J.: Associated University Presses, Inc., 1974) p. 14.
17. Wagner, p. 64.
18. Warner, p. 61.
19. Christopher Buckley, The Second World War, Five Ventures, (London: Her Majesty's Stationery Office, 1954) p. 8.
20. Ibid, p. 7.
21. John Connel, Wavell: Scholar and Soldier, (New York: Harcourt, Brace and World, 1964) p. 438-440.

22. Simon Rigge, War in the Outposts, ed. Henry Grunwald, (Alexandria VA: Time-Life Books, 1980) p. 56.
23. Chaim Herzog, The Arab-Israeli Wars (New York: Random House, 1984), p. 49.
24. Ibid, p. 58.
25. Ibid, p. 58, 375.
26. Samir A. Mutani, Jordan in the Six Day War (Cambridge: Cambridge University Press, 1987), p. 127.
27. Ibid, p. 128.
28. Frank Akar, October 1973, The Arab Israeli War (Hamden, CT: Archon Books, 1985), p. 165.
29. Anthony H. Cordesman and Abraham R. Wagner, The Lessons of Modern War Volume II: The Iran-Iraq War, (London: Mansell Publishing, LTD, 1990), p. 68.
30. Herzog, p. 305.
31. Ibid, p. 375.
32. Ibid, p. 303.
33. Wagner, p. 68.
34. Cordesman and Wagner, p. 89.
35. Stephen C. Pelletiere, Douglas V. Johnson II, Leif Rosenberger, Iraqi Power and U.S. Security in the Middle East (Carlisle Bks, PA: Strategic Studies Institute, 1990) p. IX.
36. O'Ballance, p. 48.
37. Wagner, p. 68.
38. O'Ballance, p. 32-37.
39. Ibid, p. 42.
40. Ibid, p. 49.
41. Ibid, p. 47.
42. Pelletiere, Johnson II, and Rosenberger, p. 4.
43. O'Ballance, p. 66-67.
44. Ibid, p. 67.

45. Cordesman and Wagner, p. 124.
46. Ibid, p. 127.
47. O'Ballance, p. 80.
48. Ibid, p. 83.
49. Cordesman and Wagner, p. 135-140.
50. O'Ballance, p. 85.
51. Ibid, p. 86.
52. Pelletiere, Johnson II and Rosenberger, p. 14.
53. Anthony H. Cordesman, The Iran - Iraq War and Western Security 1984-87, (London: Janes Publishing, Inc. 1987) p. 123-125.
54. Ibid, p. 126.
55. Ibid, p. 38, 117.
56. Cordesman and Wagner, p. 247-254.
57. Ibid, p. 262.
58. Ibid, p. 271.
59. Pelletiere, Johnson, and Rosenberger, p. 23.
60. Ibid, p. 28.
61. Cordesman and Wagner, p. 373.
62. Ibid, p. 374-375.
63. Pelletiere, Johnson and Rosenberger, p. 29.
64. Aaron Danis, "A Military Analysis of Iraqi Army Operations", Armor Magazine, (Nov. - Dec. 1990), p. 76.
65. Cordesman and Wagner, p. 355, 373.
66. Danis, p. 16.
67. Cordesman and Wagner, p. 413.
68. Ibid, p. 381.
69. Ibid, p. 356.

70. Nick Adde, "Who is This Foe Across the Sand From Our Troops?", Army Times, September 10, 1990, p. 52.
71. David Wood, Iraq's Modern Weapons are Precisely Lethal, Minneapolis Star-Tribune, Nov. 11, 1990, p. 29.
72. Trevor N. Dupuy, Elusive Victory: The Arab Israeli War, (New York: Harper and Row, 1978) p. 468.
73. Ibid, p. 467.
74. Stephen C. Pelletiere, Douglas V. Johnson II, Leif Rosenberger, p. 30.
75. Kenneth Dombrowski, "The Iraq Invasion of Kuwait", (Combat Studies Institute, 1990) p. 2.
76. Chris Bellamy, The Future of Land Warfare, (New York: St. Martin's Press, 1987), p. 20.
77. Danis, p. 17
78. Ibid, p. 16.
79. Cordesman and Wagner, p. 483, 592.
80. O'Ballance, p. 214.
81. Cordesman and Wagner, p. 495.
82. Barbara Starr, "NBC Nightmare Threatens to Spread," International Defense Review, November 11, 1990, p. 1225.
83. Anthony Cordesman, "Lessons in the Iran-Iraq War Pt II", Armed Forces Journal (June 1982), p. 78.
84. Ibid, p. 74.
85. Cordesman and Wagner, p. 445-446.
86. Cordesman, p. 80.
87. Cordesman and Wagner, p. 470.
88. Ibid, p. 416, 460.
89. Ibid, p. 463.
90. Ibid, p. 471.
91. Ibid, p. 421.
92. Ibid, p. 419.

