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THE ALLIED CAMPAIGN IN WESTERN FRANCE - OPERATIONAL LESSONS

by

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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The paper traces the background to the development of the plan, describes the key aspects of the plan itself, and further describes the plan's execution. The plan and its execution are analyzed using key elements of the operational art. The elements are: the enemy's center of gravity and lines of operation; and the operational scheme - command and control, maneuver, fires, protection, deception, culminating points, and logistics. Operational level lessons are derived from the analysis. (continued)

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PREFACE

The Allied Campaign in Western France was a phase of Operation OVERLORD - the invasion plan for Europe. This paper specifically focuses on the Normandy Campaign, from the lodgement battles to the breakout after the German defeat at Falaise-Argentan (June 1944 - August 1944). My reference to the term "campaign plan" throughout the paper relates specifically to the operations planned for and conducted in Normandy.

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CHAPTER I

INTRODUCTION

The Problem. Effective operational level planning and execution determine our success or failure in the course of a campaign. The difference between success and failure relates directly to our attainment of the strategic aim or aims. Whether we are rescuing Americans and restoring a legitimate government on a small island as in Grenada, or forcing the Iraqi Army out of Kuwait, operational planning and execution play a key role in determining our success or failure. Our experience in Vietnam reminds us of the price we pay for ignoring the operational level of warfare.

Operation Desert Storm ostensibly demonstrated our grasp of the operational level of war and the operational art. However, I ask you to consider those lessons within the defining context of that campaign. Our enemy was cooperative. The characterization "potted plant" best described our enemy. The allied forces were virtually uncontested at the operational level. The opposite was true in western France in 1944. Our forces faced a formidable enemy in the German Wehrmacht. The Germans were masters in operational level warfare. The Allied Campaign in Western France challenged our planners and operators at all levels (strategic, operational, tactical). This campaign was dynamic and complex. The

campaign involved joint and combined operations, a forced entry onto the European continent against a determined enemy, extended operational maneuver schemes, and severe logistical problems.

We learn form historical case studies. The Normandy Campaign of 1944 in Western France offers us a rich historical example of the workings at the operational level of war. I contend that the Allied Campaign provides us with timeless lessons concerning the operational level of war and the operational art. This was a campaign planned and conducted in the face of great adversity. These circumstances lucidly exposed the strengths and weaknesses of the operational planning and execution. Operational planners and executors should not lose sight of the arduous conditions in which this campaign was planned and executed. In this uncertain world, we may be faced with similar circumstances in a future conflict.

This paper examines the Allied Campaign of 1944 in Western France. The paper addresses the campaign after the landing at Normandy (lodgement battle) up to the breakout after the Falaise-Argentan envelopment on 14 August (D+69). The purpose of the paper is to answer the following question: What are the contemporary implications of the successes and failures of the Allied Campaign in Western France for operational commanders?

I intend to capture the key operational lessons abundantly available from the Allied Campaign. My paper focuses on the operational design and execution of the campaign plan. In the course of this paper, I will describe the background to the planning of Operation OVERLORD, the strategic guidance provided to General Eisenhower, and the general concept of operations for the campaign. I will analyze the campaign plan execution by using a framework composed of key operational elements. The elements are: the enemy's critical factors (center of gravity, lines of operation), and the operational scheme (command and control joint/combined organizations, maneuver, fires, protection, deception, culminating points, sustainment). My methodology proceeds by describing the plan versus what was actually executed. Lessons learned are outlined for each of the key operational elements used in my analysis. The conclusion identifies areas of concern for today's operational commander.

CHAPTER II

GENERAL PREPARATIONS

Background. The invasion into western France had its genesis in 1941 when Winston Churchill directed his military staff to begin planning for an invasion of Europe. Americans would argue that these preparations were of a thin veneer. Britain continued to pursue a peripheral strategy against Germany despite American arguments to push for a large cross channel invasion. However, preparations did begin in earnest in January 1943. British manpower resources had reached their maximum potential. Any further delays in the execution of the continental invasion would have precluded the operation altogether. The allies had to move now or conduct a future invasion with fewer men.

The Allied Combined Chiefs' of Staff created a planning organization for the invasion under British Lieutenant General Frederick Morgan. He carried the title, Chief of Staff to the Supreme Allied Commander (COSSAC). The invasion was subsequently designated OVERLORD. COSSAC developed the initial campaign plan for OVERLORD which focused on establishing a logistics base and seizing terrain.[1] General Eisenhower, appointed as the Supreme Commander, arrived in Britain in January 1944 to complete the organization and planning for OVERLORD.

Strategic Guidance. The Combined Chiefs of Staff directive to General Eisenhower declared:

> You are designated the Supreme Allied Commander of the forces placed under your orders for operations for the liberation of Europe from the Germans.... You will enter the continent of Europe, and, in conjunction with the other United Nations, undertake operations aimed at the heart of Germany and the destruction of her armed forces.... After adequate channel ports have been secured, exploitation will be directed to securing an area that will facilitate both ground and air operations against the enemy.[2]

General Eisenhower commenced his campaign planning for the most extensive military adventure in history with the Combined Chiefs' guidance. General Eisenhower focused his efforts on what he believed the to be the center of gravity - destruction of the enemy's forces.[3]

CHAPTER III

OPERATIONAL DESIGN OF THE CAMPAIGN PLAN

The Campaign Plan - Assumptions. The Supreme Allied Command Staff functioned under three operational level planning assumptions which were considered prerequisites for a successful campaign. The first of these, construction of artificial harbors to sustain the force until permanent ports were secured, was on schedule. The second, air superiority, was achieved as a result of the heavy bombing campaign. The third assumption, deployment of German reserves in the invasion sector, would be disrupted through the deception and air interdiction operations. In addition to these three assumptions, eight major concerns affecting the probability of success of the campaign plagued the COSSAC planners. The concerns were: surprise for the amphibious assault, air support, rapid consolidation of the assault formations once ashore, functional artificial harbors, favorable force ratios at the point of the attack, better performance of naval assault forces than previously experienced, reduction of German fighter aircraft strength, and sustainment of the forces ashore for three months.[4]

Campaign Plan Concept (General Strategy). Eisenhower outlined his general concept of operation into seven phases. A preliminary phase preceded Eisenhower's seven phases. The preliminary phase aimed at softening up German resistance in

France. This was primarily accomplished through a bombing campaign (Operation POINTBLANK) and a deception campaign (Operation FORTITUDE). The campaign's phases were: 1) land on the Normandy coast; 2) build up the resources for major battles in the Normandy-Brittany area and break out of the enemy's encircling positions; 3) pursue, on a broad front with two army groups, emphasizing the left to gain the necessary ports and reach the boundaries of Germany and threaten the Ruhr; 4) build up a new base along the western border of Germany [operational pause], by securing ports in Belgium and in Brittany as well as in the Mediterranean; 5) complete the destruction of enemy forces west of the Rhine; 6) launch the final attack as a double envelopment of the Ruhr - emphasizing the left; 7) clean out the remainder of Germany.[5] Maps 1 and 2 depict the general strategy for the campaign and the forecast of operations.

Argument lingers over the forecast of the phase lines. The British claimed that the U.S. insisted on the forecast while General Bradley insisted that the specific days (e.g., D+14) not appear on a phase line. In any event, an overlay forecasting progress existed in Montgomery's 21st Army Group Headquarters. An expectation of progress by day was no doubt in the minds of the major commanders.

The major planning for the campaign focused on the conduct of the first two phases (landing and expanding the beachhead/build-up). This included a drive to secure

Cherbourg and an attack to the east only if the Germans appeared to be weak. The objective in the east was to secure Caen. The indicators suggested that a more prudent move could be made to secure the Brittany ports prior to the move east. Expansion east would then commence after the securing of the Brittany ports with an aim to widen the perimeter. The expected boundaries were the Loire river in the south and the Seine river in the east. Montgomery viewed the expansion as developing gradually. The main effort would first go to the left (east) flank of his army to hold the stronger German forces, and then shift to the right (west) to secure the ports.

This concept of operations suggested that four subordinate armies carry out these tasks. Second British Army would advance south of Caen and block the German force. First U.S. Army would secure Cherbourg and then assume the main effort and break out of the Cotentin. In the final phase, the Third U.S. Army served as a follow on force to conduct the drive into Brittany and protect the southern flank as the First and Second Armies drove toward the Seine. The First Canadian Army assisted in securing the left flank.[6]

Inherent in this concept, the Allies had to prevent the Germans from rapidly reinforcing the main point of the invasion. Two schemes were developed to support this effort. The first scheme was a large scale deception effort to convince the Germans that the main assault would occur at Pas

De Calais. The second scheme relied on "deep operations." That is, air interdiction of the German's panzer reserves.[7] These were the key elements in the concept of operations for the campaign.

