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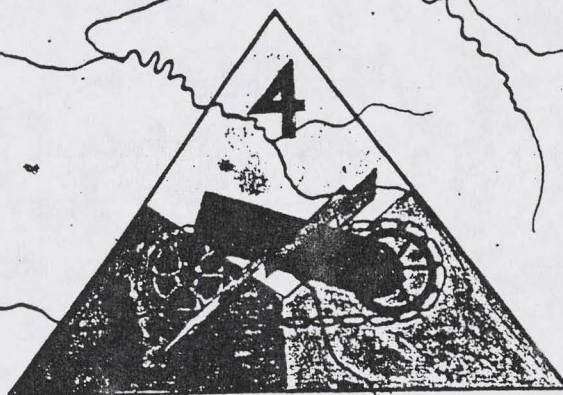
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ARMOR IN THE EXPLOITATION
(THE FOURTH ARMORED DIVISION ACROSS FRANCE
TO THE MOSELLE RIVER)

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A RESEARCH REPORT PREPARED
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1948 - 1949

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MAY 1949



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Brigadier General Bruce C. Clarke
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PREFACE

The purpose of this report is to collect all available data pertaining to the advance of the 4th Armored Division from the area of the NORMANDY breakout to the MOSELLE River, to evaluate the material gathered, process it, and present it in such form that it can serve as a valuable basis for research, study, and instructional material on the employment of armor in the penetration and exploitation.

The 4th Armored Division was selected as a subject of study from the armored units of the Third Army as best typifying the employment of armor in the penetration and exploitation, thus affording the most fertile territory from which to learn lessons, evaluate principles, and draw conclusions that may be applicable to future armored operations.

While this study is not an official document it has been based upon the most comprehensive and detailed research of documents available or obtainable, and upon the personal experiences and recollections of individuals associated with the division during this period. However, it must be borne in mind that the enormous distances covered with great rapidity, in a relatively short space of time, made the issuance of fragmentary orders the rule rather than the exception at all levels of command up to corps, and often precluded the rendering of exact or detailed after action reports by participating units.

No attempt has been made in this study to recount the gallant deeds of individuals or small units; rather an attempt has been made to delve into the application by the division and its major units of the then accepted principles of the employment of armor with a view towards analyzing and contributing to the tactics and techniques of armored warfare in the present and the future.

Considerable difficulty was experienced in the preparation of this report because of incomplete and sketchy information available on the actions of the 4th Armored Division during period covered. With the sole exception of Combat Command A. After Action Reports filed by units of the division were incomplete, inaccurate, and in some cases non-existent. Because of the rapidity of action, Operation Orders of all units including Corps, are lacking. Nor were accurate statistics available on supply and evacuation. Task organizations were not accurately recorded during this phase, again with the notable exception of Combat Command A. Task organization charts within this report are completely accurate only in the case of Combat Command A. Others are approximations.

The preparing committee acknowledges and appreciates the assistance rendered by the following individuals: Brigadier General Bruce C. Clarke, for making available certain reports and histories; Lieutenant Colonels Alexander Graham, Robert M. Parker, Jr., Albin F. Irzyk, Major Ralph M. Click, and Captain John H. Merriam for furnishing eye-witness accounts and recollections; Major M. J. L. Greene for making available maps and materials, and guidance in preparation; CWO R. C. Bush for making available unit histories; and Miss Margaret L. Lockard for typing and stenciling.

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CHAPTER I

INTRODUCTION

During the months of August and September 1944, General George S. Patton, Jr.'s Third U.S. Army electrified the whole Allied world by the speed and rapidity of its advance across NORTHERN FRANCE. Led by armored columns, including the 4th Armored Division, General Patton's forces pierced the German lines in NORMANDY and drove relentlessly forward, wreaking havoc and destruction on a bewildered foe. This great advance, spearheaded by armor, bore out the importance and the necessity of using tank units in modern war. By September 15, 1944, few people questioned the important role of armor in the successful waging of land warfare. The faith and perseverance of two great American soldiers, Major General Adna R. Chaffee and General George S. Patton, Jr., came to fruition on the battlefields of FRANCE. The contribution of these two men in winning World War II can never be exaggerated. Since 1919, and in the face of severe criticism and skepticism they never lost faith in the tank as a mighty and decisive weapon of war, nor did they waver in their role of foremost exponents of armored employment "en masse".

One of the most successful armored units in the Third Army's advance was the 4th Armored Division. Many current doctrines and techniques of armored employment stem from the experiences of this division and the able manner in which they overcame

the obstacles of battle. They did much to prove that armored units are an essential part of the Army battle team.

On 30 July 1944, elements of Combat Command B, 4th Armored Division, seized the high ground immediately to the north of AVRANCHES (T2868). It was expected that the city, which was the objective of the 4th Armored Division, would be tenaciously defended by the Germans. This city was the key terrain and communications center vital to future Allied operations. Its capture would enable General Patton's Third Army to break out of the beachhead area and into the open country of NORTHERN FRANCE with its attendant possibilities of free maneuver.

The importance of AVRANCHES as the strategic gateway to BRITTANY was fully recognized by both sides. To the Americans it was the springboard from which to launch attacks to perform the dual missions of cutting off the BRITTANY PENINSULA and then executing a wide turning movement to the east to outflank the German forces in NORMANDY. To the Germans, possession of AVRANCHES meant an anchor point on which to hinge their crumbling lines in an effort to contain the Allied invasion bridgehead. Further, the Germans well knew the hazards to themselves of an American armored breakthrough at this point.

Gen Lt. Bodo zV. Zimmerman, Chief of Operations, OB WEST, recounted after the war that the Germans felt that if the Americans gained entrance into BRITTANY near the BAY of MONT ST. MICHEL (AVRANCHES) the battle in NORMANDY would be hopeless for OB WEST, "despite all sacrifices".¹

On 31 July 1944, elements of the 4th Armored Division captured AVRANCHES after a short but bitter fight, during which the Germans launched a fierce counterattack which temporarily placed the issue in doubt and nearly engulfed the headquarters of Brigadier General Holmes E. Dager's Combat Command B. General Dager personally organized and led an American counterattack force, which included some of his headquarters personnel, that repelled the enemy and broke the back of the German assault. AVRANCHES was then quickly secured and 2000 prisoners taken. For this action General Dager was awarded the DSC (GO 60, Hq TUSA).²

Although German resistance at AVRANCHES was expected to be bitter, and for a day it was, the armored attack swept through this key city and seized intact crossings of the tactically important LA SEE and LA SELUNE Rivers. The Americans have often attributed the seizure of these vital crossings to the speed and dash of our attack and the attainment of surprise. Without minimizing our efforts this is only partly true. The Germans were in part aware of the situation but in large measure were unable to react due to the disintegration of their units.