93. Ibid, p. 421.
94. Frederick U. Axelgard, "Iraq and the War with Iran", Current History, Feb. 1987, p. 82.
95. O'Ballance, p. 185.
96. Nora Boustany, "Top Iraqi General Reportedly Replaced" The Washington Post, Nov. 9, 1990, p. 29.
97. Cordesman and Wagner, p. 421.
98. Ibid, p. 44, 59, 413.
99. Ibid, p. 414.
100. Ibid, p. 413.
101. Ibid, p. 454.
102. Melissa Healy, "Iraqi Troops in Kuwait said to Suffer Critical Shortages", Los Angeles Times, Sept 5, 90, p. 6.
103. "Iraq's Army: Hit Hard by the Blockade", Newsweek, Oct.29, 1990, p. 14.
104. William Druzdiak, "Embargo Said to Make U.S. Attack Less Difficult," Washington Post, Nov. 17, 1990, p. 9.
105. Cordesman and Wagner, p. 424.
106. Tom Marks, "Iraq's Not-So-Tough Army." Wall Street Journal, Aug 21, 1990, p. 54-55.

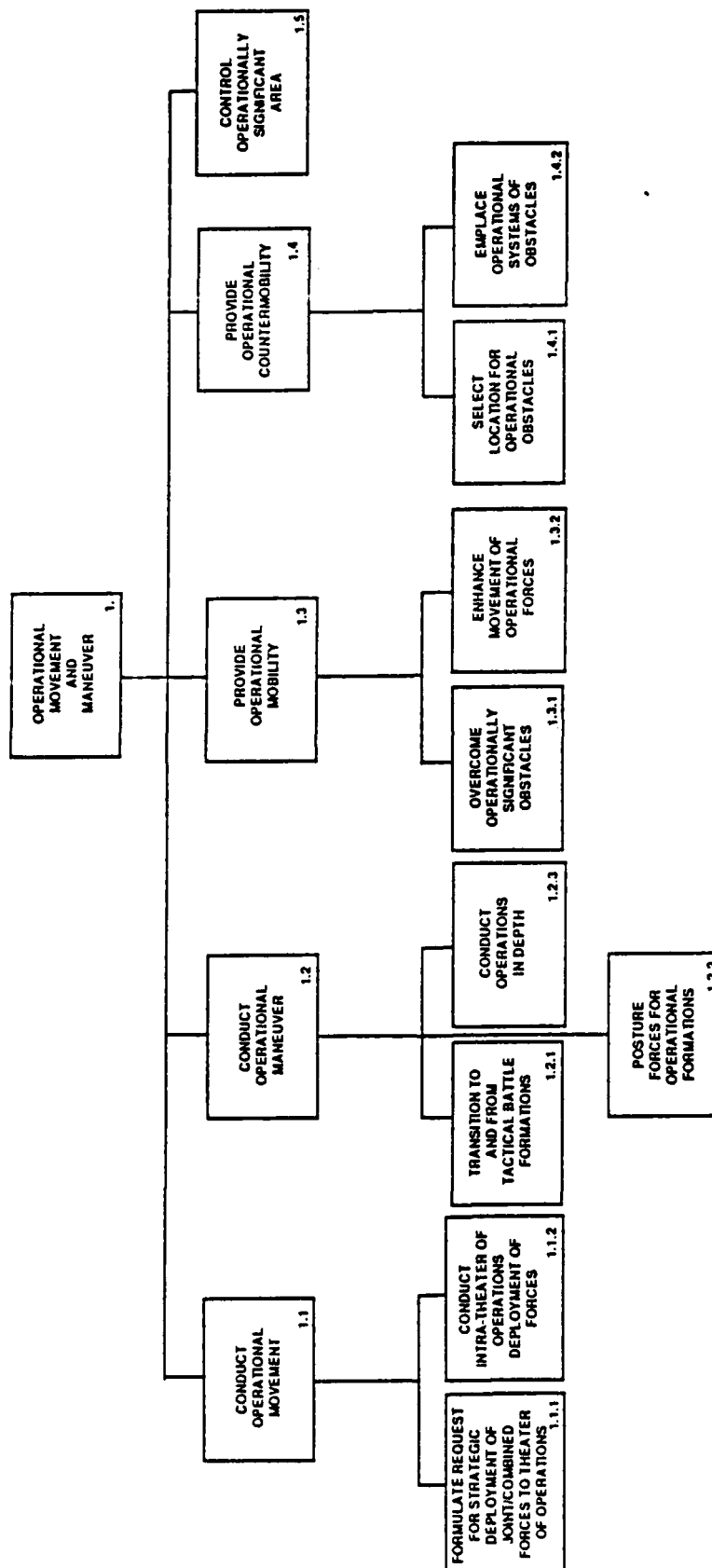


