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NAVAL WAR COLLEGE
NEWPORT, RI

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RAIDING LOGISTICS:
THE LOW COST ALTERNATIVE TO FIGHTING FAIR

BY:

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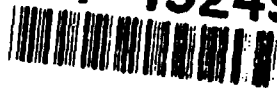
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THE RAIDING OF U.S. LOGISTIC ELEMENTS MAY BE THE MOST ADVANTAGEOUS APPROACH FOR AN ENEMY TO TAKE. THROUGH THE USE OF SMALL ELITE OR IRREGULAR FORCES AN OPPONENT CAN DRAMATICALLY EFFECT MILITARY OPERATIONS AT A VERY LOW COST. LOGISTIC OPERATIONS ARE HIGHLY SUSCEPTIBLE TO THIS FORM OF WARFARE BECAUSE OF THE INHERENT OPERATIONAL CHOKE POINTS AND RELIANCE ON CRITICAL COMMODITIES. PROTECTING THE REAR AREA IS OF UTMOST CONCERN TO THE JRAC. HE MUST BE ABLE TO DETECT, DETER, AND IF NECESSARY DEFEAT THE ENEMY FORCES. THE USE OF DECEPTION, DISPERSAL AND DUPLICATION ARE INVALUABLE IN COUNTERING THE ENEMY'S ACTIONS. TO ADEQUATELY DEFEND THE REAR AREA COMBAT SUPPORT SERVICE (CSS) PERSONNEL MUST BE PROPERLY TRAINED, EQUIPPED, AND STAFFED. FUTURE COMMANDO RAIDS WILL BE MORE FORMIDABLE THAN EVER. THE JRAC WILL NEED TO RELY HEAVILY ON COUNTERINTELLIGENCE ASSETS TO GUARANTEE THE SURVIVAL OF LOGISTIC FACILITIES AND COMMODITIES.

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Abstract of
RAIDING LOGISTICS:
THE LOW COST ALTERNATIVE TO FIGHTING FAIR

The raiding of U.S. logistic elements may be the most

advantageous approach for an enemy to take. Through the use

of small elite or irregular forces an opponent can

dramatically effect military operations at a very low cost.

Examples of this can be seen in the American Civil War, World

War I, and World War II. Statistically, medium sized forces

comprised of elite military individuals have been very

successful at conducting commando raids. Logistic operations

are highly susceptible to this form of warfare because of

inherent operational choke points and reliance on critical

commodities. Protecting the rear area is of utmost concern to

the Joint Rear Area Commander (JRAC). He must be able to

detect, deter and if necessary defeat the enemy forces. The

use of deception, dispersal and duplication are invaluable in

countering the enemy's actions. To adequately defend the rear

area Combat Support Service (CSS) personnel must be properly

trained, equipped, and staffed. Future commando raids will be

more formidable then ever. The JRAC will need to rely heavily

on counterintelligence assets to guarantee the survival of

logistic facilities and commodities.

ii

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PREFACE

In the research of this paper only one resource was found that addressed the success or failure of a large number of commando raids. The 1985 Rand Note proved invaluable, but minor inconsistencies in the text were noted.[1] (Hp15-17) In those areas that contained inconsistencies, information in tabular form was used over that in the text. For this paper, this problem only occurred in the data concerning seaborne raids. The text referred to nine raids for elite raids transported by boat but the tables only addressed four.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

RAIDING LOGISTICS:
THE LOW COST ALTERNATIVE TO FIGHTING FAIR

INTRODUCTION

The Problem. Often, the most effective means to influence military operations may be the use of unconventional forces employed to disrupt or destroy the enemy's logistics lines of communication. Throughout history striking an enemy's rear area with small forces has enhanced a weaker opponent's ability to effect the adversary's military operations. The merit of this tactic lies in its economy versus seeking to engage the enemy forces directly. With the requirement for long logistics lines to support its overseas operations, the United States is highly vulnerable to "commando raids." Logistics lines may well be the weak link in the success of future operations.

Topic Importance. Historically, countries have planned for, and attempted to wage, the last successful war that they fought. Desert Storm was a major success for the United States, but Saddam Hussein may not accurately represent the abilities of the next opponent. Opportunities to strike logistic bases during the build up phase of operations may not be missed in another conflict.

Out of necessity, weaker countries often resort to deception and unconventional tactics. This tendency will continue to be true into the future. The U.S. should be

1

prepared to fight an enemy that recognizes alternatives to concentration and mass. One low cost alternative is the employment of small force units to destroy critical commodities and facilities. These are highly attractive targets because of the impact that the loss of logistics supplies and lines of communication have on operations. Theater and Rear Area Commanders must appreciate the vulnerability of these areas and be prepared to protect them.

The Format. This paper encludes an historic look at three different examples of military operations that were affected by an attack on their logistic elements. Examples are drawn from the American Civil War, World War I, and World War II. The vulnerability of logistics is examined by developing an understanding for the composition of raiding parties and the inherent weaknesses of logistic bases and logistic lines. Present U.S. operations protection and rear area defenses are assessed. Finally conclusions and recommendations are made for improving the protection of logistics elements, and future operations.

CHAPTER I

HISTORICAL OPERATIONS AFFECTED BY RAIDS ON LOGISTICS

"The history of war provides that nine out of ten times an army has been destroyed because its supply lines have been cut."

GEN Douglas MacArthur[1]

AMERICAN CIVIL WAR. In December, 1862, General U.S. Grant and his Union Army were preparing to capture Vicksburg, Tennessee. His plan called for a dual push of his forces and those of General Sherman to capture the city, gain control of the Mississippi River and cut off western supplies from the Confederacy. Sherman was to move down the Mississippi River and attack Vicksburg from the northwest, while Grant continued to move south, push overland, and attack from the east.[2] In preparation for this advance Grant had his logistic depot moved from La Grange Tennessee south to Holly Springs Mississippi.[3] (Figure 1) The significance of Holly Springs was that it was easily connected to all other major Union bases by three major railroads.[†]

In an attempt to cripple the Union advance against Vicksburg, Lieutenant General John C. Pemberton authorized a

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[†]Holly Springs, Mississippi was located along the Mississippi Central Railroad which ran north to Grand Junction. From Grand Junction, the Tennessee and Ohio Railroad ran to Columbus, Kentucky, and the Memphis and Charleston Railroad ran to Memphis, Tennessee and Corinth, Mississippi.