Logistics. The logistics plan called for the establishment of artificial harbors until the forces ashore could secure the French ports in the area of operation. The plan called for the arrival of 600 to 700 tons of supplies per day per division. Additionally, reserves in troops, ammunition, and supplies were scheduled to arrive at the beachhead to support the initial deep offensives. The key to the logistics plan lay in the early securing of the French ports.

Command. The chain of command established for the campaign was as follows: from the Combined Chiefs of Staff to the Supreme Commander, to Field Marshal Montgomery (commander of ground forces for the Normandy invasion) and further directly to the major sea and air force commanders (Commander-in-Chief Allied Naval Force, and the Commander-in-Chief Allied Air Forces).

Before delving into the analysis of the execution of the campaign plan, I want to make some abbreviated comments concerning the adequacy of the plan itself. Two authors codified the elements of a campaign plan (theater of operations, concept of operations, joint/combined operations, arrangement of sequential tactical engagements, center of

gravity, and lines of operation) into seven fundamental tenets. These serve as a useful tool for reviewing the adequacy of the campaign plan.[8] I use these tenets only for reviewing the campaign plan itself - not for analyzing the plan's execution. The tenets are: 1) the campaign plan provides a broad concept of operations and sustainment to achieve the strategic objective; 2) the plan provides an orderly schedule of decisions...based on the commander's vision and intent; 3) the plan orients on the enemy's center of gravity; 4) the plan phases a series of related major operations; 5) the plan composes subordinate forces and designates command relationships; 6) the plan provides operational direction and tasks to subordinates; and 7) the plan synchronizes air, land, sea efforts, it is joint in nature.

The OVERLORD campaign plan met the conditions described in the tenets. Eisenhower defined a broad concept of operations and sustainment (deceive, land, build-up, breakout, pursue, defeat) to meet the strategic aims. His vision and intent were clearly articulated in his concept of operations which gave his commanders the latitude to operate independently in pursuit of the aims. Eisenhower clearly articulated the center of gravity as the "German forces" and his concept to defeat the enemy was formulated into seven phases. Forces were task organized under Montgomery and Bradley and a commander was designated to command the initial phases of the

invasion. Operational tasks (seizure of ports, pursuit on a broad front) were provided to the major subordinate commanders and Eisenhower synchronized air, land, sea operations (e.g., control of air forces) in support of the campaign.

Conclusions On The Campaign Plan. The plan adequately addressed all of the essential elements necessary to guide operations and achieve the strategic aim of defeating Germany. In my view, the plan manifested four problems. The first dealt with interpretation of the plan. Montgomery viewed the object of OVERLORD to "secure a lodgement on the continent from which further offensive operations can be developed...which will include airfield sites and the port of Cherbourg."[9] This interpretation problem could affect the timing and coordination of the first phases of the plan. The second problem was that the plan relied excessively on the deception campaign. The planners did not craft a course of action in the event that the deception plan failed. The deception plan's success was the linchpin for the first phases of the campaign. The third problem involved terrain considerations. The planners did not fully consider the impact of the obstacles (hedgerows) in the bocage.[10] The cost of the oversight would manifest itself in the near "stalemate" conditions at D+30. This, in effect, precluded operational maneuver. The fourth problem, the plan was oriented on terrain - that is securing a lodgement area. Although Eisenhower identified the center of gravity as the German

forces, an operational level maneuver was not anticipated until forces reached the Seine river. Operational opportunities could be lost with such an intense focus on one aspect of the campaign.

Overall, Eisenhower constructed an adequate campaign plan. The plan's execution, however, uncovers a number of operational shortfalls.

CHAPTER IV

ANALYSIS OF THE EXECUTION OF THE CAMPAIGN PLAN

Overview of the Campaign's Execution. (see map 3) The initial lodgement gained during the first week of the invasion (6 June - 12 June) was smaller than anticipated (see maps 4 and 5). This was due in part to the severe German resistance in some areas and the slow-go terrain in the Bocage. Montgomery's plan, however, remained intact. He envisioned a gradually developing expansion into the lodgement area. His plan consisted of three major operations which comprised his scheme.[11] The three major operations were: 1) land, gain a secure foothold, and block the counterattacking German panzer forces in the vicinity of Caen; 2) expand the foothold and secure the vital port of Cherbourg; and 3) complete the occupation of the lodgement area. The third major operation included a breakout and transition into an exploitation. The plan progressed in this general sequence (Map 6 depicts the general situation as of June 17th, D+17).

The drive by Bradley's First Army across the Cotentin Peninsula and into Cherbourg proceeded fairly close to the original forecast (see map 7). By D+24 (30 June) the drive inland was slowing, especially in the eastern area (in the vicinity of Caen). The bocage hedgerow country in the American sector and German resistance near Caen stalled the

Allied operations (Map 8 depicts the general situation as of D+24, 30 June).

The Second British Army made two major efforts (Operation Epsom) in June to breathe new life into their advance. Montgomery attempted a double envelopment of Caen and a powerful punch through the German lines east of Caen. Both operations failed due to poor British tactics and the restrictive terrain (hedgerows). Bradley's First Army succeeded in capturing Cherbourg and then shifted his effort to the south in order to expand the foothold. Bradley's forces made limited attacks south but failed to seize significant amounts of terrain. The bloody hedgerow fighting added to the American casualty list at an exponential rate. The terrain, coupled with light to heavy German resistance, attenuated the Allied advantages in air, armor, and materiel.[12] The Allied situation in early July was that:

> The elusive high ground of the Caen-Falaise Plain still lay in German hands, the Caen bridgehead remained unsatisfactorily small, high casualties to the infantry had left the manpower problem more acute than ever and, to add to Montgomery's problems, Bradley's offensive was stalled in the mud and bocage of western Normandy. Time remained a critical factor; it was essential that the Allied commanders develop and execute a concerted plan for a breakout.[13]

Montgomery still had his eye on completing the occupation of the lodgement area. He realized that containing (fixing) the German panzer forces near Caen was the linchpin for further American advances south and then west into Brittany. Montgomery employed strategic bombers in a hope to blast a

hole in the German defenses at Caen through which his forces could advance. This plan failed, primarily due to the bombs simply missing the German defensive positions. Montgomery's 21st Army Group did manage, however, to advance into part of Caen but at great cost. His advance came to a grinding halt at Caen.

General Bradley developed a similar plan using strategic bombers. The bombers blasted a hole in the German defenses and Bradley passed heavily reinforced mechanized forces through a very narrow front. The plan became known as COBRA. Montgomery developed a complementary plan code-named GOODWOOD. This plan included a major attack by strategic bombers followed by a heavy armored attack at Caen. This became, in effect, the operational scheme for the breakout from Normandy. Montgomery's forces pinned the German forces at Caen and Bradley's forces punched through the weaker German lines west and south of Caen.

The campaign plan called for the insertion of the Third U.S. Army into the line to capture the Brittany Peninsula and drive south to the Loire river in order to protect the flank of the other Allied armies. The plan, however, assumed a gradual expansion of the beachhead and foresaw no opportunity for an early envelopment of major German forces. The Third Army advanced rapidly into the enemy's rear.[14]

Although the developing enemy situation presented Bradley with an immediate opportunity to attempt an envelopment, he

chose to stay with the plan. He turned elements of Patton's Third Army right (westerly) to secure the Brittany ports[15] (see map 9). Bradley did so because the OVERLORD planners were always deeply concerned about gaining sufficient port capacity to support the logistics buildup.[16] The logisticians estimated that the tonnage coming across the Normandy beaches was marginally adequate to keep the forces then ashore supplied. The main effort for the forces remained focused on gaining a suitable lodgement vice destroying German forces. Two days after Bradley had turned elements of Patton's Third Army into Brittany, he realized the immense operational opportunity he had in hand. He switched his primary thrust from the ports of Brittany eastward. Bradley directed elements of his First and Third Armies toward Mortain (see map 9).

The Germans launched the famous Mortain Counterattack (see map 9) designed to penetrate to the channel north of Avaranches in an effort to cut off the Third Army's lines of communication. The Mortain Counterattack failed and Bradley maneuvered elements of the First and Third Armies eastward and northward to envelop the German 5th and 7th Panzer Armies (see map 10). Although the German's lost some 60,000 soldiers, close to a quarter of a million escaped over the Seine River to fight again.[17]

The Normandy Campaign ended with the defeat of the German Panzer divisions in the Falaise-Argentan pocket. The Allied

advance from this point constituted more of a pursuit operation than a resisted drive. I will now turn to the analysis of the Normandy Campaign.