Figure 5-2. Operational Movement and Maneuver

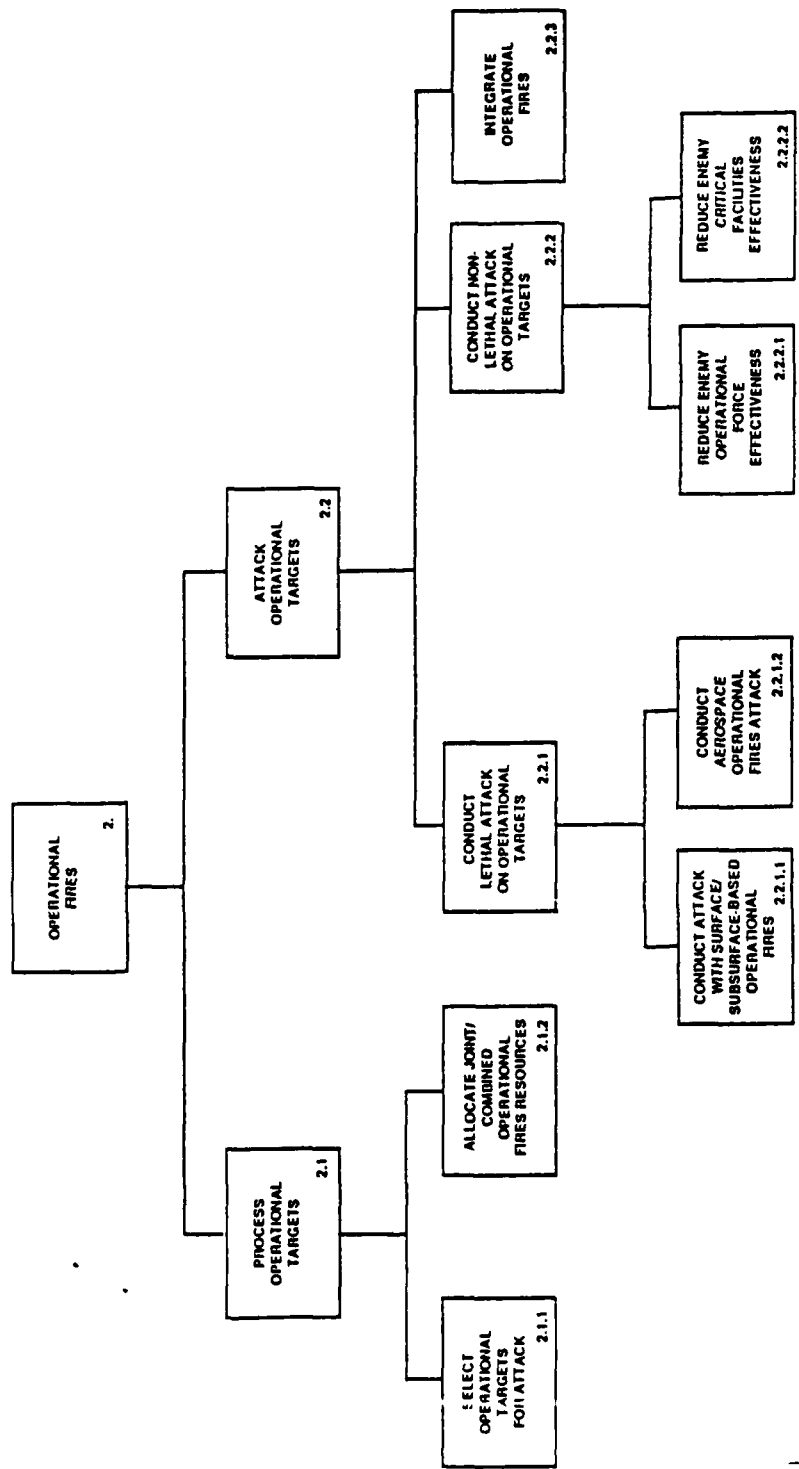


Figure 5-3. Operational Fires

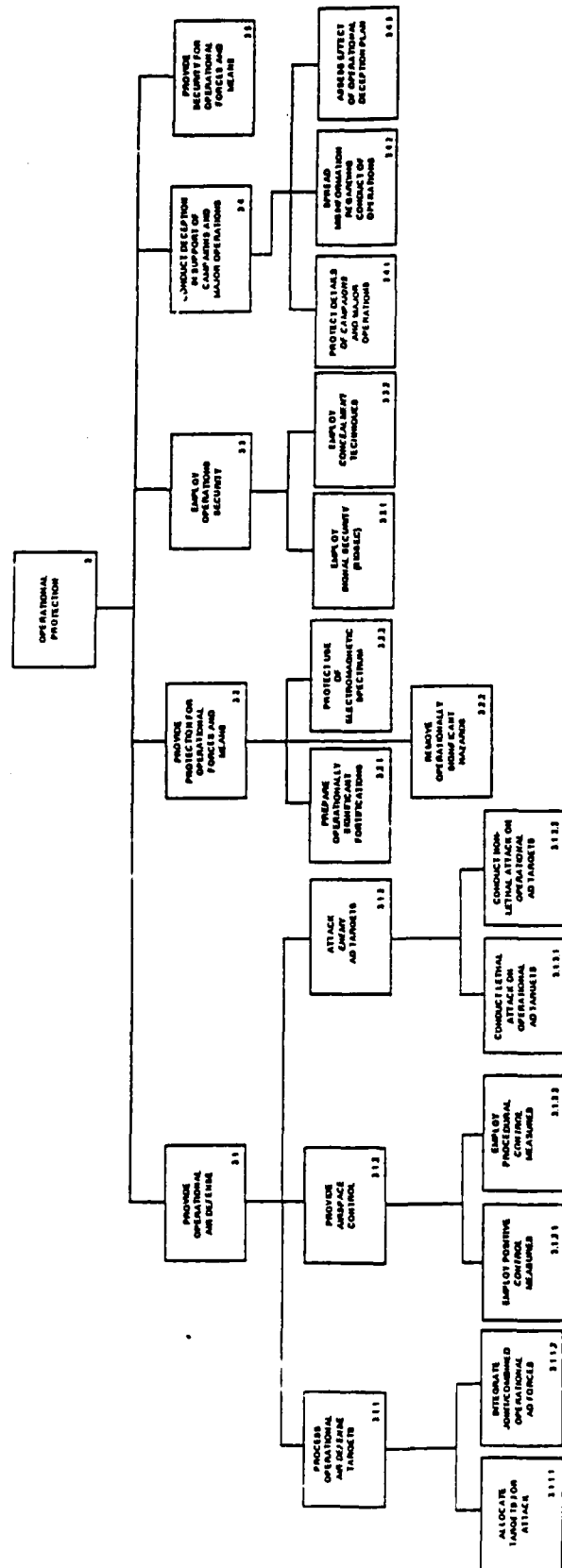


Figure 5-4. Operational Protection

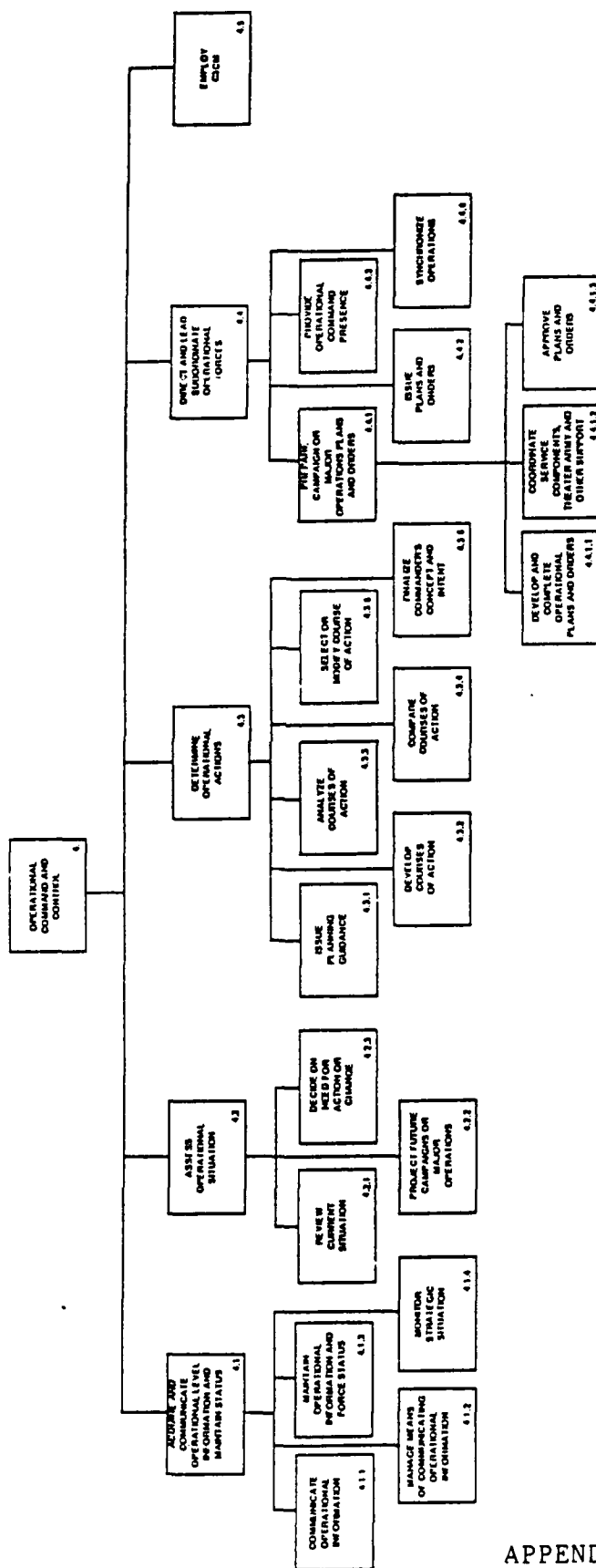


Figure 5-5. Operational Command and Control

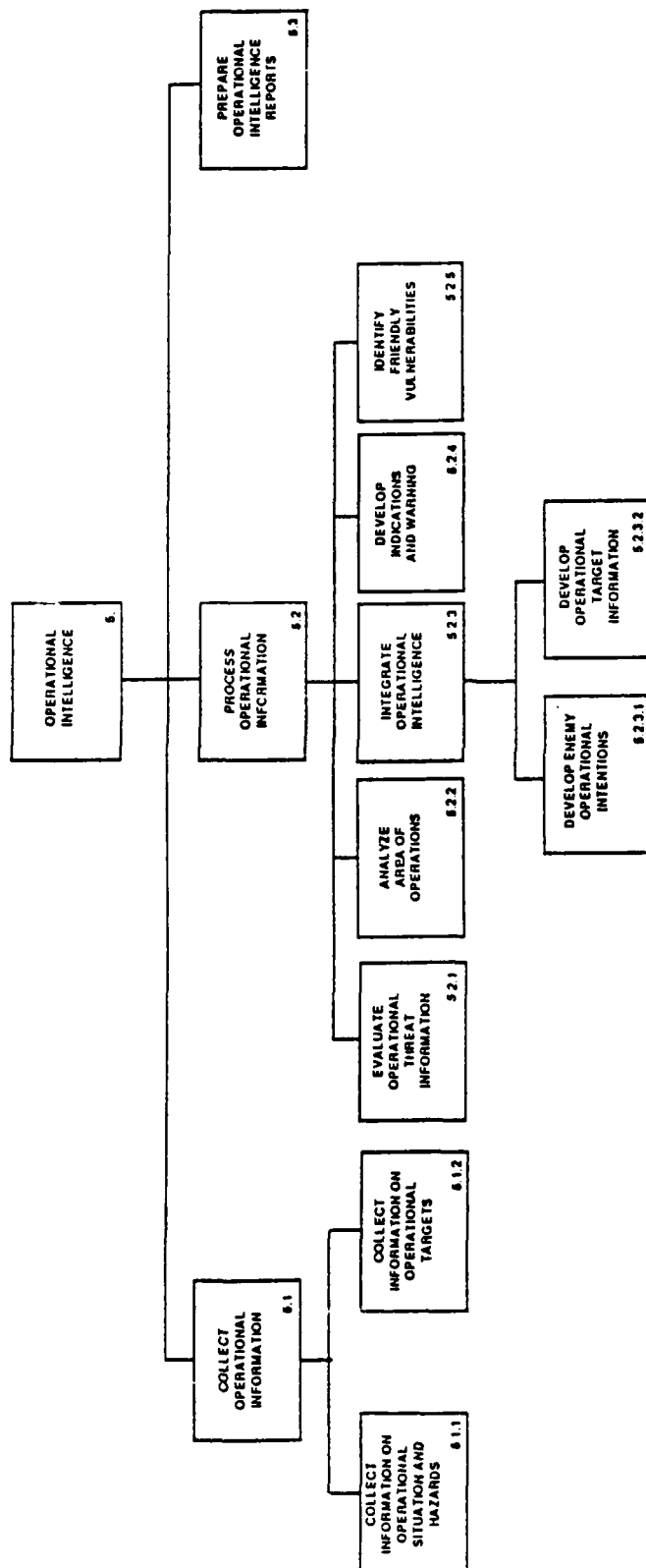


Figure 5-6. Operational Intelligence

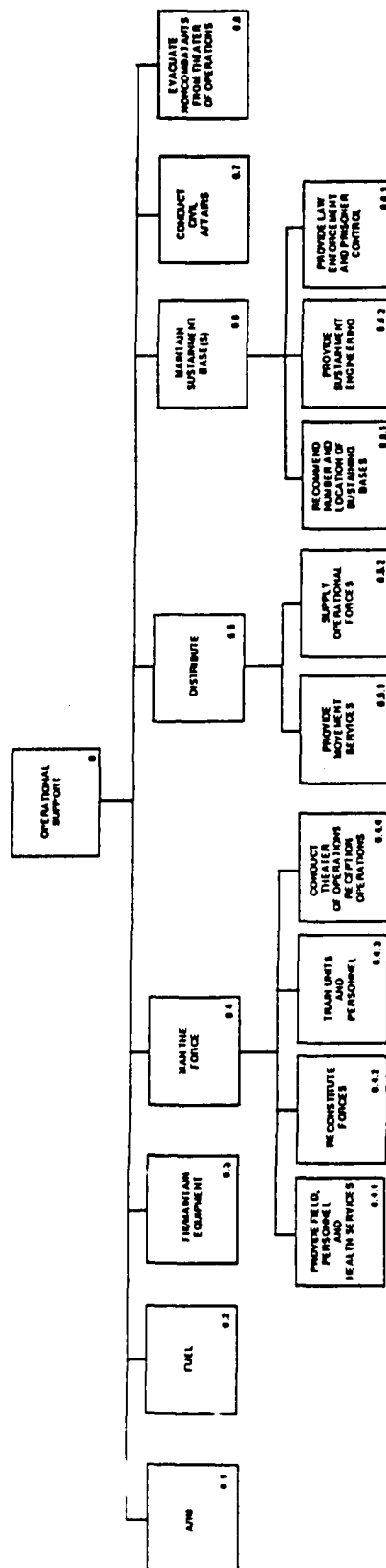


Figure 5-7. Operational Support

BIBLIOGRAPHY

BOOKS

Akar, Frank. October 1973, The Arab Israeli War. Hamden, Ct: Archon Books, 1985.

Al-Durah, Mahmud. The Iraqi-British War of 1941. Beirut: Dar Al-Talish. 1973.

Bellamy, Chris. The Future of Land Warfare. New York; St. Martins Press, 1987.

Connel, John. Wavell: Soldier and Scholar. New York: Harcourt, Brace and World, 1964.

Cordesman, Anthony. The Iran-Iraq War and Western Security. London: Times Publishing, 1987.

Cordesman, Anthony and Abraham Wagner, The Lessons of Modern War, Volume II: The Iran-Iraq War. London: Mansell Publishing, LTD, 1990.

Dudgeon, Peter. The Defense of Habbaniya-May 1941. London: Imperial War Museum, 1961.

Dupuy, Trevor N. Elusive Victory: The Arab-Israeli War. New York: Harper and Row, 1978.

Dyer, Gwynne. "Iraq", World Armies. ed. John Keegan. New York: Facts on File, 1983.