3

raid aimed at Grant's rear area. On December 20, Major General Earl Van Dorn, flanking Grant's forces with 3500 calvary troops, raided the Union supply center at Holly Springs, burning it to the ground. Almost simultaneously, Nathan B. Forrest, with 2500 calvary troops, struck the Union lines of communication around Jackson, Kentucky, and destroyed 60 miles of railroad. In two swift maneuvers these small Confederate forces, avoiding open confrontation, destroyed the Union supplies and cut its lines of communication. With only 6000 troops, the Confederacy had defended Vicksburg from the advance of a Union Army with nearly 40,000 troops. On December 23, Grant wired Major General McClernand:

> "Raids made upon the railroad to my rear by Forrest northward from Jackson, and by Van Dorn northward from the Tallahatchie, have cut me off from supplies, so that further advance by this route is perfectly impracticable. The country does not afford supplies for troops, and but a limited supply of forage."[4]

Grant was forced to abandon his plans for the capture of Vicksburg, fall back, and wait out the winter.

WORLD WAR I. The war for the Holy Lands saw Arab irregulars, supported by British demolitionists, conducting extensive raids against Turkish railways and bridges. Though this had a limited effect on the Turkish Army's ability to resupply and reinforce, it did provide needed supplies for the raiding parties. Its greatest attribute, however, was the large number of Turkish troops that were kept occupied by a comparatively small force.

The intent for the British and the Arabs was to control the desert and to force the Turkish Army to maintain the longest possible passive defense. This plan called for using an extended and dispersed front comprised of irregular forces of Bedouin tribesman.[5] The idea was not to defeat the Turks in open battle or to force them to surrender. It was to drain them slowly, tying them to their railroads and forcing them to reinforce their posts with numbers greater than they desired. As Brian Gardner wrote in Allenby, "(Lawrence) and the other demolitionists were seriously undermining the whole Turkish force by piercing the wounded and useless limb that (the Turks) refused to amputate, ..."[6]

Most of this activity was done under the tutelage of British Colonel T.E. Lawrence. During the eighteen months that he led the Arabs, he dynamited 79 trains and bridges. In 1917 alone they blew up 25 trains, tore up 15,000 rails and destroyed 57 bridges and culverts.[7]

In support of Field Marshall Viscount Allenby's 1917 Damascus campaign Colonel Lawrence and Feisel's Arab irregulars were part of a deceptive attack being by Chetwode's XX Corps. (Figure 2) The XX Corps occupied the majority of the Turkish troops while Lawrence severed the Turkish lines of communication around Deraa. This forced the Turks to reinforce their post with troops from the Palestine front, which was the real target.[8] In doing so Lawrence blew up a bridge 149 km south of Damascus, blew up another bridge and

ripped up 600 pairs of rails just north of Deraa, and blew up enough rails in Deraa to cause complete chaos in the Turkish supply system. He then cut the telegraph lines between Palestine and Syria, isolating the Turkish Army from Turkey and Northern Syria.[9] Years later, General Allenby said of the Damascus campaign, "Lawrence was under my command, but, after acquainting him with my strategic plan, I gave him a free hand. ..., and I never had anything but praise for his work, which, was invaluable throughout the campaign."[10]

At the campaign's conclusion, which ended with the surrender of Turkey on October 31, 1917, British casualties numbered 5,666. The cost to the Turks was much higher. During the offensive, 325,000 Turks were killed and over 70,000 were taken prisoner along with 3,700 Germans and Austrians, and the British front was advanced 350 miles in six weeks.[11]

WORLD WAR II. During the Second World War, the British engaged in extensive commando raids against German forces. These raids allowed the smaller military forces of Great Britain to maintain pressure on Germany, forcing them to commit additional resources that were needed elsewhere.

In 1935 the *Normandie*, then the largest ship in the world, was built in the port of St. Nazaire, France.(Figure 3) After the German occupation of France, the port had been readied to receive the battleship *Bismarck*. It was the only port on the Atlantic seaboard with a dry dock capable of

6

berthing a ship of this size. Despite the sinking of the
Bismarck in 1941, the strategic importance of the port
continued into 1942 with the launching of the German
battleship *Tirpitz*, the most modern and powerful battleship to
date.

The raid on St. Nazaire on 28 March 1942 was a defensive
maneuver designed to protect Britain's trade routes and reduce
Germany's influence on the North Atlantic. The *Tirpitz* was a
strategic threat to Britain's naval operations in the
Atlantic. Aerial bombardment of the port had been ruled out
due to the possiblity of collateral damage to the French
civilians. This left a commando raid as the most viable
alternative. The objective of "Operation Chariot", "was to
render useless for the remainder of the war, the graving-dock
at St. Nazaire, ..."[2] Destruction of the *Normandie* Dock would
make any venture into the Atlantic too risky for the *Tirpitz*
because her return route to Germany, via the North Sea, was
easily blocked by the Allies.

The concept of the operation included the quick seizure
and isolation of the islands of Penhout and St. Nazaire
located in the middle of the docks area. From there, the
destruction of the *Normandie* dock gates, the basin lock gates,
the oil-fuel storage tanks, and the power station could be
accomplished.[3]

Utilizing the element of surprise was of utmost
importance, since it afforded the raiders the highest

probability of successfully penetrating the heavy defenses of the port. It was therefore decided that only an obsolete destroyer, *H.M.S Campbeltown*, and 14 small coastal vessels would be used in an attempt to stream line the operation. The *Campbeltown* (an ex U.S. "Town" class destroyer), was gutted, her bow filled with 96,000 lbs of explosives, and then rammed into the outer caisson of the dry dock and detonated using a delayed fuse.[14] Her crew, supported by the crews of the coastal vessels,[†] then attacked secondary targets in the port.