General Elfeldt, who took command of the German LXXXIV Corps holding the AVRANCHES sector on 28 July 1944, stated that his corps, comprising the remnants of seven divisions, was in a state of confusion and unable to move because the Allied air forces dominated the area. LXXIV Corps was unable to hold a continuous front as some of the divisions had only about three hundred infantry left and the artillery was much depleted.³

Expecting the attachment of the full-strength 116th Panzer Division to use as a counter-attacking unit to relieve the pressure, General Elfeldt ordered all troops south of the LA SEE River near AVRANCHES to defend the south bank while the troops to the east were to defend in place until the 116th Panzer Division arrived that night. Unfortunately for General Elfeldt the 116th Panzer Division never arrived as it was diverted to another danger point while on the way.⁴

General Elfeldt goes on to state that on the 1st and 2d of August he was reinforced by two nearly full strength divisions and the detoured 116th Panzer Division. LXXXIV Corps had orders to halt a further breakthrough between BRESCY (T4220) and VIRE (T6341) and to delay the expected American thrust southeastwards from AVRANCHES, as powerful counterthrust was to be made by panzer corps, under General Von Funk. This was subsequently reinforced, to provide a counter-stroke of larger scale, by all the tanks that could be made available from General Eberbach's 5th Panzer Army. Events were not to favor General Von Funk, however, because Elfeldt's forces did not hold and fell back to the east under pressure. The 4th Armored Division was now moving swiftly to the south, leaving the immobile and unhappy Elfeldt far to their rear, outflanked and outsmarted. In his postwar remarks the hapless general told B. H. Liddell Hart that the Americans were not "tactically clever"; that U.S. First Army troops missed several subsequent chances of cutting off his corps headquarters.⁵ One does not have to be a deep student of grand strategy to see that General Elfeldt viewed the problem

with the small solution while the Americans were employing the large or decisive solution. General Elfeldt's war encompassed but a little bit of NORMANDY while the Americans viewed their battleground as all of NORTHERN FRANCE.

With the fall of AVRANCHES, Colonel (later Brigadier General) Bruce C. Clarke's Combat Command A, 4th Armored Division passed through and around other elements of the division, seized crossings over the LA SEE and LA SELUNE Rivers, and prepared to continue the advance southward against the enemy. While General Elfeldt was puttering around with plans and fretting over reinforcements, it was this same Combat Command that acted and lunged far to the south in BRITTANY during the first two days of August.

Thus was the way opened for the 4th Armored Division, led by Combat Command A, to break clear of organized German resistance and embark on an exploitive advance unequalled in history. In but a month, the 4th Armored Division swept over 1000 miles before grinding to a halt on the banks of the MOSELLE River. This historic advance carried them from the COTENTIN Peninsula on the ENGLISH CHANNEL southward to LORIENT on the ATLANTIC Ocean, thence eastward across the breadth of FRANCE to the MOSELLE River. One can only speculate how much farther the division may have gone toward the German Fatherland had not the American supply lines collapsed from strain and overextension.

Prior to the invasion of EUROPE considerable debate and controversy had taken place among experienced military men and tacticians concerning the ability of armor to operate effectively

SITUATION 31 JULY 44

BAY OF THE SEINE

GULF OF
ST MALO

US
BRITISH
ENEMY

UNITS BELIEVED ON WAY TO BATTLE AREA		
UNIT	OLD LOCATION	REMARKS
265 INF (REM)	BRITTANY	
243 INF	"	
2 PRCHT	GHEENT	S OF SEINE
9 PZR	NIMES	
11 PZR	BONDEAUX	

against stubborn German resistance on a continental land mass and where the enemy would have large troop formations and interior lines of communications. Those who had little faith in armor pointed out that the German armor successes against the French in 1940, were made possible by the demoralized condition of FRANCE and her armies, and by the lack of modern and sufficient weapons and equipment.

However, those in command had clearly evaluated the situation and their decision to employ armor was never to be regretted. The employment of armored divisions to penetrate and then to exploit enabled our forces to score a series of lightning advances and victories that surely saved us many casualties and time in the prosecution of the European Campaigns.

To evaluate properly the decision of higher commanders to employ an armored division in the initial penetration and exploitation and the subsequent gigantic exploitation the width of Europe's second largest land mass, it is necessary to understand the strategic and tactical situation existing at the time and the forerunning events that led up to the 4th Armored Division breakout, supported by others, at AVRANCHES.

THE ENEMY⁶

(Enemy Forces and Plan of Defense)

In May 1944, one month prior to the Anglo-American invasion of NORMANDY, Germany's war leaders felt confident that the Nazi war machine could hurl back any attack on the western portion of "Festung Europa". Although the Germans realized the Western Allies would launch a full scale invasion from the British Isles sometime

in the near future, they still considered the Russian Army the greatest threat to the homeland.

In expectation of the impending invasion the German Strategic War Plans of 1944, called for assuming the defensive on the Russian Front and in ITALY, while defeating the Allies in Western Europe. It was their intention to thrust the invaders back into the sea from whence they came or at the very least to contain them in a limited beachhead area. A quick decision in the west would dispel the danger on that front for some months to come and would enable the great bulk of the Wehrmacht to be employed against the Russians.

Although the German Ground Forces of May 1944, were not the able force they were in 1942, there were still 6,000,000 troops available formed into 320 divisions, logistical elements, and headquarters, as shown in Table 1.

50 Panzer and Panzer Grenadier Divisions	600,000 troops
200 Infantry Divisions, Offensive Type	2,400,000 "
70 Infantry Fortress Divisions	700,000 "
Corps, Army, GEQ, and S.O.S.	2,300,000 "
320 Divisions, all types	6,000,000

TABLE 1 - Composition of German Army, May 1944

It should be noted now that the strength of a German Panzer Division at the beginning of the war was 15,000 officers and men and 400 tanks. The 1944 edition of the same division contained only 8 - 12,000 officers and men and 200 tanks. Other types of divisions had decreased in about the same proportions of strengths.

The dispositions of German troops at this time (Table 2) points up German thinking concerning a western invasion and the necessity for quickly repelling such an attempt. Surely more troops were stationed in FRANCE and the Low Countries than required by occupation alone.

FRONT	DIVISIONS
Russian Front, including FINLAND	195
FRANCE and the Low Countries	59
ITALY	25
HUNGARY, YUGOSLAVIA, and ALBANIA	15
GREECE, CRETE, AEGEAN ISLANDS	10
NORWAY	12
DENMARK	4
	320

TABLE 2 - German Army Troop Dispositions - May 1944.

The German Air Force of June 1944, was in a rather disastrous shape, though by no means defunct. Four years of war had taken its toll of German air might, and though still capable of sporadic attacks, the Luftwaffe was no longer capable of organized and sustained operations in the face of the Allied Air Forces. Estimates of the size and disposition of the German Air Force in June 1944, are as shown in Table 3.