Enemy's Critical Factors - Center of Gravity (COG). The hub of German power in France was the panzer divisions.[18] Eisenhower identified the "German forces" as the center of gravity in his analysis of the situation surrounding Normandy. However, the campaign plan provided little guidance as to how the Allies intended to defeat or destroy the German army.[19] There was no defeat mechanism in the plan. Although Eisenhower stated that the campaign's purpose of "destroying enemy forces" was always his guiding principle, geographical points appeared to gain as much attention or more than destroying enemy forces.[20] For example, the capture of Caen seemed to become an end unto itself for Montgomery. In my view, this refocus to geographical points resulted from the Allied forces inability to destroy the center of gravity. Montgomery settled on fixing the Germans at Caen so that the Americans could conduct a breakout and gain territory. Once the breakout developed, the Allies failed to capture the moment at Falaise. Total defeat of the German center of gravity escaped the Allied forces.

Perhaps the terrain mindedness of the Allied commanders, or their preoccupation with gaining a lodgement, led them to fail to destroy the enemy force.[21] For the Allies, American materiel and manpower were the COG. Only terrain seizure

would afford the Allies the opportunity to inject their strength against the Germans.

Fixing the enemy COG initially, vice defeating it, appears the best objective for the Allies. The initial focus on defeating the German forces was a high risk operation at this point in the campaign. The composition of the national forces (US - highly mobile, British - restricted mobility and short on manpower) limited the Allies capability to defeat major German forces. Defining what was to be done to the enemy COG, short of defeat, may have reduced casualties and led to an earlier breakout.

Lessons on the Center of Gravity. Identification of the COG is of itself half of a solution. Identifying what, how, and when to neutralize it, defeat it or limit its influence completes the success equation. The operational commander, in deciding how to handle the COG, must recognize his own COG. The planned actions against the enemy COG must be synchronized with the commander's ability to use his strengths to achieve the objective. Intermediate steps (short of defeat - e.g., fixing) that affect the enemy's capability to employ his strength must be included in the plan. The defeat of the COG may best be a secondary objective in the initial phases of a campaign.

Lines of Operation. An analysis of the situation in Normandy in terms of lines of operation presents an interesting situation. The Allies, by virtue of landing at

Normandy, assumed a position where they could threaten the enemy lines of operation without endangering their own. The German line of battle (east to west line along the coast) ran parallel to their lines of operation - which proceeded east to west from Germany into France. Any envelopment of the German eastern flank could immediately threaten the German lines of operation.[22] The opportunity to interdict the German lines and defeat the German forces existed.

In order to fully exploit the German disadvantages in lines of operation, the Allies would have had to place their strongest forces (American) on the left (entering Normandy). Unfortunately, this would have placed friendly strength directly against enemy strength. Montgomery did exploit the enemy lines of operation to the degree possible. His attacks against Caen drew the enemy reserves. His lines of operation, however, became exposed the further he moved inland. Montgomery had to balance the gains against the German lines of operation against his degree of exposure. In this case, his fixing and holding of enemy forces at Caen extracted maximum advantage from German disadvantage.

Lessons on Lines of Operation. Lines of operation run along a continuum in battle from least vulnerable to most vulnerable (but always vulnerable). To achieve success, the operational commander can influence the degree of vulnerability on his lines by properly gauging time and space battlefield relationships. Understanding the enemy's

capabilities to maneuver against your lines is critical. Montgomery understood this on his eastern flank, although his initial attempts to push past Caen may have exposed his lines of operation. Operationally, lines will be vulnerable. Army doctrine foresees fighting occurring on "islands of combat" that would temporarily expose lines of operation. The commander must sequence his maneuver to limit the time of exposure.

Command and Control. (see chart 1, Operational Chain of Command). The Normandy invasion began under an arrangement by which General Montgomery commanded the ground assault forces until the Supreme Commander should take personal control of operations in the field.[23] Montgomery retained over-all control until 1 September (D+87). On 1 August (D+56), General Bradley assumed command of the 12th Army Group and remained subordinate to Montgomery. The air and naval forces reported directly to the Supreme Commander. However, Eisenhower, did not directly command all available air resources. He had only indirect authority over the strategic bomber forces, which were largely autonomous and had their own target priorities.[24]

Montgomery served as the operational commander. Eisenhower stated, " the critical assault [phase] was foreseen as a single battle, closely interrelated in all its parts, and requiring the supervision of a single battleline commander."[25] Montgomery defined his view of command and control, "... HQ, 21st Army Group is an Allied HQ exercising operational command

and control over the land forces of the Allies, under the Supreme Commander."[26]

The operational commander within this structure did not control the forces needed to coordinate the overall effort. The air force situation was difficult to manage. Air Chief Marshall Leigh-Mallory was responsible for both supporting Montgomery and the air defense of the United Kingdom.[27] Also, Bradley and Montgomery each had their own tactical air force to support their operations. Operation GOODWOOD provides a vivid example of the problems with the air forces command and control structure. Montgomery wrote to Eisenhower immediately before GOODWOOD and asked: "Grateful if you will issue orders that the whole weight of the airpower is to be available on the day to support my land battle."[28] While the question of air support was being resolved, Montgomery was making crucial and unexpected alterations to the GOODWOOD plan.[29] Bradley experienced a similar dilemma. Bradley coordinated air support for the commencement of Operation COBRA. The plan called for bombing parallel to his front line of troops. The air force bombed perpendicular to his front resulting in fraternization. The point is simply that the operational level commander planned operations without assurance that required forces would properly participate - primarily due to the awkward command and control structure in place.

Ground command and control under Montgomery's 21st Army Group are best summed up by Bradley: "Montgomery carefully

avoided getting mixed up in the US command decisions, but instead granted us the latitude to operate freely and as independently as we chose.[30] Once Bradley assumed command of the 12th Army Group (1 August) the command relationship was one of "joint coordination" vice control. This hampered operational control. For example, at Falaise-Argentan, boundaries were not clearly delineated for the converging Allied forces. Consequently, the Germans escaped a decisive defeat. "A" commander did not control the "operational level" of this aspect of the campaign. This type of problem can be traced to Montgomery's own thoughts concerning his level of command and control after 1 August. Montgomery believed that for reasons of diplomacy he must hold the reigns much more loosely when he dealt with US rather than British subordinates.[31]

Lessons on Command and Control. Although Eisenhower defined the requirement for a single battleline commander [unity of command], the appropriate forces were not subordinated (task organized) to the operational commander. This forced Montgomery to coordinate his plan with external organizations. In some cases these organizations had their own priorities. An operational commander cannot piece together a well coordinated plan nor capture emerging opportunities on the battlefield with this type arrangement. Operational control of the required forces was absent.

Commanders must have at their fingertips control of those forces needed to conduct operational level warfare.

Coalition warfare bends traditional (national) conceptions concerning command and control structures. For example, the British envisioned a separate commander for each aspect of battle - air, land, sea.[32] Coalition warfare brings together many powerful actors across nations and services. Some or many coalition players have their preconceptions about operations in general and the execution of the current campaign plan. Resolving differences cannot occur by carving out territory for each major actor. "An" operational level commander with control of the required forces to complete the mission is a prerequisite for success. Although the Normandy invasion was successful, the commander needed hard and fast Operational Control authority over the right forces. Command and control includes the appropriate command relationship and a direct link to the organizations subordinated to the operational commander.

Operational Maneuver. There was a dearth of planning for operational level maneuver in the Normandy campaign plan. Bradley identified a grave weakness in the campaign plan. He thought that a great amount of effort went into the assault phase of the campaign, but not nearly enough planning had been devoted to the exploitation beyond the beachhead.[33] Planners gave only fair treatment to the geographical intractability of the bocage and to the proficiency of the soldiers to execute

tactical actions in difficult terrain. Although the planners foresaw a breakout, the conditions in Normandy reduced the campaign into a series of vicious, smaller unit actions. Imaginative maneuver was replaced by attritional slugfests. These difficult conditions, coupled with a lack of planning for operational level maneuver, riveted the major commanders' thoughts on the current battle. A battle sometimes measured in yards gained.