The results of Operation "Chariot" were significant. The *Normandie* Dock was blocked for 10 years[15] despite the eighteen months spent by the German's attempting its repairs.[16] The inner and outer caissons had been damaged and destroyed respectively, as was the operating and pumping machinery that controlled it.[17] It was estimated that 60 German officers and 320 men died during the raid[18]. For all this the British lost 144 of the 630 men, with another 215 taken prisoners of war[19], fourteen coastal vessels and the *Campbeltown*.

[†]These small coastal vessels were "B" and "C" class Fairmile boats. They were 112 ft. wooden boats with minimal protection, a crew of 12, and 15 embarked commandos. Capable of 16-18 knots, they had been modified with two 20mm anti-aircraft guns and additional fuel tanks specifically for the mission.

CHAPTER II

VULNERABILITY OF LOGISTICS TO COMMANDO RAIDS

THE THREAT. There are three levels of threat activity
that the Joint Rear Area Commander (JRAC) must consider.[1] Of
the three this paper is concerned primarily with Threat Level
II, and specifically sabotage operations conducted by
unconventional forces, and raid operations conducted by combat
units.

In an attempt to better understand the structure of these
forces, commando raids in general must be examined. Raiding
parties are of one of two types, conventional military elite
units or irregular forces in support of military forces It
is sometimes easier for a small force to achieve the desired
results than a larger one by avoiding detection. For this
reason understanding the size of successful raiding parties is
important. The mode of transportation by which the raiding
party carries out its operation can aid in identifying the
avenue of approach and the distance the raiding party is
capable of traversing. The last area of importance is the
geographic origin of the raiding party. These indicators can

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[1]Level I - Sabotage by enemy sympathizers/Terrorism. Level
II - Diversionary and sabotage operations by unconventional
forces. Raid, ambush, and reconnaissance operations by combat
units. Unconventional warfare missions. Level III -
Battalion-sized or larger. Heliborne, airborne, or amphibious
operations. Joint Pub 3-10 Doctrine for Joint Rear Area
Operations. Washington D.C.: Joint Chiefs of Staff, 26 Feb.
1993, p.I-8

help the commander understand the nature of the threat and plan for the rear area defenses.

A 1985 Rand Note looked at 100 raids conducted between 1946 and 1983.[1] Information was assembled from that report on the three areas of interest (see Table 1). This table, however, does not present a complete account of the available information. Certain elements of these data were elaborated on in the Rand study and are of interest to this study. All but one of the seaborne raids conducted were cross-border operations. Operations conducted on foot were naturally either indigenous or cross-border. All four of the indigenous operations on foot were successful. All the 15 raids in which deception was used were successful.[2]

From the data in Table 1 it is evident that elite force raiding parties of medium size (50 men) and smaller have the greatest chance of accomplishing their mission. This was true also for missions that were transported by land vehicles. Despite these statistical advantages, variations in missions will necessitate the tailoring of each raiding party.

CHOKE POINTS AND CRITICAL ITEMS. Often the primary targets of these raids are command, control, communication, and intelligence (C3I) facilities, airfield and port facilities, main supply routes (MSR), and MSR choke points. These rear area facilities, supplies, and personnel can suffer catastrophic failures at the hands of even a small raiding party. The fact that Combat Support Service (CSS) units are

10

normally the least capable of defending themselves increases

the palatability of these targets.[3]

TABLE 1

STATISTICAL NATURE OF RAIDING PARTIES

	# Succeeded / ELITE	# Failed IRREGULAR	% of Success ELITE/IRR
ORIGIN			
Indigenous	5/0	10/ 1	100/ 91
Cross-border*	34/2	19/15	94/ 56
International	4/4	4/ 1	50/ 80
TRANSPORTATION			
Truck	11/0	7/0	100/100
Aircraft(com)	2/0	4/1	100/ 80
Aircraft(mil)	4/1	-/-	80/ -
Helicopter	14/2	2/0	87/100
Boat	4/0	15/5	100/ 75
Foot	6/0	9/6	100/ 71
Other	-/-	0/3	-/ 00
SIZE			
1-5	2/0	12/9	100/ 57
5-15	4/0	12/4	100/ 75
15-25	7/1	6/2	87/ 75
25-50	11/0	2/0	100/100
50-100	4/1	-/-	80/ -
100-200	1/2	0/1	33/00
OPERATION			
Destruct/sabotage	26/1	19/5	96/79

* originating from an adjacent nation

Source: Hoffman, Bruce <u>Commando Raids: 1946-1983</u>.(Santa
Monica,CA: Rand, 1985) pp. 15-22

11

Logistic facilities and transportation elements that are critical nodes and that are difficult to defend are the most likely targets of enemy attacks. Choke points usually occur at those locations through which supplies must pass in order to arrive in theater. These airfields, port facilities, and logistic bases are difficult to defend because their fixed positions enable the enemy to collect necessary intelligence to effectively plan and execute a raid. Their size often saddles the JRAC with a large perimeter to defend. Additionally the facility may not be exclusively military, making security even more difficult to manage. These considerations force a trade-off between base security and the movement of material to the combat units. The JRAC must maintain an economy of force operation and determine, and allocate, the appropriate level of manpower to guarantee the base's security.

Transportation is often the limiting factor in logistic sustainment. Transportation networks need to be maintained to prevent the logistic system from becoming a constraint to the Area Commander's operation reach. Railroad lines, roadways, and pipelines are difficult to defend because of the distance, and often remote areas that they cover. These networks are critical for the rapid movement of items such as fuel, ammunition, water, and personnel over long distances. Disruption of these lines of communication make it difficult if not impossible for the needed commodities to be moved.