FRONT	No. AIRCRAFT
Western Front (including GERMANY)	1300
GERMANY and Central EUROPE	1600
Mediterranean Area	700
Russian Front	1700
	<u>5300</u>

TABLE 3 - Disposition of German Air Force, June 1944

The above examination of Germany's overall Army and Air Force situation indicate to what extent she was still capable of resisting any invasion attempts or of containing an invasion. Opposed by 59 German divisions in FRANCE and the Low Countries, how then were the numerically inferior Allies able to launch a successful seaborne invasion and later to overrun the German forces so rapidly with such disaster to the Hitlerites.

At this time there were two German Army Groups in FRANCE and the Low Countries (Figure 2), Groups B and G, under the overall command of Field Marshal Gerd Von Rundstedt, who was considered one of the ablest officers in the German Army. Army Group B, commanded by Field Marshal Erwin Rommel, included the Seventh Army in the BRITTANY PENINSULA area, and the Fifteenth Army along the Channel Coast. These two armies were commanded by Generals Dollman and Salmuth, respectively. The strength of Army Group B was about 42 divisions. Army Group G, commanded by Field Marshal Blaskowitz, included the First Army in the BISCAY coast area, and the Nineteenth Army in the valley of the RHONE. First Army was under the command of General Obstfelder and the Nineteenth under General Sodenstern.

LEGEND

DIRECTLY SUBORDINATE

SUBORDINATE FOR TACTICAL PURPOSES ONLY

THEORETICALLY SUBORDINATE
ACTUALLY DIRECTLY UNDER OKW

0000
BELGIUM -
N. FRANCE

0000
FRANCE

XXXXXX
OB-WEST

RUNDSTEDT 1942 - JUL 44 / SEP 44 - MAR 45.

KLUGE JUL - AUG 44.

MODEL (TEMP) 17 AUG 44 - 5 SEP 44.

BLUMENTRITT C OF S. SEP 42 - SEP 44.

XXXXXX
THIRD AIR
FORCE

NAVY GROUP
WEST

XXXXXX
G BLASKOWITZ

XXXXXX
B ROMMEL

XX XX
NINE -
TEENTH ⑦

XXXX
FIRST ①②

XXXX
FIFTH
PANZER

XXXX
SEVENTH ⑨

XXXX
FIFTH -
TEENTH ⑩

XXXX
WEHRMCT
NETHER-
LANDS

XX
338

XX
159 RES.

XX
708

XX
16

XX
49

XX
17 SS PZ

XX
3 PZ GREN

XX
15 PZ GREN

XX XX
SS PZ ①

XX
2 SS PZ

XX
9 SS PZ

XX
77

XX
91

XX
243

XX
5 PCHT

XX
6 PCHT

XXX
XXV (CUT OFF AT LORIENT)

XX
265

XX
56 SECURITY

XX
281 OST

NOTES

① From Army Gp G to Army Gp B 9 Aug 44. Reverted to Army Gp G 5 Sep 44.

② To Army Gp B 5 Sep 44.

③ Often placed directly under OKW as reserve.

④ Often placed directly under OKW as reserve.

⑤ Genost BOLLMAN (died Jul 44), Obstgruff HAUSSER (WIA Aug 44),

Genl Z EBERBACH.

⑥ Gen OSTENBERG

⑦ Gen SODENSTERN

⑧ Genost SALMUTH

Although the 59 divisions of Von Rundstedt's command were distributed throughout the 225,000 square miles of three Western European countries, the Germans felt that the highly developed rail and highway systems would enable speedy concentration under any conditions. Even should the Allies succeed in securing a solid beachhead the German High Command felt that on the basis of past performance counteroffensive forces could quickly drive the Anglo-Americans into the Channel.

THE ALLIES⁷

Months before the actual invasion took place the Allied planning staff completed the essential features of the general plan, including the choice of the landing area and the troop and equipment requirements. The overall plan contemplated four principle phases as follows:

1. Preliminary Phase - or softening up period. Every means would be employed such as air bombardment, propaganda, political and economic pressure, and sabotage, to soften the enemy. Special emphasis was to be placed on the destruction of the German Air Force.
2. Assault Phase - Establishment of the beachhead.
3. Follow-up and build-up phase to extend the beachhead, seize the port of CHERBOURG, and cover airfield construction.
4. Break Out and sweep to the East.

The third phase, the follow-up and build-up phase, which was the forerunner of the breakout, took 48 days from 6 June to

24 July. Fighting was hard and vicious as the German Army fought a tenacious battle, first to repel the invasion, then to contain it. Although Allied casualties were high (115,665 from D-Day to 20 July) their achievements were great. These included (1) a successful landing on a hostile shore and the penetration of Hitler's famed Atlantic Wall; (2) the capture of a major port, CHERBOURG, that was rapidly being rendered serviceable; (3) the consolidation of an expanded beachhead; (4) a weakening of the German defenders by destruction and mounting battle weariness. By the end of July the Allies had about 1,000,000 troops, including 30 divisions, on French soil.

The supply problem, however, was more serious, especially with the lack of suitable operating harbors. Even the elements combined with the enemy and severe storms in mid-June halted all unloading operations at OMAHA BEACH, wrecking the artificial breakwater and smashing the floating docks. With the abatement of the storms the Supply Forces quickly reestablished the flow of supplies. So efficiently did they operate that before long over 20,000 tons per day were flowing across UTAH and OMAHA BEACHES in addition to the thousands of troops being landed daily.

However before the Allies could launch their great offensive to break out of NORMANDY and into the open country of NORTHERN FRANCE it was necessary not only to build up supplies and manpower but to secure maneuver room and jump-off positions. Therefore in early July, the U.S. Armies opened the Battle of the Hedgerows and

the struggle for St. LO in order to gain favorable attack positions and to free our armies from the restrictive marshlands and hedgerow country so characteristic of the COTENTIN PENINSULA.

From 7 July until 22 July the battle raged, with Americans and Germans alike sustaining severe and damaging losses. In the ST. LO battle alone the XIX Corps of First Army suffered 11,000 casualties in a drive that gained from three to seven miles of ground.⁸ At first glance such losses might appear to be prohibitive, but close studies show that the victories in the hedgerows and at ST. LO set up the situation that made possible the great exploitations of August. ST. LO was in fact the liberation of FRANCE!