By mid July, focus did shift to broader horizons. Operation COBRA had an operational level flavor. However, Bradley envisioned COBRA as a five day operation. His vision lacked depth in space and time. Conversely, LTG Collins (VII Corps commander) structured the plan to allow instantaneous exploitation without pause.[34]

The Falaise-Argentan envelopment demonstrated a hesitancy on the operational commander's part to recognize the immense potential for pursuing an operational maneuver that could have annihilated the major German forces. Bradley's decision to turn Patton's Third Army toward Brittany was made because of the need of ports - a logistics based decision. No argument exists over the need for the ports - timing was the key. The opportunity to attack the German strength and defeat it by an operational maneuver was lost. Rigid adherence to the plan - a plan devoid of operational level maneuver planning cost the Allies a decisive victory. Operational maneuver in the Normandy campaign was reduced to a "push-broom" attritional

method as compared with an operational "sickle" thrust into the flank of the Germans.[35] For example, Eisenhower abandoned an early plan for enveloping German forces near the Seine river in order to continue the push east.

Lessons on Operational Maneuver. Commanders must continue with a sustained level of operational foresight and planning as a campaign unfolds. A myopic view (i.e., tactical) of the battlefield precludes the operational commander from establishing the conditions (force disposition, logistics) to exploit an emerging opportunity. Rigid, inflexible application of the plan must be reconsidered in view of rapidly changing battlefield dynamics. As conditions change, the commander must reassess his assumptions and the adequacy of his basic plan. Planning should never grow so rigid that it arbitrarily closes off promising options.[36] Finally, the commander must consider the dynamics at the tactical level (not focus all efforts but consider the dynamics) such as tactical proficiency, type forces available, and terrain. These elements determine the success or failure of the major operation. Operating in difficult terrain for example may be unavoidable, but the commander must consider the effect on his scheme of maneuver over space and time. In essence, synchronization in a fluid environment is a key to successful operational maneuver.

Operational Fires. Operational firepower, as we think of it today, was used in three operations during the Normandy

campaign. During operation GOODWOOD bombardment commenced just prior to the ground assault. Two thousand bombers delivered massive blows to the Germans followed by the massed artillery fire of three corps plus naval gun fire. Naval guns and artillery hurled a quarter of a million rounds onto the GOODWOOD battlefield.[37] Due to inept British combined arms tactics and an inability to push required ammunition forward, the assault ended in stalemate.

Operation COBRA provides a second example of operational level fires. Bradley synchronized a bombardment of 2,546 bombers followed by a massive artillery barrage. LTG Collins (VII Corps commander) was reinforced with artillery battalions and had more than 1,000 guns in all. Two problems attenuated the potential effects of the fires; a shortage of ammunition and the absence of a coordinated corps fire plan; division artillery commanders planned their own fires.[38] However, the fires did influence the campaign. The fires opened a gap in the enemy lines that allowed Bradley to conduct a tactical maneuver that had operational implications.

The fires delivered into the Falaise Pocket included the combined attack by the artillery of three armored armies and the massed aerial bombardment by Allied air forces.[39] This resulted in a crushing defeat for the Germans and the transition to all out pursuit.

Lessons on Operational Fires. Operational fires provided the impetus for operational maneuver in both Operation

GOODWOOD and COBRA. In the Falaise Pocket, it was an end unto itself. The synchronization of fires to support major operations cuts across numerous organizations on the battlefield. The locus of planning must be conducted at the operational level headquarters. Coordination of fires is a significant undertaking and stresses the command and control structures at the operational level. The commander's intent plays a key role in synchronizing the effects of air, land, and sea fires. The confluence of soldiers, sailors, aviators, equipment, and ammunition at the right time and place on the battlefield requires clear intent and sustained operational level forethought.

Operational Protection. The campaign plan design called for the 21st Army Group and First US Army to protect each others flanks. Montgomery gave his Second Army the mission of protecting the left flank of the invasion force to block what the Allies expected to be the main German counterstroke.[40] Additionally, the Allied deception plan played a pivotal role in distracting the German Fifteenth Army at Pas De Calais. This force, if committed, would have defeated the Allied forces. At the operational level, protection from the enemy's operational maneuver was achieved. The Allied COG was protected sufficiently to conduct the major breakout. However, if Montgomery's Operation Epsom had been successful, he may have exposed the American flank. Recall, the Americans

were bogged down in the bocage. Any flank attack would have been fatal.

Lessons on Operational Protection. Operational protection not only entails the physical blocking of major forces, but the synchronization of efforts to deceive and disrupt enemy operations. The operational commander must think out in time and develop a plan that allows him to seize the initiative in order to conduct his operational heme. A note of caution; anticipated operational level maneuver must be viewed in light of the operational protection scheme. Montgomery's early attempts to breakout may have been tactically significant, but his maneuver may have jeopardized the entire operational scheme.

On the modern battlefield, operational level protection may begin before forces reach the theater. Unlike Desert Storm, we may not enjoy an unopposed entry. The enemy can disrupt our forces at the operational level as we enter the theater. The commander's concept of operations must drive a scheme of maneuver that considers operational protection an integral part of the plan from the very start of an operation.

Operational Deception. Operation Fortitude - South portrayed that the true cross-channel attack would come on the Pas De Calais. The objective was to hold German reserves in place, precluding reinforcement of the invasion area. Specifically, the plan was aimed at holding the German Fifteenth Army in the area of Pas De Calais. The plan

succeeded brilliantly. By mid-July, there were 30 Allied divisions ashore and 22 German divisions defending in the Pas De Calais.[41] The deception saved the Allied breakout efforts in Normandy. Eisenhower and Montgomery viscerally understood that a rapid reinforcement of enemy units into the invasion area spelled defeat for the campaign. The plan demanded a planning effort commensurate with the overall invasion plan itself and a significant allocation of resources. The plan's success was attributed to a number of factors, effectively synchronized to cause the Germans to act in the Allies favor. The factors key to the plans success were: timing - synchronization of the effort; developing a reliable conduit through which false information was passed; crafting false information that was within the capabilities of the Allies; selecting the proper target of the deception (German High Command (OKW) and Hitler himself); integrating of nonmilitary schemes (placing key leaders outside the theater of operations) and conducting physical interventions against the diversion site (bombing Pas De Calais). Perhaps the key ingredient in the deception story's success lay in ULTRA - the British cryptologic effort that made the Allies privy to some of the highest communications of the Reich.[42] The Allies knew to what extent the OKW and Hitler were buying the deception story.

Lessons on Deception. Deception, like any other element of the campaign plan, must be integrated into the operational

scheme and planned concurrently. The commander must not develop the deception plan as an afterthought or in haste. The operational commander must centralize the planning much in the same way as he does for maneuver. Planning deception in this manner conveys the operational commander's intent and reduces the chances of undesirable side effects (e.g., not properly phased into the scheme of maneuver). Also, the operational commander's involvement as the "planner" influences the allocation and prioritization of scarce combat resources. His involvement also imparts to his subordinates the importance of the deception plan in the overall campaign.

Commanders must know what the enemy relies on for intelligence to make deception work.[43] "ULTRA" will not accompany us into the next campaign. Deciding on how much intelligence to allow the enemy to collect may very well determine the deception plan's success or failure. Reading the enemy's reaction, especially in a low intensity conflict, may be tenuous at best. Deception may be our best defense against the modern day threat we may face (chemical, nuclear capable). Desert Storm exposed our vulnerability during our build-up. Operational commanders can expect our potential enemies to take advantage of this phase of our operation. Operational protection will be paramount.

Culminating Points. The Normandy campaign does not provide a clear case history for analyzing operational level events in relation to culminating points. Although the Allies

reached a stalemate by D+30, they reassessed their strategy and proceeded accordingly. The potential for overextending themselves operationally presented itself in the bocage country. If the Allies continued to press the attack immediately after landing, they surely would have reached a culminating point. The terrain, easily defended by the strong willed Germans, caused the Allies to consume more resources than anticipated - human and equipment. The Allies were delivered to the point where they were defending their gains to avoid the risk of losing them.[44]

Subsequent operational maneuvers (GOODWOOD and COBRA) remained inside the parameters that precluded overextension and vulnerability to a decisive counterattack. Bradley's conservative decision to secure the Brittany ports first and commit only a portion of his forces to the pursuit eastward prevented the overextension. The US forces were able to continue their attack, however, until early September before logistics halted their advance.[45] The German counterattack at Mortain suffered the fate of overextension and ultimate defeat by an Allied counterattack.

Lessons on Culminating Points. In the classical sense, forces have extended operations beyond a culminating point as a result of outrunning their logistical support. This campaign demonstrated that other factors can create the unfavorable conditions that result in forces reaching an unanticipated culminating point. Factors such as terrain and

enemy will must be taken into consideration by the commander. Anticipating where an offensive action may reach a culminating point is not solely a logistical calculation. The commander's calculus must be more sophisticated. He must be aware of "contributing factors" (terrain, enemy will) that can push a force unexpectedly beyond a culminating point.