Choke points are not only critical in getting supplies into a land based theater but also for getting them out of one. Support for naval battle groups is highly dependent on overseas port facilities. An Aircraft Carrier Battle Group (CVBG) must rely on frequent deliveries of fuel (both for ships and aircraft) and ammunition. Supply ships such as Naval Auxiliaries must then pass through specific foreign ports and obtain resupplies in support of overseas operations. It would be much easier for an enemy to raid a logistic port than take on a CVBG. By severing the life line of the battle group an opponent could curtail or at least impact the CVBG's ability to sustain operations.

Transport ships and aircraft, delivering the supplies, are less capable of defending themselves. The crews of merchant ships and transport aircraft are probably less trained at defending themselves than are other CSS personnel. Many of the merchant ships, and chartered aircraft, are manned with civilians with little or no combat training. Merchant ships are thinner skinned and less compartmented making them more vulnerable to severe damage. Ships are also susceptible to underwater sabotage. It is often more difficult to detect and prevent an underwater raid since there is no effective way to close of an entire harbor and the water masks their approach.

Critical commodities for military operations can include fuel, ammunition, food, water, clothing, transportation

vehicles, and replacement personnel. The majority of these commodities are most likely transported from outside the theater of operations. Without these items a military force cannot operate for extended periods.

The large quantities of fuel and ammunition required to sustain modern warfare makes their timely resupply crucial to operations. Once in theater, both ammunition and fuel are stored in large depots. As an example, during Desert Storm, the U.S. Marines forward based a large quantity of supplies to Khanjar, Saudi Arabia, just 16 miles from occupied Kuwait. This logistic base covered 768 acres and contained nearly 5 million gallons of fuel. The adjacent ammunition supply point contained more than 17,000 tons of Class V explosives.[4] A base with these quantities of fuel and ammunition would have made a handsome target for a prudent opponent.

Fuel and water are hopefully supplied by the host nation or by allies near the theater of operations. Those intended for ground forces are transported by rail, pipeline, or truck from logistic bases to the combat areas. If the rail or pipelines are vulnerable or actually disrupted, greater emphasis is laid on truck transport. If this happens the host nation may also be relied upon for the timely reinforcement of additional vehicles. The vast territory covered by these transportation networks makes them easy targets. Critical supplies may be lost through interdiction, and in many cases transportation awaiting repair would further hinder resupply.

14

CHAPTER III

PROTECTING THE REAR AREA

DEFENDING THE LOC'S. In addressing the operational
protection of the rear area, the JRAC must determine how to
best defend pivotal facilities and supplies from elite and
irregular commando raids. Any interruption in logistic
operations could diminish the fighting power of the combat
forces.[1] The JRAC must plan to detect, deceive, and if
necessary defeat an enemy strike in the rear area.

The essence of a Theater Commander's operational plan is
to extend the range at which he can mass the employment of his
forces decisively, ie. his operational reach.[2] The U.S. must
be prepared for enemy actions directed at its rear area. The
intent of these actions is to disrupt and destroy CSS
operations as a means of limiting this combat reach. Without
safe, reliable storage and transportation, critical supplies
may not survive to reach combat units. The JRAC's ability to
provide safe bases and lines of communication is paramount in
developing sustainable combat power within a area of
operations.

The key element in defending against enemy raids is the
ability to detect the threat in time to respond. It is here
that intelligence and an understanding of the enemy is
critical. Counterintelligence is particularly effective in
assisting JRAC in identifying the espionage, sabotage,

subversion, and terrorist threats to the rear area.[3] The counter intelligence support officer (CISO) can provide the commander with estimates of enemy intelligence. Host nation (HN) agencies can provide populace and resource control (PRC) aimed at detecting, isolating and neutralizing insurgent and guerilla activities.[4]

From his experience in the First World War, T.E. Lawrence wrote that it was impossible for purely passive (fixed) defenses to be effective in preventing railway disruption. He believed it would take a passive defense, mobile ground elements, and air reconnaissance assets working together to be effective.[5] In areas that were only passively protected, Lawrence's raiding parties had been able to operate almost at will. The situation today may be no better. "The greatest single gap in the Army's rear-battle doctrine is threat detection. Threat level I and II forces could operate virtually unimpeded on urban terrain where most combat support (CS) and combat service support (CSS) assets will be located."[6]

In an attempt to defend the rear area, the JRAC must go beyond a passive defense and institute active measures. It will not be enough to wait for the enemy to strike and hope that he can be defeated. The JRAC must use the information gained on the threat, seek him out, and preclude any raid. An active defense may entail escorting logistic elements to and from combat units. In a port it can mean periodically using underwater explosives or a ship's sonar to deter submerged

operations or the laying of a mine field. It should exploit the latest technology ranging from infra-red detectors to aerial surveillance. An active defense must include patrols utilizing aircraft, fast patrol boats, and ground vehicles.

The British raid on St. Nazaire was complicated by a an approach that was easily protected by German patrol vessels, fixed coastal battery defenses, and by mines and underwater obstructions.[7] The British viewed the patrol vessels as the greatest threat since it was impossible to know when or where they would be encountered. The fixed positions on the other hand could either be avoided or dealt with.[8] Even the Germans listed inadequate patrolling of the River Loire as one of the principle contributing factors to the success of "Operation Chariot".[9]

DECEIVE, DISPERSE, DUPLICATE. One means of defeating the enemy's efforts is to deny them crucial targets through the use of deception, dispersion, and duplication in the rear area. In deceiving the enemy the JRAC must use information collected by the counterintelligence agencies to determine what intelligence the enemy is seeking. Confirming what the enemy already wants to believe is the most effective way to deceive it. Another is to deny the enemy accurate intelligence by concealing, camouflaging, or building decoys to protect critical items.

Enemy human intelligence (HUMINT) sources must not be able to refute information gathered by surveillance systems or

17

the deception will not work. For this reason operational security is a necessity. The majority of rear area communications may be over non-secure modes.[10] Additionally logistic bases may be accessible to host nation workers that may be enemy sympathizers. Rear area personnel must work constantly to preclude disclosing information about operations that could negate the deception.