There is neither time nor space here to discuss the details of the ST. LO Battle. Suffice it to say that the battle was fought courageously and well. The gains to our forces were immeasurable. Not only did we attain the advantages of favorable ground, maneuver room, and time for the build-up and regrouping, but the weary forces of the enemy were severely battered. His reserves were pulverized, his armor was committed piecemeal and subsequently destroyed, and no where could he replace his losses. The closing days of July brought to a close a well defined phase of Allied operations. Through coordination of air, ground, and sea forces a successful bridgehead had been firmly established, maneuver room obtained, and sufficient areas in which to concentrate supplies and reinforcements had been made available.⁹

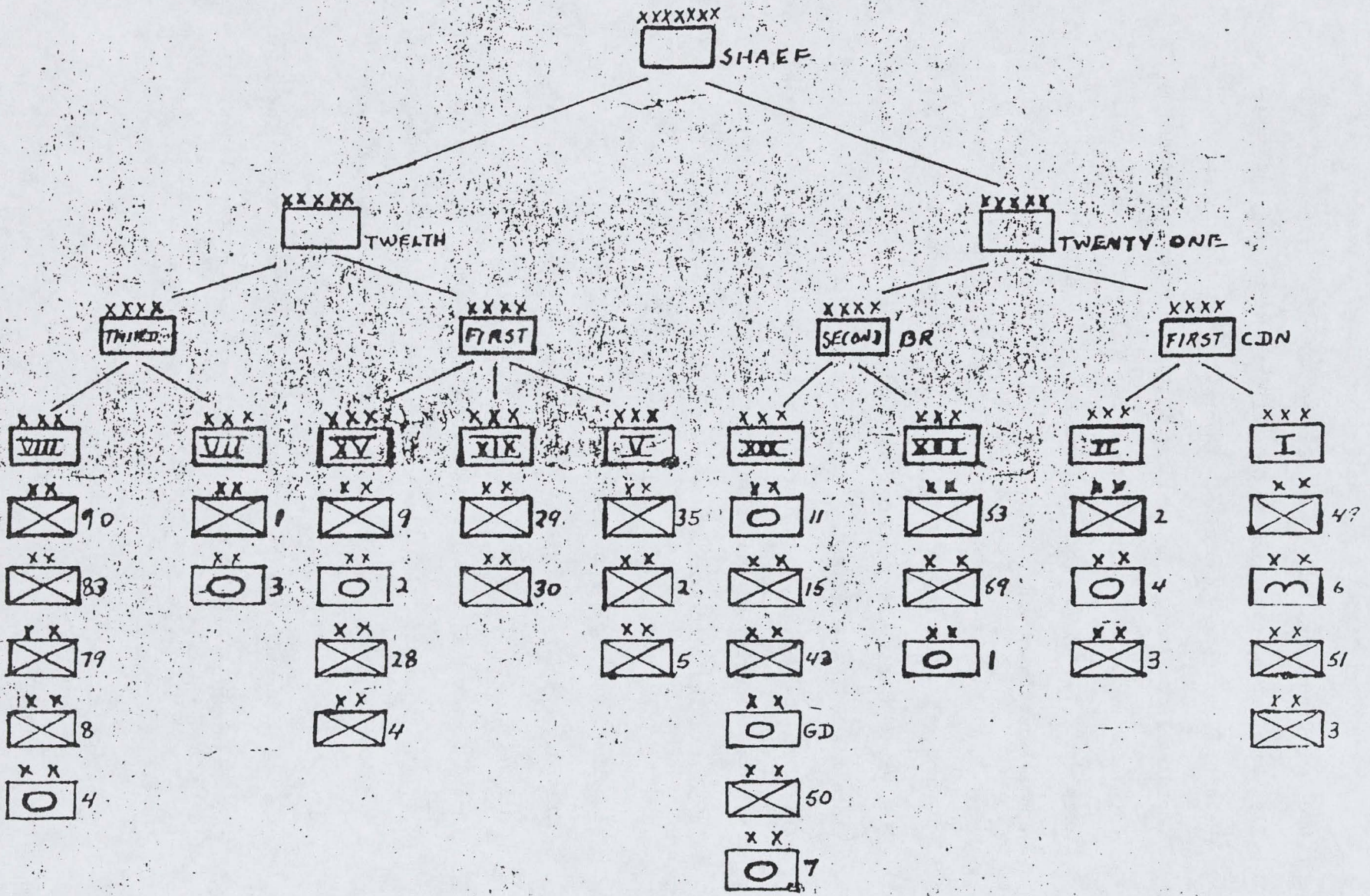
General Eisenhower, The Supreme Allied Commander, now had two Army Groups available, the 12th and the 21st (Figure 3). The 21st Army Group, commanded by General (later Field Marshal) Sir Bernard L. Montgomery contained the British Second Army and the Canadian First Army. The American 12th Army Group, commanded by Lieutenant General (later General) Omar N. Bradley, was composed of the U.S. First Army and General George S. Patton's newly operational Third Army.

With the completion of the grouping of forces the stage was now set. General Bradley's 12th Army Group was to penetrate the enemy's left wing, pushing southward and then southwestward into the BRITTANY PENINSULA, and at the same time to drive toward PARIS and the SEINE River line. The 21st Army Group was to maintain the security of the Allied left flank and to swing around even with the 12th Army Group as it advanced toward the SEINE.

Once the penetration had been made the Allied Plan contemplated the employment of armored divisions to expand the breach in the enemy lines and then exploit rapidly to the south, east, and west. The decision to employ armored units in this manner was based on the belief that the destruction of the enemy and the gaining of desired objectives, the SEINE River line, could be accomplished more rapidly and economically with armor in the lead. This decision was not to be regretted.

The enemy was off balance; our forces were ready; the tip of the sword was to be set in motion. The 4th Armored Division,

Fig. 3



destined to lead the way across FRANCE, started the push to
AVRANCHES and beyond.

NOTES FOR CHAPTER I

¹Department of the Army, German Report Series, MS #B-308,
OB WEST, A Study in Command.

²Combat History - Fourth Armored Division (17 July 1944 -
9 May 1945).

³The German General Talk, by B. H. Liddell Hart.

⁴Ibid.