Operational Logistics. The campaign plan called for the seizure of deep water seaports in northwest France. Their seizure was necessary for three reasons. First, sustainment of the assault phase and follow-on forces depended on their capture. This would prevent the Germans from defeating the assault. Second, expansion of the lodgement was essential for future operations.[46] The build-up would set the conditions for future operations. Third, the anticipated limited capacity of supplying the forces over the beach would severely limit the Allies ability to breakout of the lodgement as planned.

By the end of June the Allies were 30% behind schedule for anticipated supply build-up. Although Cherbourg was captured in late June, the Germans systematically demolished the port's equipment and docks. The Allies had anticipated a three day reconstruction period of Cherbourg port based on their experience at Naples. Cherbourg would take six weeks. The Allied dependence on facilities which would most certainly be destroyed by the Germans was faulty operational design.[47]

The unavailability of deep water ports forced the Allies to continue over-the-beach logistics operations. Initially, the delivery and unloading of supplies followed a rigid order of priority.[48] The unfolding realities failed as a catalyst to change the rigid procedures. The fighting on shore swallowed tons of ammunition and an ammunition shortage developed early-on. Unfortunately, the logisticians remained with their plan, exacerbating the problem. However, the rigid system gave way to common sense and improvisation. The Allies discovered that the beaches were capable of discharging supplies far in excess of what was anticipated.

Several factors combined to prevent a logistical collapse during the Normandy campaign. These were: 1) the beaches were capable of discharging far in excess of what plans allowed for; 2) consumption rates (less ammunition) were overestimated; 3) the initial slow-go fighting in the bocage allowed for the accumulation of other supplies - especially fuel.

Overall, operational level maneuver was restricted until shortfalls in logistical sustainment were overcome. Ammunition severely limited major operations. For example, Bradley limited two of his corps to 25 155mm rounds per day, and cut VII Corp's (assaulting Cherbourg) allowance by one-third.[49] Ground transport for combat units further limited the ground commander's ability to push the fight and conduct major offensive operations. If the Allies suffered from one

fault logistically, it was rigidity in their planning and execution.

Lessons on Operational Logistics. The most detailed planning bears its own dangers of fostering rigidity.[50] Reliance on a set-piece logistical operation fails to account for the friction of war. Flexibility, and an appreciation for the reality on the ground allows the operational level logistics to support the scheme of maneuver.

Plans that rely on assumptions concerning enemy action for their success are doomed to fail. The operational level logistics planner can certainly "assume" some future activity or end state. However, the plan must respond to support the operational level scheme of maneuver regardless of the assumption's ultimate validity.

The sequencing of equipment and supplies into the theater will undoubtedly be a major challenge for operational commanders in the future. Constrained build-up periods, austere infrastructure, and enemy resistance will require surgical prioritization of the logistics flow into the theater. Everything cannot land on the "beach" at the same time. Operational maneuver plans must dictate the flow and priorities less logistics dictate operational maneuver.

Just as the operational commander develops sequels and branches to his scheme, so must the operational level logistics planner.

CHAPTER V

CONCLUSION

Eisenhower and his commanders were successful in Normandy. They achieved their aim. The enormity of the task, the immeasurable details required in the plan, and a staunch enemy tested the Allies' strength and courage. The Allies responded to the challenge. They planned and executed a campaign that met the Combined Chiefs strategic guidance. The plan and its execution leave a legacy of lessons for today's operational level commanders. The Allied campaign plan and its execution demonstrated the complexity of prosecuting war at the operational level.

Operational planning must survive the first battle contrary to the maxim, "no plan survives the first battle." An operational level plan that succumbs at the first battle was not an operational plan. The commander begins his planning by understanding the interaction of tactical level dynamics (soldiers - equipment - terrain). I am not suggesting that tactical level thinking dominate the commander's thought processes, but serve as data points around which he builds the larger operational scheme of maneuver. These dynamics define the realm of operational level possibilities. Synchronizing the complex operations in the Normandy campaign required an appreciation for the influence that tactical dynamics had on operational undertakings. For

example, operational maneuver requires space and mobility. The Allied planners failed to consider the effects of the bocage in the operational sense. Consequently, their initial plan was rapidly reduced to an nonsequenced set of tactical battles. Terrain, in this case, desynchronized the entire operation. Once this occurred, myopia set in and the commander focused only on the tactical level until Operations GOODWILL and COBRA. We may not survive operationally if this occurs on a future battlefield. The commander must not fail to consider the foundations upon which the operational level of war functions.

A solid campaign plan identifies the enemy center of gravity and defines the defeat mechanism. A failure to define the mechanism blurs the focus on the battlefield. As the case study revealed, terrain and pursuit appeared to take precedence over destroying enemy forces. Additionally, the commander must synchronize his planned actions against the enemy COG based on his condition on the battlefield. The COG may best be left a secondary objective until the most favorable conditions are achieved.

Operational maneuver, fires, protection, deception, and logistics must be inextricably intertwined. They necessarily proceed together in the planning and execution phases. The locus of planning remains within the operational commander's purview. Synchronizing priorities within the operational elements can only be accomplished at this level. The Allies'

problems in synchronizing fires during the campaign is illustrative of the importance in anchoring the planning at the operational level headquarters. A synchronized plan does not translate into battlefield success. Operational planning demands flexibility - the plan must address sequels and branches in light of operational success, failure or emerging opportunity.

The Allied failure to develop the envelopment immediately at Falaise-Argentan and again before the Germans crossed the Seine river reflects on shallow planning. Without flexibility, opportunities rushed by and the enemy survived to fight another day. As the U.S. downsizes its forces, the operational commander can ill afford to miss opportunities. Attritional battles are not an alternative in our future. Operational opportunity must be sought and seized.

The commander who crafts a solid plan and executes it boldly must pay attention to the indicators that can overextend an operation. Factors such as the enemy's will and effects of terrain can carry forces beyond a culminating point. Logistics, although the most important element in determining to which point an operation may proceed, is not the only planning factor. Logistics, terrain, and enemy will can combine to deliver the operational commander an unexpected turn. A rapid advance (of which the U.S. is fully capable - as in Desert Storm) met by strong willed resistance may push the advance beyond viability. The operational commander's

calculations must be sophisticated and consider all potentialities.

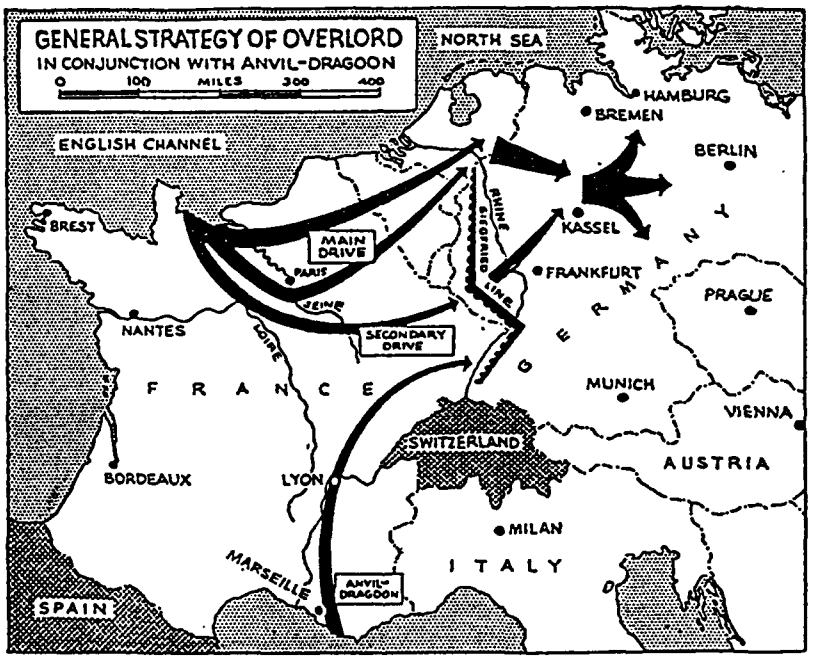
Success at the operational level essentially rests with the commanders ability to synchronize and sequence the battlefield actions. Command and control of the required forces is the sine qua non at the operational level. Coalition warfare will undoubtedly be our preferred method for conducting future wars. The operational commander, regardless of which nation he serves, must control the forces (sea, land, air) necessary to conduct the campaign. The task of coordinating a plan in a coalition environment is difficult enough without carving out "territory" for other commanders. The Allies missed opportunities to defeat the enemy in detail because no "one" operational commander was in charge. Requiring the operational commander to coordinate externally for resources he should rightfully control, hinders his efforts and adversely affects the plan. Seizing opportunities on the battlefield requires absolute control of the forces available to perform the mission. Time is relative on the battlefield. A fractured command structure hamstrings the commander and results in missed opportunities.