Dispersion of assets is another means to protect critical commodities. By not placing all the "eggs in one basket" the chance of irreparable damage being done by a single raid is reduced. Decentralization of the rear area is often less cost effective, and more difficult to manage, but the alternative could be catastrophic. Dispersion would make the enemy work harder. More raids would be required to accomplish the desired end results. The enemy raiders should be forced to cover a much larger area. Even if the enemy does penetrate the defenses and destroy a logistic base, his actions will signal other bases in the area to tighten their defenses.

With dispersion there must come duplication. Airplanes are designed with redundancies to ensure the aircraft's survival in case a critical system is lost. Logistic planners must look at the rear area the same way. To ensure the survival of the combat units, duplication should be built into critical LOC's and facilities. Duplication also helps the JRAC deter the enemy. Where it might be cost effective to mount a raid against a critical port, depot, or railroad line,

if it is just one of a many, the cost may not justify the return.

COMBAT IN THE REAR AREA. The JRAC must be prepared to combat a raid in any military operation ranging from a low intensity conflict to a conventional war. The level of force necessary to defend the rear area must be readily available and sufficient to defeat whatever force the enemy presents. CSS personnel must be trained and equipped for this task since a Tactical Combat Force (TCF) may be assigned only for threats greater than a raid.

Low-Intensity Conflicts (LIC) are confrontations between contending states or groups at a level less than conventional war but greater than peace time rivalry. Most of this activity is handled by the State Department and host nation (HN) agencies. The threat in a LIC is usually from sympathizers and guerrillas and can often be controlled by counterintelligence and HN police forces. If these groups do reach the rear area CSS personnel are expected to defend the area. These threats are best deterred by keeping logistic facilities and commodities to a minimum.

Contingency operations are normally conducted in crisis situations that present a definite threat to U . interests.[11] In these operations, the host nation (HN) will normally provide rear area security. If the HN is unable, or U.S. forces are in a hostile territory, then security measures will be the responsibility of the Area Commander. When presented

19

with a Level II threat, the CSS personnel are called upon to be the base defense until U.S. military police (MP) arrive on scene. The MP's then become the response force responsible for rear area security.

Raiding parties in a conventional war can be expected to be more formidable. In the lesser levels of conflict, Level I and II threats were probably more often irregular forces. This may not be the case in a conventional war where logistic bases will represent more profitable targets. The JRAC must be prepared to defend the rear area from well trained and disciplined elite commandos. The raid on St. Nazaire was conducted by the British Special Boat Service (SBS), a group of commandos specifically trained for seaborne raids. They had practiced, and their equipped boats specifically for the mission. "Operation Chariot" was even supported by a diversionary air raid to further conceal their approach. The loss of 144 of these highly trained commandos was easily excepted by Great Britain in exchange for averting the *Tirpitz*, and protecting their Atlantic shipping lanes.

To defend against these elite forces, CSS personnel must be able to detect the intrusion early. MP's will need to defend the area with machine guns, anti-armo. weapons and grenade launchers. Avenues of approach should, if feasible, be mined to restrict the threats mobility. Forces must seek out the incoming raid and engage it as early as possible to minimize the enemies opportunity to disperse. The key to

minimizing damages is an active defense. More than anything the JRAC cannot expect to defeat the enemy if it waits for the raid and then responds. In his drive for Vicksburg, General Grant learned this lesson the hard way. By 19 December, Grant was aware that Forrest was in his rear area but believed he would only interrupt communications for a day or two.[12] It was not until after the raid that Grant was concerned enough about the security of his supplies to dispatch an entire division to Memphis to escort the Army's supply train.[13] Grant learned that to protect the extended lines of communication required more than passive defenses.

CHAPTER IV

CONCLUSION

Logistic elements necessary for the sustainment of military operations are highly vulnerable to the threat of raids, ambushes, or unconventional forces. The evolving nature of war has made military operations more dependant than ever on the large volume of critical commodities provided by the rear area. These factors make the rear area an increasingly appetizing target for enemy operations. To protect and defend the rear area requires a change in the emphasis previously given this area by the CINC's. It requires more dedicated intelligence, detailed planning, and increased training in support of its operations.

Intelligence must be maximized to determine not only the enemy's capabilities, but also to estimate its intentions. One without the other is of little use. By examining the enemy's tactical doctrine the JRAC will better understand the enemy's intentions and be able to plan and train to counter theme. Too often, U.S. forces train for what they would do if they were in the enemy's position, which they are not.

The JRAC must have CSS personnel that are properly trained, led, and equipped to concentrate the necessary combat power to defend the rear area. They must be trained and equipped with weapons capable of defeating an elite commando force. How can the JRAC expect a unit of technically trained,

22

not combat trained, soldiers or sailors to fight and defeat an enemy's elite "special" forces with inadequate training and equipment? CSS personnel must receive training from their own elite forces. Security penetrations should be conducted to identify perimeter weakness. Such exercises would also serve to train CSS personnel in detecting and combating elite units. The rear area must be equipped with a capable command and control network. Without this, a timely response to the threat may not be possible. The rear area needs also to be sufficiently manned with MP personnel to combat the threat when and where it occurs. The whole system is worthless without the people to make it work.

The U.S. must be prepared for an opponent who is a student of history and who has done his home work. Even Saddam Hussein has probably learned from his defeat and is a more formidable opponent today. Military planners cannot be allowed to underestimate the enemy. Less advanced countries cannot hope to defeat U.S. sophisticated surveillance systems and satellites. Instead they may take a lesson from the Korean War. U.S. forces had a difficult time containing North Korean and Chinese forces from moving south. These forces were not mechanized and thus were not restricted to the roads. Raiding parties of the future may well move by less sophisticated means in an attempt to foil U.S. surveillance systems. Lawrence described the Arab camel raiding parties as self-contained ships. Each man had 6 weeks rations and was

23

capable of a trip of 1000 miles out and home. Each man
carried ammunition and a rifle and was demolition qualified.[1]
How would today's Army in the desert identify raiding parties
on camel or horse back? With coastal fishing vessels, it
would be nearly impossible to distinguish all the legitimate
fishermen from the saboteur laying mines or conducting the
coast line reconnaissance and insertions.