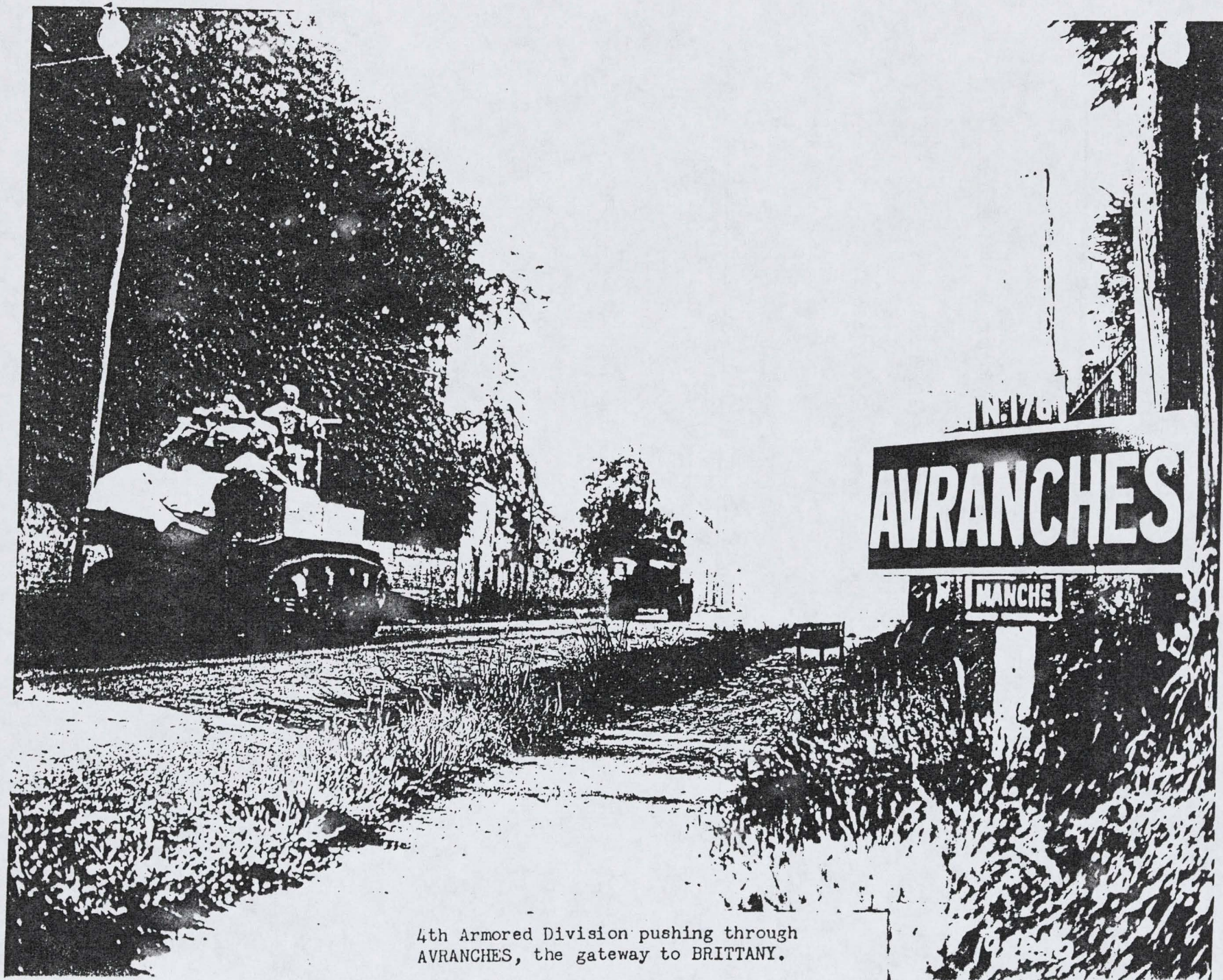
⁵Ibid.

⁶The Invasion of Western Europe, Part I (6 June to 31
December 1944), Department of Military Art and Engineering,
United States Military Academy, West Point, New York, 1946.

⁷Ibid.

⁸ST. LO, Historical Division, U.S. War Department

⁹Ibid.



4th Armored Division pushing through
AVRANCHES, the gateway to BRITTANY.

runs east and west across the northern end of the city and the LA SELUNE River runs in the same direction south of the city. Fortunately, the bridges and dams over these rivers were still intact as the events of the 31st of July will bear out.

The eventual taking of the city, however, was made somewhat easier because by this time there was ample evidence to show that the enemy was becoming highly disorganized and astounded by the rapidity of the 4th Armored Division's attack. As an example of this, a complete divisional hospital with all its personnel and trains intact was captured a few miles north of AVRANCHES. In addition, the enemy could be observed fleeing from the city to the east.³

In order to capitalize on the situation, the 8th Tank Battalion accompanied by elements of infantry was ordered to move immediately in the direction of TIREPIED (T3519) along the LA SEE River and seize crossings over the river in case bridges north of AVRANCHES were blown. They fought all night as they moved toward TIREPIED destroying many enemy carts, wagons, and impedimenta as the enemy attempted to flee to the east. This was a bold and daring exploit especially since they were definitely in the heart of enemy territory and didn't know what kind of forces or how many might oppose them. This acceptance of a risk was characteristic of the division and this battalion by accepting it, succeeded in taking TIREPIED the following morning and in addition secured all bridges in the vicinity.

The remainder of CCB went into position on the high ground north of the city, preparatory to an assault the next day. CCA and the remainder of the Division which had been following CCB, closed early the next morning.

On the morning of the 31st, the enemy opened up with all its weapons, mainly antitank guns. Their fire was sufficient to immobilize the infantry of CCB moving up to the city and greatly restricted the movement of vehicles. Again the P-47's of the XIX TAC aided by the Division artillery adequately neutralized these guns to permit the infantry to work their way into the city and clean it out.

While CCB was engaged in cleaning out AVRANCHES, CCA, commanded by Colonel (later Brig. Gen.) Bruce C. Clarke, skirted to the east to block escape routes of the enemy. To further exploit the Division's success, CCA split into four task forces and sped south to seize crossings over the LA SELUNE River at PONTAUBOLT (T2909), at DUCEY (T3308), at ST. LAURENT (T3503), and at LES BIARDS (T4104). This action alone had a far reaching effect on the success of the whole Brittany campaign. Had these crossings not been secured immediately, the enemy could have blown the bridges and opened the dams thus flooding the entire area. This would have undoubtedly resulted in a long and costly operation to force a crossing against determined enemy resistance. In addition, it would have given the necessary time to reorganize his ruptured defenses.

By nightfall of the 31st, the key city of AVRANCHES, where tank columns turned the corner into Brittany, was completely subdued. All dams and bridges across the LA SELUNE to the southeast as far as DUCEY were secured. In five days of fighting, the Division had smashed the 77th, 91st, and 243d German Infantry Divisions, wiped out the 6th Parachute Regiment, and dealt severe losses to the 5th Parachute Division and the 2d SS Panzer Division.⁴

To further demonstrate the flexibility of armor, consider CCA's situation on 1 August 1944. Colonel Clarke received orders at 0500 to report to Division Headquarters northwest of AVRANCHES. At 0530, he radioed back to alert all troops for movement prior to 0900 and by 1000 the Combat Command was on the road with a new Division mission.⁵

On this same day, the Division and VIII Corps passed to control of the Third U. S. Army, commanded by Lt. Gen. George S. Patton, Jr., the Army having become operational at this time. Third Army's first mission was to drive south and southwest from AVRANCHES, take the RENNES (Y0516) - FOUGERES (Y3878) area, then turn west to seize the Brittany peninsula and open its ports to allied use.