In sum, operational planning and execution require a strong centralized planning structure built around the operational level commander. He is the one who shapes the battlefield. He focuses the effort on defeating the enemy at the appropriate time and place. The operational commander

must consider the dynamics at the tactical level in his synchronization plan. Flexibility and sustained operational foresight allow the commander to seize opportunities and deliver decisive blows against the enemy. The Normandy experience demonstrated the limitations in the Allied operational level planning and execution.

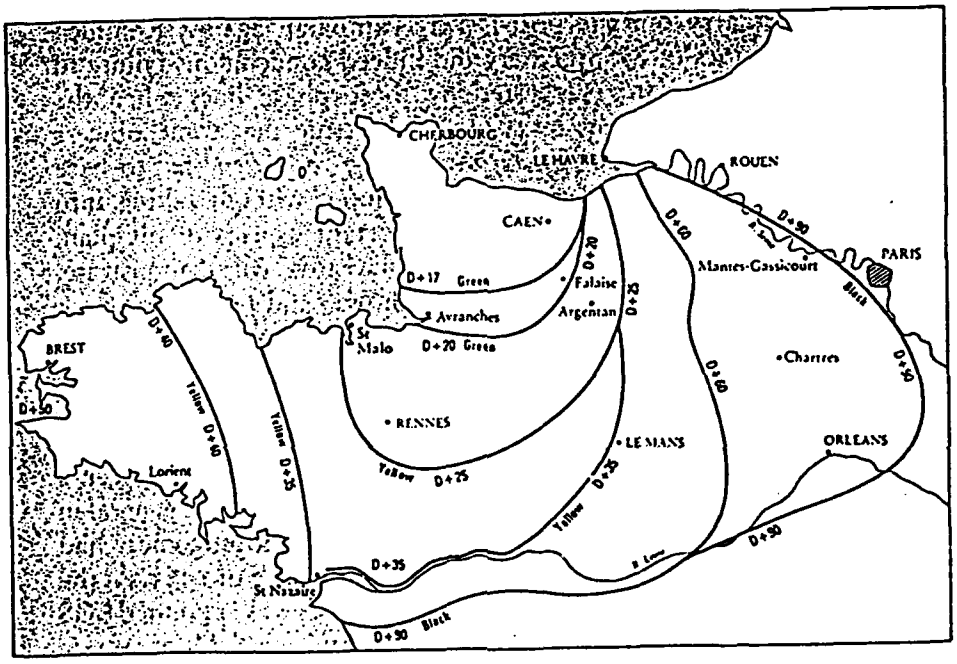
APPENDIX I - MAPS

MAP 1



Source: Dwight D. Eisenhower, Crusade in Europe, (New York: 1948), p. 227.

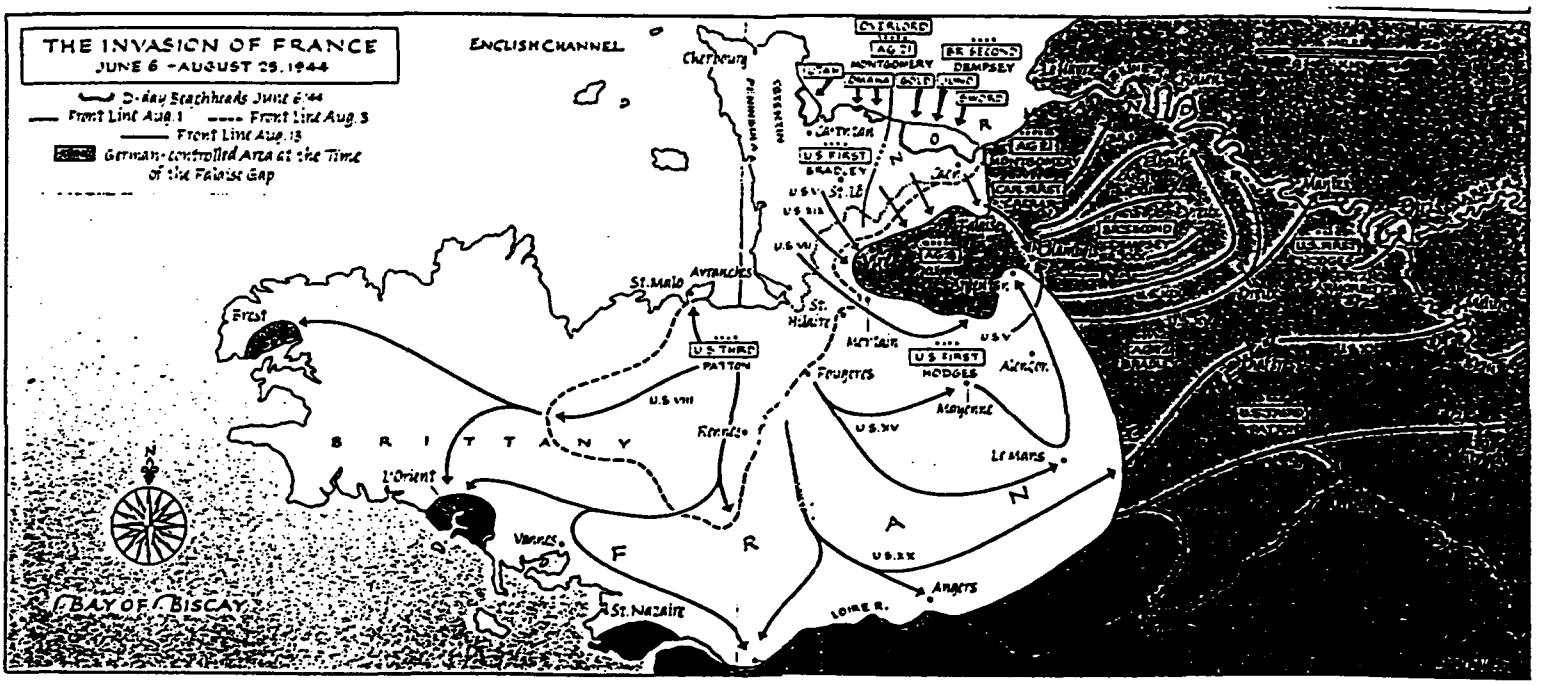
MAP 2



FORECAST OF OPERATIONS D + 17 TO D + 90

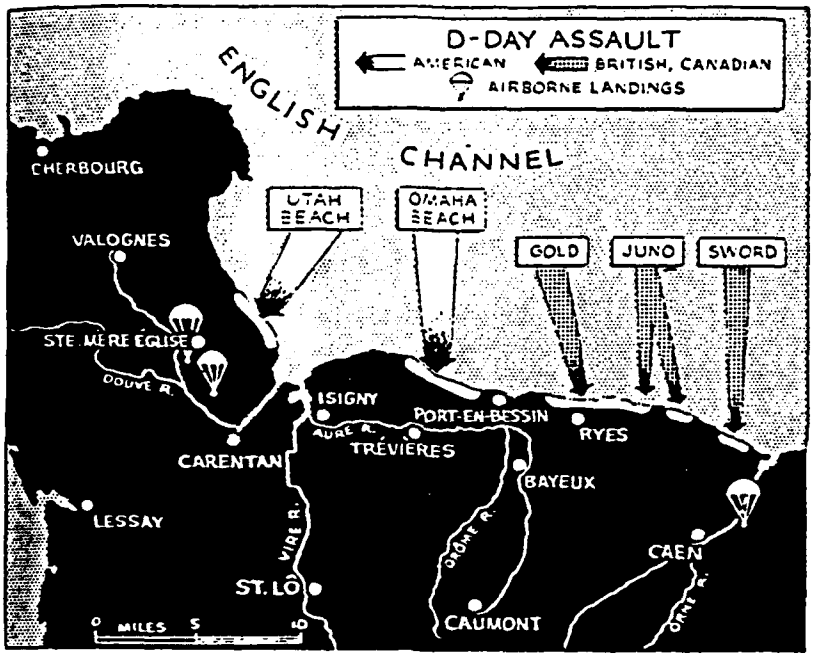
Source: Carlo D'Este, Decision In Normandy, (New York: 1983), p. 91.