Defense of the rear area will rely more heavily on the
information gathered by the counterintelligence (CI)
specialists. Their background and expertise will be
invaluable to the planning and training of support personnel.
CI personnel are familiar with the threats capabilities. They
can provide the JRAC with timely reporting of suspicious
activities in and around the rear area. CI specialists can
help the JRAC determine how effective the deception measures
are. Through investigations of espionage incidents, CI
personnel may be able to identify perpetrators and recommend
countermeasures to avert an actual raid.[2]

The best way to catch a thief has always been to use a
thief. In the future the best way to combat commando raids
will be to listen to and utilize elite small force
specialists. A squad size compliment of these individuals,
trained in conducting commando raids, should be assigned to
the JRAC. Their purpose would be to evaluate the mission,
enemy, terrain, troops, and time (METT-T) of launching a raid
on the rear area. Their perspective, combined with the

24

information provided by the counterintelligence personnel, would give the JRAC the ability to plan for and possibly predict the enemy's raid. This is critical to the JRAC to ensure that logistic bases and lines of communication are protected and combat operations uninterrupted.

APPENDIX I

GLOSSARY OF TERMS

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Commando - a party called out for military purpose, a member of a military unit specially trained for making raids and assaults.[1]

Deception - Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudice to his interests.[2]

Logistics - The science of planning and carrying out the movement and maintenance of forces. Those aspects of military operations which deal with design, development, acquisition, storage, movement distribution,maintenance, evacuation, and disposition of material.[3]

Lines of communication (LOC) - All routes (land,water, and air) that connect an operating military force with a base of operations and along which supplies and military forces move.[4]

Port - A place at which ships may discharge or receive cargoes. It includes any port accessible to ships on the seacoast, navigable rivers, or inland waterways.[5]
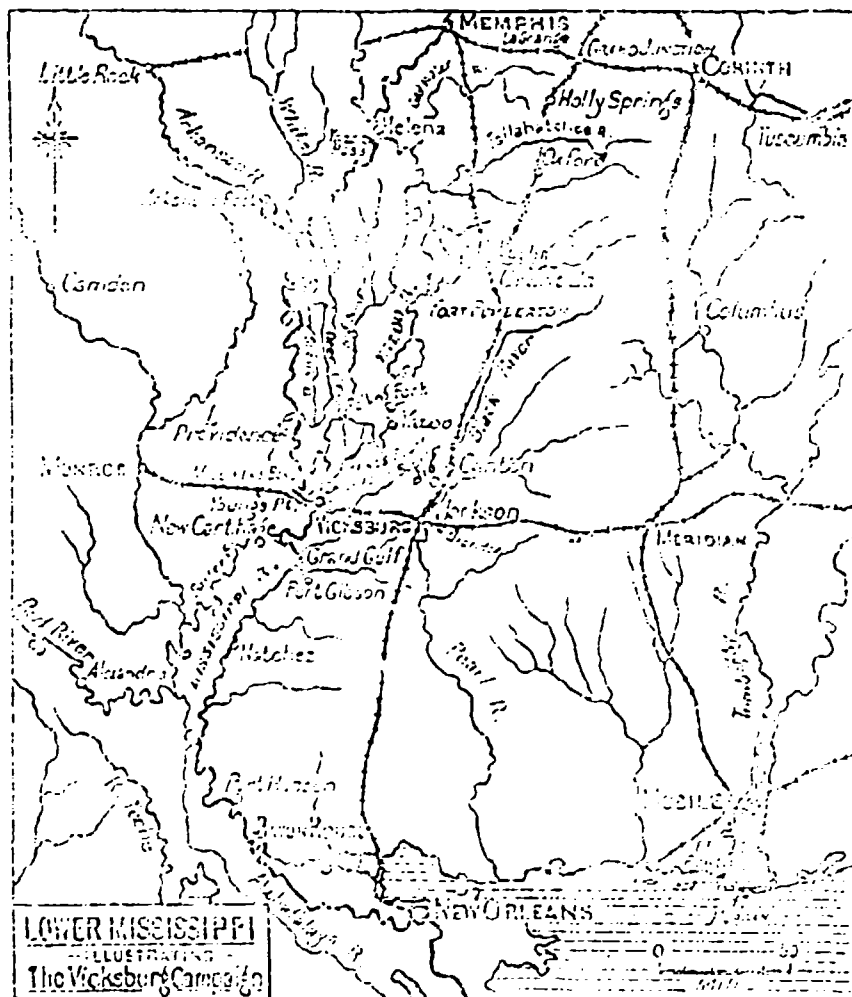
Raid - An operation, usually small scale involving a swift penetration of hostile territory to secure information, confuse the enemy, or to destroy his installations. It ends with the planned withdrawal upon completion of the assigned mission.[6]