In furtherance of this plan, the 4th Armored Divisions's new mission was to capture RENNES. CCA, early on the morning of 1 August, led the Division attack followed by CCB later that afternoon. Upon reaching the outskirts of RENNES, the leading elements of CCA met very strong resistance in the form of converted anti-aircraft defenses firing at point blank range and were forced to withdraw to the north of the city under cover of smoke.⁶

Apparently they were not aware of the strength of the RENNES defenses and had expected to move into the city without too much trouble. General Wood being notified of the powerful defenses ordered CCA to develop the city's defenses and contain the city but not to launch an assault. The remainder of the Division closed on CCA while they were thus engaged. It was here while bivouaced north of RENNES that the Division experienced its first air attack. Three enemy planes were destroyed by the 489th Antiaircraft Artillery Automatic Weapons Battalion SP, the unit which was to establish an ETO record of 35 planes destroyed in one day and another record of 134 enemy planes destroyed in ten months of combat.⁷

Because of the type defenses in and around RENNES, additional infantry was needed before an assault on the city could be made. While waiting for the infantry to move up orders were issued to the Division late on the afternoon of the 2d to move in the direction of BREST and establish blocking positions in the vicinity of LUDAC (X2167) and PONTIVY (X0455). The Division Reserve was to continue to contain the city of RENNES until the 13th RCT of the 8th Infantry Division arrived to help the 4th Armored Division assault the city. The division was about to carry out these orders early on the morning of the 3d but they were suddenly countermanded and they were now ordered on a new mission. This new plan called for an encirclement to the west of RENNES, block escape routes of the enemy and prepare for continued advances to the east. To enable the Division to move out, trucks from the Division Trains and

CCA Trains were dispatched to the 13th RCT enabling them to reach RENNES faster and take over the area held by the 4th Armored. This action, however, left the Combat Command without trains.⁸

Both Combat Commands moved out on different routes. CCA moved west to the vicinity of MONTFORT (X8158) and BEDEF (X8263) south to PIPRIAC (H7921), then east to MESSAC (H9023) where they captured the bridge over the VILLAINNE River and then continued on to capture the communication center of BAIN de BRETAGNE (X9924).

CCB followed CCA, circling west around it, through MONTFORT, south to GUER (X6732) and then east to Derval (H9904). Resistance was extremely light.

Each Combat Command, upon reaching their objectives, received additional orders; CCB to continue on to ST. VINCENT (J1203) to the east and cut off any enemy coming from the south, CCA to turn north and block the escape routes to the south and southeast of RENNES while the 13th RCT pressed the attack on the city from the north.

Without a noticeable halt; the Commands proceeded to carry out these new instructions. CCB marched throughout the night of the 3d, arriving in ST. VINCENT about 0800 the next morning. The area was immediately outposted and the remainder of the Combat Command coiled in a bivouac area preparatory to moving the next day. The only enemy encountered were disorganized elements in the vicinity of CHATEAU BRIANT (J2209) and were quickly subdued by the 51st AIB.

CCA split into two task forces, one moving to JANZE (J1436), the other to CREVIN (J0234) and thus cut off all roads from the VILLAIN River to Highway N163 on the right. The Command remained in this position until the afternoon of 5 August. Large numbers of enemy troops were either captured or killed as they attempted to flee south as the 13th RCT attacked RENNES from the north. Fighting continued throughout the 3d and 4th of August when the city was finally captured by the 8th Infantry Division Combat Team. On that same day, Col. Bruce C. Clarke led a task force up Highway N137 to contact friendly infantry occupying RENNES and opened a direct supply route for the Division. This supply route was sorely needed since half of the Combat Command vehicles were out of gas after a days fighting. There was no other way to replenish the supply since all the trains had been left behind north of RENNES. Had the Division been forced to move at this time half of their vehicles would have had to be left behind.

With the taking of RENNES, the capitol city of Brittany was liberated and the entire peninsula was almost cut in two.

The 4th Armored Division in its long slashing moves had completely disrupted the enemy's rear areas and had destroyed many of his supply installations. The Division, however, had learned an important lesson. Never again would it pull out leaving its supply vehicles behind. Also, in future moves, it became SOP to overload all trucks 50 percent of their rated capacity and to carry seven days rations in each combat vehicle.⁹

To complete the severing of the Brittany peninsula, the Division was ordered to continue their attack to the west. CCA was given the mission of taking VANNES (HLS08). This order was carried out to the letter on the same day with very little trouble.

CCB was given the task of taking LORIENT (G7322). Within three days, the Command was on the outskirts of the city. During this march, they moved with reconnaissance troops and infantry out in front. In this sort of formation, had any resistance developed, a delay would have occurred while by-passing tanks to the front.¹⁰ Fortunately, the small amount of resistance confronting them was quickly dealt with by FFI personnel whom the Command continually met along the way, always holding bridges and critical terrain features.

It should be mentioned here that by now supply lines were becoming exceptionally long, longer than the Division had ever experienced. Supply vehicles had to go over 100 miles, all the way back to AVRANCHES in order that the Combat Commands could keep moving. Only small protective forces accompanied these vehicles over the long supply route. This was made possible, again, by the excellent assistance rendered by the FFI who kept the roads open by occupying strategic towns and critical terrain features. Never during the entire Brittany campaign was supply ever a serious problem.¹¹ Part credit must go to the FFI who aided materially in keeping these key roads open.

Upon reaching the city the morning of the 7th, they found it strongly defended, consequently, CCA was ordered to the scene to reinforce CCB. Still finding the city too difficult to handle, both units began to develop and test the enemy defenses, continuing in this activity throughout the 8th of August.

Realizing the Division incapable of taking LORIENT without reinforcements, and to forestall any attempts on the part of the enemy to move troops up from the south, Corps issued new orders. CCB was to contain the city, reinforced with Corps artillery, while CCA was to move on NANTES (0056). And so from the 9th of August until the 15th when they were relieved by the 6th Armored Division, CCB successfully carried out its assigned task. During that time they broke up many attempts on the part of the enemy to supply their besieged garrison.

Meanwhile, CCA with a ^{re} constituted Combat Command, moved out at 0900, 10 August, with the mission of containing the city of NANTES and patrolling the river line ST. NAZAIRE (N5662) to ANGERS (08279).