MAP 3



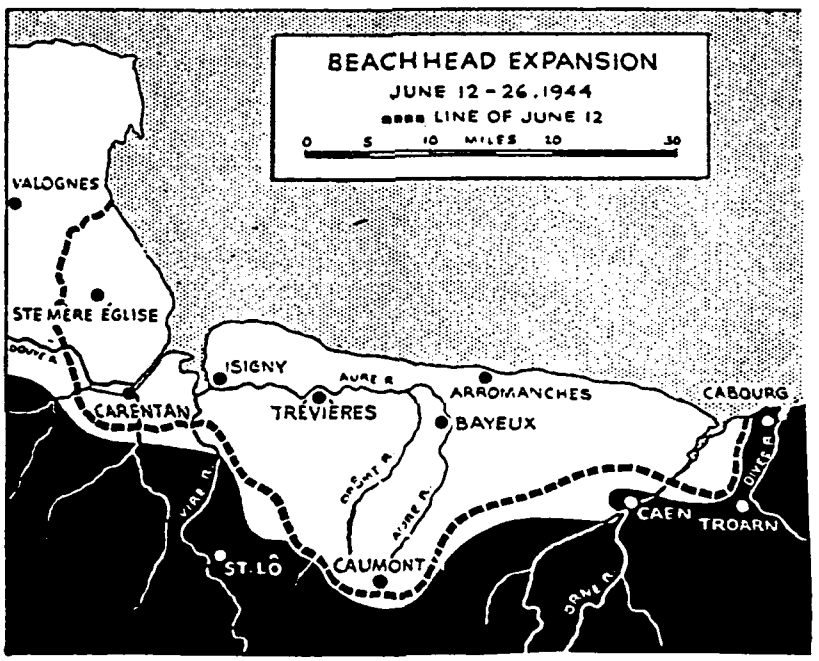
Source: Omar N. Bradley and Clay Blair, A General's Life, (new York: 1983) p. inside cover.

MAP 4



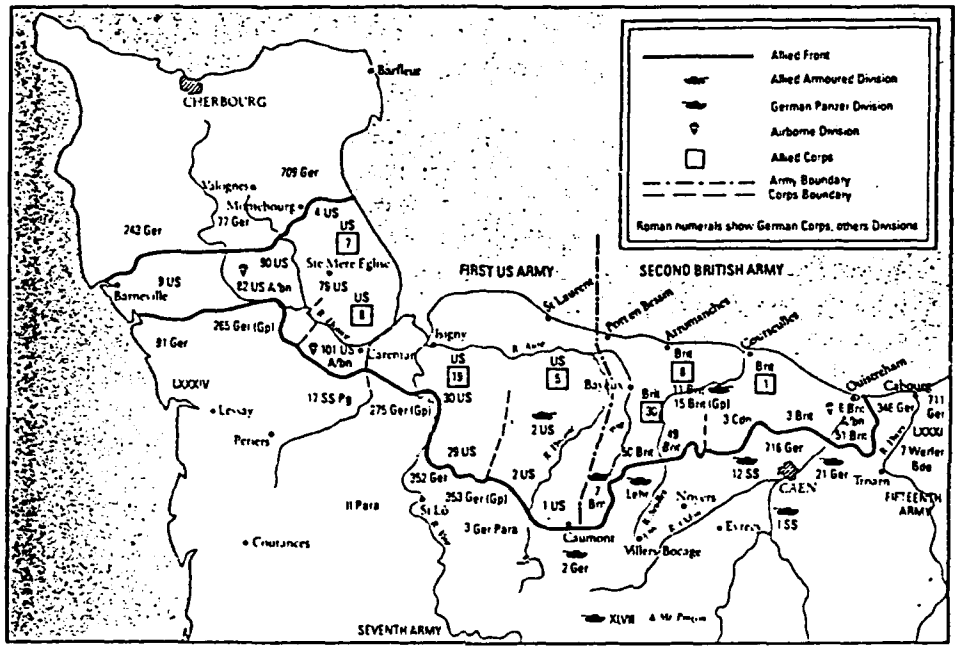
Source: Dwight D. Eisenhower, Crusade In Europe, (New York: 1948), p. 225.

MAP 5



Source: Dwight D. Eisenhower, Crusade In Europe, (New York: 1948) p. 262.

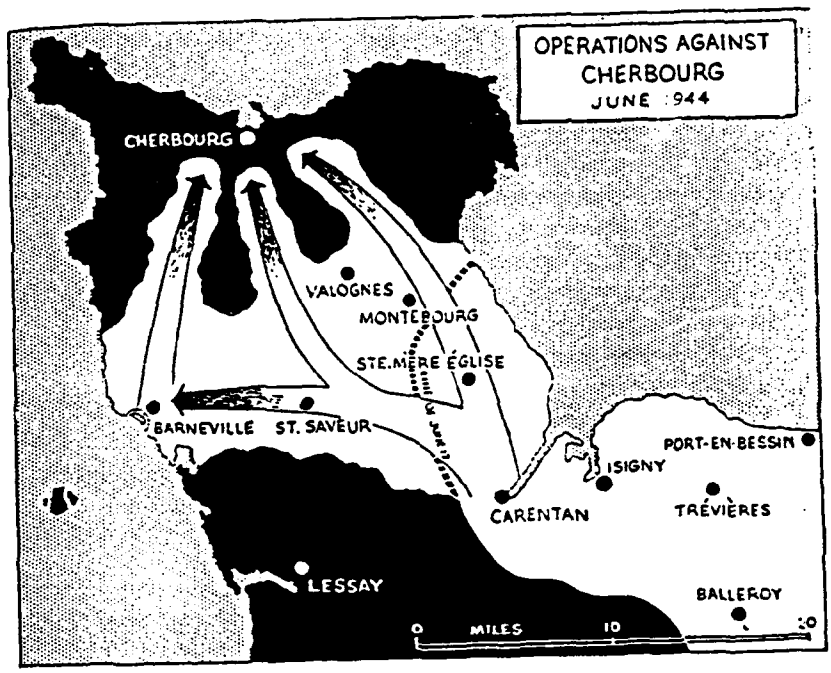
MAP 6



SITUATION MAP, 17 JUNE 1944

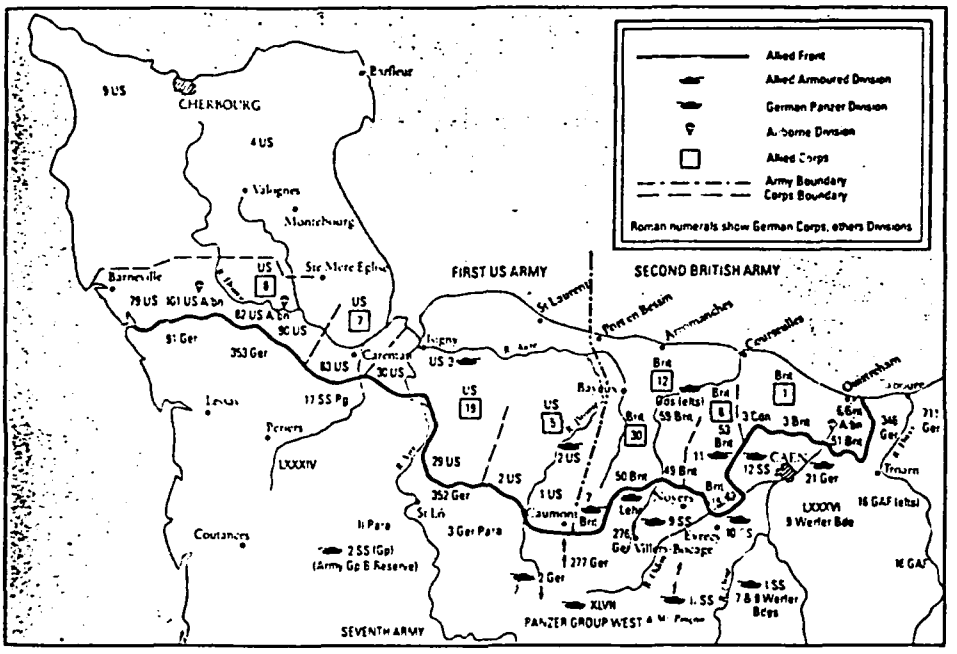
Source: Carlo D'Este, Decision In Normandy, (New York: 1983) p. 198.

MAP 7



Source: Dwight D. Eisenhower, Crusade In Europe, (New York: 1948), p. 259.