APPENDIX II

AREA MAPS OF HISTORIC RAIDS
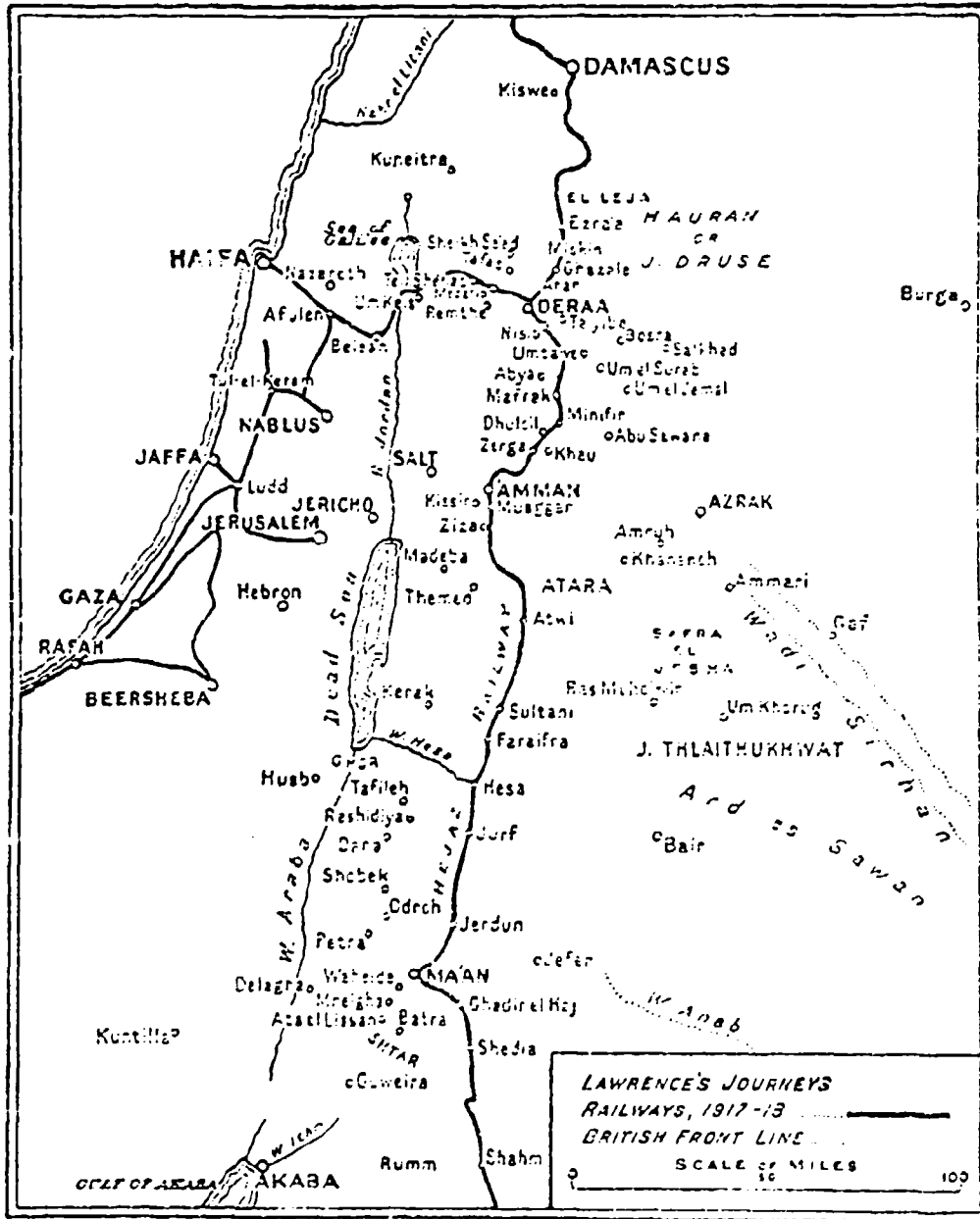
FIGURE 1

AREA MAP FOR RAID ON HOLLY SPRINGS, MISSISSIPPI

Source: Liddel Hart, B.H. Sherman: Soldier, Realist, American. New York: Fredrick A. Praeger, 1958 p. 163

FIGURE 2

AREA MAP OF RAID ON DERAA/DAMASCUS

Source: Lawrence, T.E. <u>Seven Pillars of Wisdom: A Triumph</u>. New York: Doubleday and Co. Inc., p. 17

FIGURE 3

AREA MAP FOR RAID ON ST. NAZAIRE, FRANCE

Source: Ryder, R.E.D. <u>The Attack on St. Nazaire</u>. Boston: John Murray, 1942 p. 2

NOTES

Preface

1. Hoffman, Bruce <u>Commando Raids 1946-1983</u>. (Santa Monica, Rand 1985) pp. 15-17

Chapter I

1. Appleman, Roy E. <u>U.S. Army in Korean War</u>. Washington D.C.: Office of Chief of Military History, 1961 p.

2. Liddel Hart, B.H. <u>Sherman: Soldier, Realist, American</u>. New York: Fredrick A. Praeger, 1958 p. 161

3. Rawlins to Reynolds, 3 Dec. 1862, United States War Department, <u>The War of Rebellion: A Comilation of the Official Records of the Union and Confederate Armies</u>. (Series 1, Vol. 17, Pt. 2) Washington: Govt. Printing Office, 1880-1901 p. 392

4. Grant to Commanding Officer Expidition Down Mississippi, 23 Dec. 1862 <u>Ibid</u>. Series 1, Vol. 17, Pt. 2: 463

5. Lawrence, T.E. <u>Evolution of a Revolt</u>. London: Arms and Armour Press, 1968 p. 110

6. Gardner, Brian <u>Allenby</u>. London: Cassel and Company Ltd, 1965 p. 203

7. Lawrence, p. 146

8. <u>Ibid</u>., p. 264

9. <u>Ibid</u>., p. 265-7

10. Gardner, p. 210

11. <u>Ibid</u>., p. 194; Falls, Cyril B. <u>Armageddon: 1918</u>. Philadelphia: J.B. Lippeencott Co., 1964 p.150

12. Ryder, R.E.D. <u>The Attack on St. Nazaire</u>. London: John Murray, 1942 p. 8

13. <u>Ibid</u>, p. 65

14. <u>Ibid</u>, p. 91

15. Phillips, C.E.L. <u>The Greatest Attack of All</u>. Boston: Little, Brown and Co., 1960 p. 9

16. Ryder, p. 90

17. Ibid, p. 90

18. Ibid, p. 86

19. Ibid, p. 94

Chapter II

1. Hoffman, p. v

2. Ibid. p. 22

3. U.S. Army Field Manual 100-10 Combat Service
Support. Washington D.C.: Department of the Army, 18 February
1988 p. 2-14