CCA moved east across the VILLAIN River to BAIN de BRETAGNE, then south through NOZAY (00294) and HERIC (N9976) where they relieved a BCT of the 5th Infantry Division. By 1600, CCA had covered approximately eighty miles and destroyed or driven into the city all enemy forces. In addition, their own force was disposed to fulfill the mission of containing NANTES and patrolling the river line. This was a typical screening mission for an

armored command. Although the enemy was superior in force both in ST. NAZAIRE and NANTES, by active patrolling and minor offensive action, the command was able to create the impression that a much larger force was in the area and in addition was able to keep the enemy off balance.¹²

During the night of the 11th, heavy explosions in the city indicated the enemy was destroying dumps and installations. Civilian information indicated the enemy was withdrawing. Immediately CCA requested permission to enter the city with light forces. Permission was granted and, aided by the FFI who led them through mined areas, CCA stormed the city and by nightfall had subdued all enemy resistance north of the LOIRE River in that area.

The next day, the 13th of August, the 4th Armored Division came under the control of XII Corps, whose mission was to pursue the retreating enemy and to protect the south flank of Third Army. At this time, the 4th Armored was holding the south flank of XII Corps. Both Combat Commands were approximately 100 miles apart, CCB continuing its mission of containing LORIENT; CCA performing a screening mission vicinity of NANTES.

Since being committed through the infantry lines on the 28th of July the Division had distinguished itself several times. By their long slashing drives they quickly brought about the complete severance of the Brittany peninsula and by so doing denied its use to the enemy for the rest of the war. In two weeks time they had succeeded in taking the key city of AVRANCHES, aided in

the capture of RENNES, took the cities of VANNES and NANTES and effectively contained the enemy at LORIENT.

The campaign of Brittany was practically at an end and plans were now being made to relieve the 4th Armored Division of its present mission so that it could prepare to move to the east for an assault on ORLEANS (W6500).

NOTES FOR CHAPTER II

¹CCA After Action Report, July and August 1944, (13 February 1945 Page 40).

²Statement by Lieutenant Colonel Albin F. Irzyk, Cavalry S-3 and later commander, 8th Tank Battalion, 4th Armored Division.

³CCB After Action Report, July and August 1944 (16 February 1945, Page 28).

⁴The Fourth Armored Division, by Captain Kenneth Koyen.

⁵From the Breakthrough to the MOSELLE River with the Spearpoint of the Spearhead, by Lt Col Hal C. Pattison, Cavalry Combat Command "A", Executive Officer.

⁶Statement by Lt. Col. Robert Parker, Field Artillery, S-3 and later commander 94th Armored Field Artillery Battalion, 4th Armored Division.

⁷From the Breakthrough to the MOSELLE River with the Spearpoint of the Spearhead, by Lt Col Hal C. Pattison, Cavalry, Combat Command "A" Executive Officer.

⁸Ibid.

⁹Ibid.

¹⁰Statement By Lt. Col. Albin F. Irzyk, Cavalry, S-3 and later commander, 8th Tank Battalion, 4th Armored Division.

¹¹Ibid.

¹²From the Breakthrough to the MOSELLE River with the Spearpoint of the Spearhead, by Lt Col Hal C. Pattison, Cavalry Combat Command "A" Executive Officer.



Colonel Earnest A. Bixby
Chief of Staff
4th Armored Division

CHAPTER III

NANTES TO ORLEANS

With many miles of FRANCE already covered by the division and still many more to go the Fourth was again poised to strike. It had traveled from AVRANCHES to LORIENT and then to NANTES with unprecedented speed. The city of NANTES was just another jump off point. In the days that followed the division was to make some of the longest marches ever to be recorded in the history of armor. All of FRANCE now lay before them.

On the 13th of August, the division was alerted to move east to an assembly area near ORLEANS (W6500). In the interim prior to actual movement, attempts at maintenance of vehicles was begun, but due to the extended supply lines, very little was accomplished.

At 0800, 14 August, CCA was relieved at NANTES (O 0554) by the 2d Cavalry Group and moved eastward to the designated assembly area, followed by 25th Cavalry, Reserve Command, and Division Headquarters. Although much of the journey was made without maps, the movement was quite rapid. Due to lack of maintenance, numerous vehicles of all types dropped from the column for needed repairs.

At the end of a 22 hour march, CCA arrived in ST. CALAIS (V7949) and was immediately ordered to move on ORLEANS to seize and hold the city in conjunction with the 35th Infantry Division. The ability to complete a rapid movement of 167 miles and arrive ready to fight is an inherent characteristic of armor. CCA halted

only long enough to refuel, then attacked and seized the airfield northwest of ORMES (W4558). Again the enemy signaled his intentions to withdraw by blowing ammunition stores in enormous quantities.

In the meantime, CCB was relieved at 0600 by the 6th Armored Division and began its march to VENDOME (FO512). During the march, an enemy convoy was discovered, and taken under fire which destroyed several armored vehicles. The remainder of the convoy was routed without firing a single countershot. CCB accomplished a 264-mile march in 34 hours, closing in PRUNAY (XO487) at 1545.

At first light on the morning of the sixteenth, CCA in two columns under Lt. Colonel Baily and Lt. Colonel Oden, respectively, moved on historic ORLEANS. Task Force Oden attacked east through ORMES to hit ORLEANS from the north; Task Force Bailey advanced southeast from ORMES to strike ORLEANS from the east. The center of the city was reached at 1500. Mopping up continued until the two task forces were relieved at 1800 by the 137th Combat Team. They then went into bivouac near SARAN (W6345) northwest of ORLEANS.

CCB sent a task force north to LA LOUPE (R3804) to backstop the PALAISE gap and then returned to the PRUNAY area to rejoin the division which was again preparing to move eastward.

The arrival of the division in the vicinity of ORLEANS on the 17th of August concluded the longest march ever recorded in the history of armor. Up to this time the Division had been on the move continuously, and there was but little time for the maintenance of the vehicles and equipment. Minor, hasty repairs were the rule by unit maintenance personnel.

The 126th Ordnance Maintenance Battalion also was on the move, continuously following the Division and attempting to repair the Division's combat vehicles on the run. Here again, hasty repairs and expedients had to be the rule. The backlog of deadlined vehicles continued to mount. During the long marches, mechanics were dropped off with disabled vehicles which had fallen out of the column. If they could not be repaired, the vehicles were left to be either repaired or picked up by the following ordnance personnel.

The long march was hard on the men and combat equipment, and much maintenance work remained to be accomplished at the first opportunity. This, then was the status of the Fourth Armored when it arrived in the general vicinity of ORLEANS.

The following few days from the 17th to the 20th of August were spent in the rehabilitation of men, and maintenance of vehicles and equipment. In every unit great stress was placed on putting vehicles in top shape. Units worked hard and long to bring their vehicles up to the highest possible level of maintenance consistent with the capabilities of men and equipment. But there was much work that they could not accomplish.

The 124th Ordnance Maintenance Battalion had by this time accumulated a great backlog of tank work, much beyond their capabilities to handle and repair. Assistance was requested and granted. The 501st Ordnance Company HMT was attached to help reduce the backlog of deadlined vehicles.