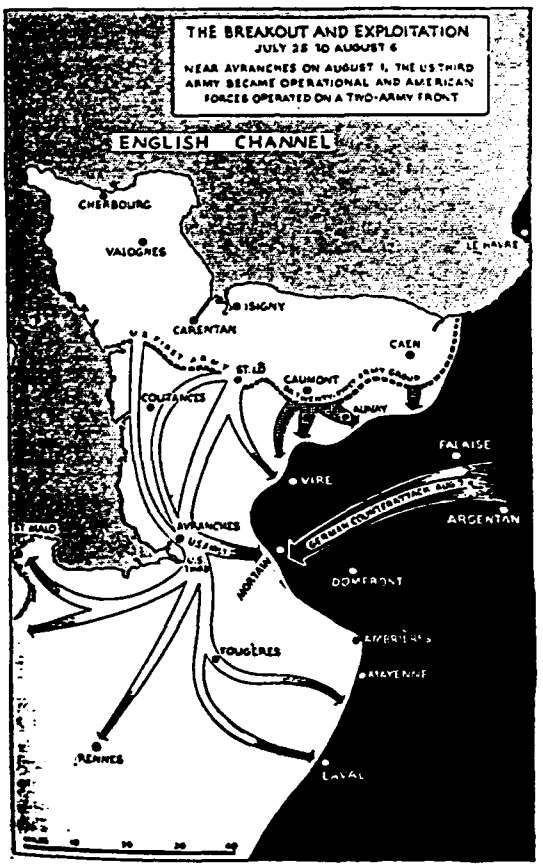
MAP 8



SITUATION MAP, 30 JUNE 1944

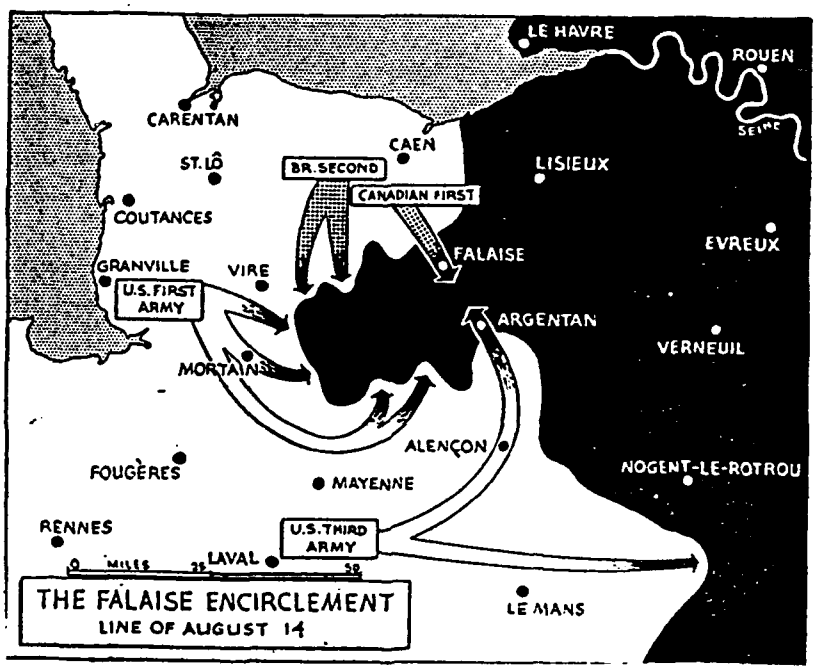
Source: Carlo D'Este, Decision In Normandy, (New York: 1983) p. 251.

MAP 9



Source: Dwight D. Eisenhower, Crusade In Europe, (New York: 1948), p. 273.

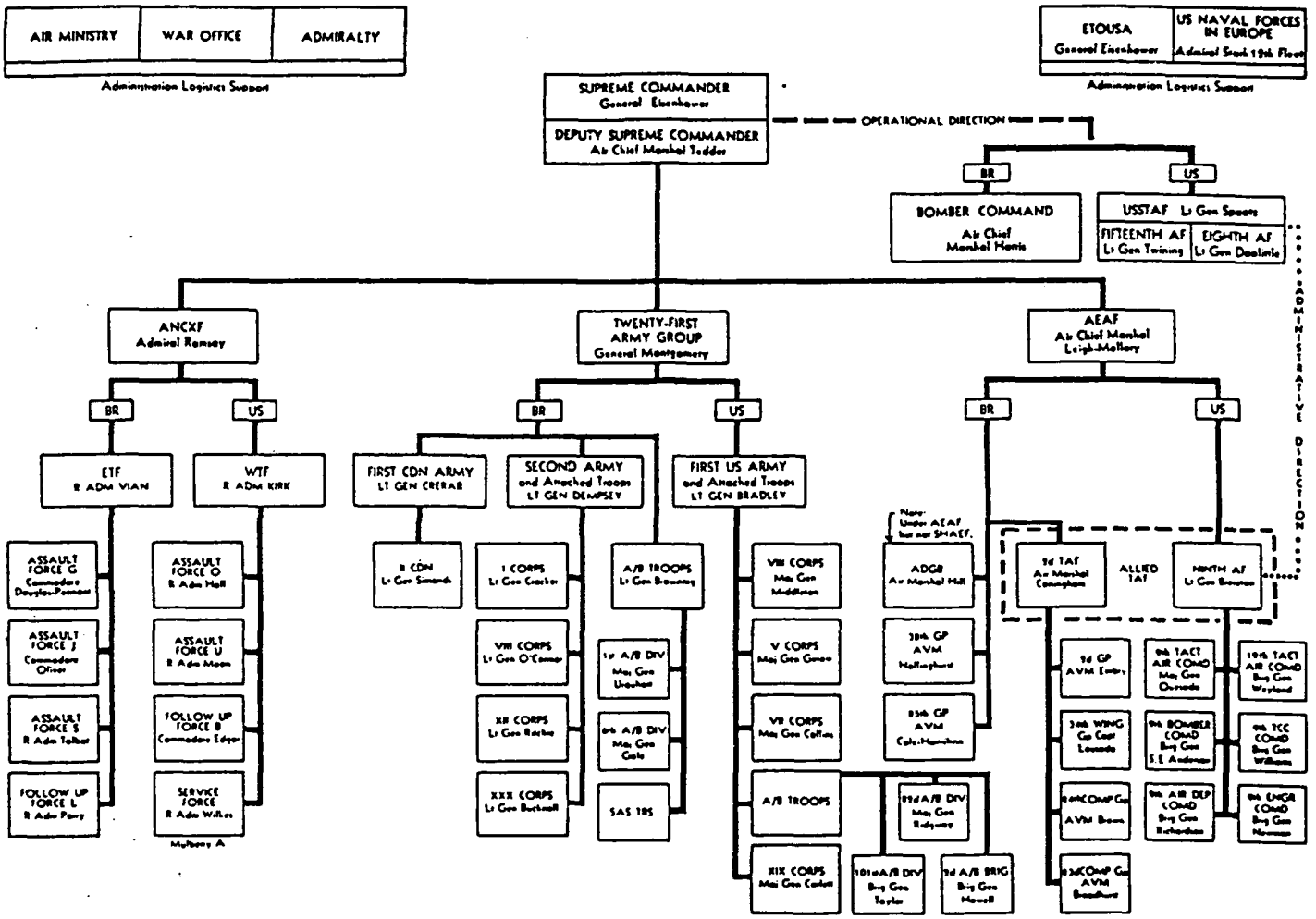
MAP 10



Source: Dwight D. Eisenhower, Crusade In Europe, (New York: 1948), p. 277.

APPENDIX - II

CHART 1



Source: Forrest C. Pogue, The European Theater of Operations, The Supreme Command, (Washington D.C., 1954), p. 159.

APPENDIX - III

DEFINITION OF TERMS

Center of Gravity. The concentration of the enemy strength most vital to him in the accomplishment of his aim.

Lines of Operation. Defines the directional orientation of a force in relation to the enemy. Lines of operation connect the force with its base or bases of operation on one hand and its operational objectives on the other.

Operational Maneuver. The movement of forces in relation to the enemy to secure or retain positional advantage. Operational maneuver seeks a decisive impact on the conduct of a campaign.

Operational Fires. Application of firepower to facilitate operational maneuver in the execution of a campaign or major operation.

Operational Protection. Measures taken to protect the force from operational level maneuver and concentrated enemy air support.

Operational Deception. Actions taken (military or nonmilitary) to protect the operational commander's intent and cause the enemy to act in a manner favorable to friendly forces.

Culminating Point. The point where the strength of the attacker no longer significantly exceeds that of the defender and beyond which continued offensive operations risk overextension, counterattack, and defeat.

Operational Logistics. Those logistical and support actions key to sustaining campaigns and major operations in a theater of operations.

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27. D'Este, p. 213.

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