4. NWC 3119 Newport RI: U.S. Naval War College, pp. 9-
15

CHAPTER III

1. U.S. Army Field Manual 100-5, Operations. Washington
D.C.: Department of the Army, 1988 p. 12-4

2. NWC 3131 An Introduction to Operational Logistics
and Sustainment. Newport RI: U.S. Naval War College, 1993 p.6

3. Joint Pub 3-10 Doctrine for Joint Rear Area
Operations. Washington D.C.: Joint Chiefs of Staff, 3 Feb
1993, p.II-17

4. Ibid. p. III-2

5. Lawrence, p.56

6. Danckert, Stephen C. "Detecting the Enemy: The
Forgotten Element of Rear Operations". Army Logistician. Ft.
Lee, VA: Army Logistic Management College, March-April 1990 p.
39

7. Ryder, p. 5

8. Ibid. p. 101

9. Phillips, p. 258

10. Joint Pub 3-10 p. IV-7

11. Ibid. p. IV-7

12. Grant to McPherson, 18 december 1862, The War of Rebellion. Ser. 1, Vol. 17, Pt. 2, p. 428

13. Hqtrs, 13th Army Corps, Dept. of the Tennessee, Special Order #34, Ibid. p. 485

CHAPTER IV

1. Lawrence, pp. 113/4

2. U.S. Army Field Manual 90-14, Rear Battle. Washington D.C.: Department of the Army, 1988 p. 3-31

APPENDIX I

1. Hawkins, J.M. ed. The Oxford Reference Dictionary. Oxford: Clarendon Press, 1986 p. 174

2. Department of Defense Joint Publication 1-02. p. 105

3. Ibid. p. 211

4. Ibid. p. 209

5. Ibid. p. 280

6. Ibid. p. 301

BIBLIOGRAPHY:

Appleman, Roy E. U.S. Army in the Korean War. Washington D.C.:
    Office of Chief of Military History, 1961

Beamer, George P. Logistics in the Maritime Strategy. Newport,
    RI, 1986

Brally, Neal H. "The Continuing Need for Reinforcement and
    Sustainment". Army Logistician, Ft. Lee, VA: Army
    Logistics Management College, March-April 1991

Danckert, Stephen C. "Detecting the Enemy: The Forgotten
    Element of Rear Operations". Army Logistician, Ft. Lee,
    VA: Army Logistics Management College, March-April 1990

Falls, Cyril B., Armageddon: 1918. Philadelphia: J.B.
    Lippencott Co., 1964

Gardner, Brian Allenby. London: Cassell and Company Ltd, 1965

Hawkins, J.M. ed. The Oxford Reference Dictionary. Oxford:
    Clarendon Press, 1986

Hoffman, Bruce Commando Raids 1946-1983. Santa Monica, CA:
    Rand, 1985

Hurley, Mark S. Union logistics in the Vicksburg Campaign. Ft.
    Leavenworth, KS: U.S. Army Command and General Staff
    College, School of Advanced Military Studies, 1992

Joint Pub 1-02 Joint Warfare of the U.S. Armed Forces.
    Washington D.C.: Joint Chiefs of Staff, 1993

Joint Pub 3-10 Doctrine for Joint Rear Area Operations.
    Washington D.C.: Joint Ciefs of Staff, 26 Feb. 1993

Joint Pub 4-0 Doctrine for Logistical Support of Joint
    Operations. Washington D.C.: Joint Chiefs of Staff, 25
    September 1992

Joint Pub 4-01.6 Joint Logistics Over the Shore (JLOTS).
    Washington D.C.: Joint Chiefs of Staff, August 1993

Jones, Archer Confederate Strategy from Shiloh to Vicksburg.
    New York: St. Martin's Press, 1980

Jussel, Paul C. Operational Raids: Calvary in the Vicksburg
    Campaign, 1862-1863. Ft. Leavenworth, KS: U.S. Army
    Command and General Staff College, 1990

Ladd, James D. SBS The Invisible Raiders. London: Arms and
    Armour Press, 1983

Lauer, Donald M. "Theater Logistics-A Combat Multiplier". Army
    Logistician, Ft. Lee, VA: Army Logistics Management
    College, November-December 1992

Lawrence, T.E. Evolution of a Revolt. London: Pennsylvania
    State University Press, 1968

Lawrence, T.E. Seven Pillars of Wisdom, A Triumph. New York:
    Doubleday and Co. Inc., 1935

Liddel Hart, B.H. Sherman: Soldier, Realist, American. New
    York: Fredrick A. Praeger, 1958

NWC 3096 "Theater Support Functions", Newport RI: U.S. Naval
    War College, August 1993

NWC 3119 "Combat Service Support during Desert Shield and
    Desert Storm: From Kibrit to Kuwait", Newport RI: U.S.
    Naval War College, October 1991

NWC 3131 "An Introduction to Operational Logistics and
    Sustainmaent", Newport RI: U.S. Naval War College, 1993

Phillips, C.E.L. The Greatest Raid of All. Boston: Little,
    Brown and Co., 1960

Ryder, R.E.D. The Attack on St. Nazaire. London: John Murray,
    1942

Sherman, William T., Memoirs of General William T. Sherman (2
    volumes). New York: C.L. Webster Co., 1891

Stephenson, John W. "Using Rear-Area Operations Centers in
    Rear Battle". Army Logistician, Ft. Lee, VA: Army
    Logistics Management College, September-October 1990

Thomas, Lowell With Lawrence in Arabia. Lond   he Century
    Co., 1924

U.S. Army Field Manual 90-14, Rear Battle. Washington D.C.:
    Department of the Army, 1988

U.S. Army Field Manual 100-5, Operations. Washington D.C.:
    Department of the Army, 1993

U.S. Army Field Manual 100-10, Combat Support Systems.
    Washington D.C.: Department of the Army, 18 Feb. 1988

United States War Department, <u>The War of the Rebellion: A
    Compilation of the Official Records of the Union and
    Confederate Armies</u>. 128 volumes, Washington: Govt.
    Printing Office, 1880-1901

Warner, Gilbert "Defending the LCU's". <u>Army Logistician</u>, Ft.
    Lee VA: Army Logistics Management College, May-June 1991