Helms, Christine. Iraq, Eastern Flank of the Arab World. Washington D.C.: Brookings Institute, 1984.

Herzog, Chaim. The Arab-Israeli Wars. New York: Random House. 1982.

Kelidar, Abbas, eds. The Integration of Modern Iraq. London: Croomheld Ltd, 1979.

London Times Insight Team. The Yom Kippur War. New York: Doubleday, 1974.

Mutani, Samir. Jordan in the 1967 War. Cambridge: Cambridge University Press. 1987.

O'Ballance, Edgar. The Gulf War. London: Brassey's Defence Publishers. 1988.

Rigge, Simon, War in the Outposts. ed Henry Grunwald, Alexandria, Va : Time Life Books. 1980.

Staudenmaier, William. "Iran-Iraq (1980-)", The Lessons of Recent Wars in the Third World. Eds. Robert Harkavy and Stephanie Neuman. Lexington: Lexington Books.

Wagner, John. "Iraq", Fighting Armies: Antagonists in the Middle East. Ed. Richard A. Gabriel. Westport, CT: 1983.

Warner, Geoffrey. Iraq and Syria, 1941. Newark: Associated University Press, 1974.

ARTICLES

Adde, Nick. "Who Is the Foe Across the Sand From Our Troops." Army Times, September 10, 1990, p. 52.

Axelgard, Frederick U. "Iraq and the War with Iran." Current History, February 1987, p. 57-60, 82-87.

Boustany, Nora. "Top Iraqi General Reportedly Replaced." The Washington Post, November 9 1990, p. 29.

Cordesman, Anthony. "Lessons in the Iran-Iraq War: The First Round." Armed Forces Journal, April, 1982. pp 32-47.

Cordesman, Anthony. "Lessons in the Iran-Iraq War: Part Two- Tactics, Technology, and Training." Armed Forces Journal, June 1982. pp 68-85.

Cowell, Alan. "Iraq's Dark Victory." The New York Times Magazine, September 25, 1988, p. 45.

Danis, Aaron. "A Military Analysis of the Iraqi Army." Armor Magazine, Nov-Dec 1990, p. 13-18.

Druzdiak, William. "Embargo Said to Make US Attack Less Difficult." Washington Post, November 17, 1990, p.9.

Evans, David. "The Lessons of Conflict." The Atlantic, November 1984. p. 26-33.

Healy, Melissa. "Iraqi Troops in Kuwait Said to Suffer Critical Shortages." Los Angeles Times, September 5, 1990.

O'Ballance, Edgar. "Iran vs Iraq." Defense Attache, No 1/1987, p. 25-31.

Segal, David. "The Iran-Iraq War: A Military Analysis." Foreign Affairs, Summer 1988, p. 946-60.

Starr, Barbara. "NBC Nightmare Threatens to Spread." International Defense Review, November 1990, p. 1223-1225.

"The Case For and Against War." Newsweek, October 29, 1990, p. 10-19.

Tusa, Francis. "Iraq vs. Almost the Rest of the World." Armed Forces Journal, October, 1990, p. 32-4.

Wood, David. "Iraq's Modern Weapons are Precisely Lethal." Minneapolis Star Tribune, November 11 1990, p.2.

"Iraqs Not-So-Tough Army." Wall Street Journal, August 21. 1990, p. 30.

STUDIES

Al-Lihaibe. "Analysis of the Iran-Iraq War". Air War College. Maxwell AFV, AL 1989.

Barbero, M.D. "War of Exhaustion: The Result of the Paradoxial Trinity". School of Advanced Military Studies, Ft. Leavenworth, KS. 1989.

Dombrowski, Kenneth. "The Iraqi Invasion of Kuwait", Combat Studies Institute, Ft Leavenworth, KS, 1990

Ellison, Gregory W. "Operational Art: The Missing Link in the Iran-Iraq War". School for Advanced Military Studies, Ft Leavenworth, KS, 1988.

Johnson, Douglas V. II, Pelletiere, Stephen C. and Rosenberger, Leif R. "Iraqi Power and US Security in the Middle East", Strategic Studies Institute, Carlisle Barracks, PA, 1990.

MILITARY PUBLICATIONS

Field Manual 100-5, Operations. Washington, D.C., May 1986.

Training and Doctrine Command Pamphlet 11-9, Blueprint of the Battlefield. Ft. Monroe, Va: April 1990.