During this brief period, all hasty repairs and expedients were corrected. Tank engines were repaired and replaced where necessary; badly worn tracks replaced. Much more time was still needed to put the Division in top shape. However, by the 23d of August, the vehicle deadline list in the Division was at a minimum, and the division had begun to roll on to the east.

CHAPTER IV

ORLEANS TO THE MOSELLE

The capture of ORLEANS opened the gateway for a rapid advance east to the MOSELLE River. Plans and preparations for retention of the initiative by a rapid continuation of the exploitation were completed without delay. These plans visualized a swift reduction of defenses at SENS (X6965) and TROYES (Y2874), culminating in the establishment of a bridgehead over the MOSELLE River.

To put these plans into operation, the 4th Armored Division, in column of Combat Commands, CCA leading, moved through the outskirts of ORLEANS toward the communication center of SENS during the afternoon of 21 August 1944. Very little opposition was encountered, allowing CCA to reach SENS before dark.

The fortunes of war again favored CCA by placing in its path a full train of German gasoline, which was captured intact with little difficulty. Adequate logistical support of an armored division in the exploitation is a continual problem, therefore, this prize came at a very opportune moment.

CCB was assigned the mission of holding the bridge over the LOING River at SOUPPES (X2866) after CCA had crossed and began preparations to secure the area to the southeast on the following morning.

Complete and paralyzing tactical surprise was achieved by the 4th Armored Division at SENS. Only a small number of

enemy troops were in the town, most of them officers of whom many were captured walking on the streets in full dress uniform with female companions on their arms.¹ One of these officers, bemoaning the confusion in the German ranks stated, "In truth, one must resort to broadcasts of the BBC (British Broadcasting Corporation) to learn where the enemy is each day and where he is going to attack next".²

Early on the morning of 22 August, the Commanding Officer of Troop D, 25th Reconnaissance Squadron reported that he was receiving heavy attacks and was being forced to withdraw from his screening position to the east between FOISSY (X8667) and MOLLINONS (X8868). At first light, Colonel Clarke, commander of CCA, went forward to make a personal investigation of the report. Determining the alarm to be valid, Colonel Clarke ordered a counterattack to be made by elements of his command. The attack was executed in a single envelopment formation, a reinforced medium tank company assaulting frontally while a light tank company enveloped the north flank of the enemy. All available artillery in the command was placed in support of the effort. Near the conclusion of the action, fighter-bombers of the XIX TAC arrived on the scene and pursued the retreating enemy column into TROYES. The aircraft accounted for an additional number of vehicles and artillery pieces. Subsequent identification of the enemy forces disclosed that it was made up of elements of the 51st SS Brigade supported by an abnormally large amount of artillery.

The next day, fifteen enemy aircraft attacked CCA's bivouac and the city of SEMS from the south. No damage resulted from the raid

but it proved to be an extremely costly effort from the enemy point of view. Seven of the attacking aircraft were shot down by attached AAA units and vehicular antiaircraft weapons of the Combat Command while fighters of the XIX TAC accounted for three more. The survivors turned tail and headed for home at maximum speed.

The 23rd and 24th of August were spent in preparing for an all out attack on the historic city of TROYES. Several vehicles, both combat and administrative, were repaired and removed from the deadline list by the 126th Armored Ordnance Maintenance Battalion and returned to the using units.

Patrolling and mopping up operations continued in and around SENS to provide necessary security for the Division. The very speed of the assault and taking of the town had resulted in the by-passing of small isolated groups of snipers which had to be eliminated.

CCB was securing the Division's left flank by occupying and holding the small but important communications center of CHEROY (X4868), the focal point of seven good highways.

The plan of operations for the attack on TROYES provided that the Division attack in column of combat commands, CCA leading. CCA was further broken down into two task forces, one commanded by Lieutenant Colonel Dolk M. Oden, the other by Major (later Lieutenant Colonel) Arthur L. West. These task forces were to advance in two columns over separate routes with the mission of forcing a crossing over the SEINE River, seizing TROYES, and establishing a bridgehead for further advance. By this time, it had been learned

that the fastest and most satisfactory routes of advance were along secondary roads because the main roads were normally mined and barred by numerous defended road blocks. Therefore the plan stipulated that the Division would travel on secondary roads exclusively in the move on TROYES.

Division intelligence agencies had learned that TROYES was defended by no more than five hundred troops, most of which were service elements. As it turned out, the city was garrisoned by a force in excess of three thousand men, including elements of the once routed 51st SS Brigade.

As planned, the Division attack jumped off at 0700, 25 August. By noon, Task Force Oden had reached the SEINE and began bridging operations under heavy artillery fire from the now familiar 51st SS Brigade. Task Force West had made excellent progress, closing in its attack position northwest of TROYES shortly before 1200. Unfortunately, the attack had to be held up due to extensive bridging operations required for Task Force Oden. Finally the original plan was changed and Task Force West attacked the city alone. The force jumped off at 1700. With all guns blazing away, the tanks raced abreast across the flat terrain, a formation reminiscent of the old time saber-waving cavalry charges. The ferocity of the attack caught the enemy by complete surprise, many of them too overcome with shock to defend themselves. Task Force Oden completed bridging operations over the SEINE during the night and by 0230 had reached the high ground northeast of TROYES. From this vantage

point, they controlled all escape routes out of the city. At first light, Task Force West began mopping up operations in the city proper and, in a very short time, had broken through to contact the other task force. Methodical destruction of the enemy was achieved through complete coordination between the armored units and the fighter-bombers of the XIX TAC. Armor drove the enemy out of the city to the south and southwest where the friendly aircraft were waiting to bomb and strafe their disorganized columns.

Upon the successful conclusion of the TROYES operation, Major General Manton S. Eddy, Commanding General of the XII Corps, sent the following telegram to Colonel Bruce C. Clarke, CCA Commander:

"HEARTIEST CONGRATULATIONS, ANOTHER
JOB WELL DONE. SO FAR YOUR COMMAND
HAS BEEN THE SPEARHEAD OF THIS CORPS
WHICH TODAY IS LEADING ALL OTHER
CORPS IN ITS ADVANCE TO THE EAST."⁴

The practical application of the use of tanks in town fighting had been demonstrated in the seizing of SENS but was confirmed in positive terms with the overthrow of the enemy in TROYES. Following the TROYES operation, no commander of the Division ever considered attacking a city without the use of considerable tank strength.⁵

After a short period of rest, CCA received orders to make plans for an attack on the towns of VITRY (T6919) and CHALONS (T5345). Again the command was divided into two columns; the east column to cross the MARNE River and seize VITRY, the west column to seize a second crossing over the MARNE to the north of VITRY and depending on the success of the east column, to turn to its assistance

or go north and assault CHALONS from the southeast. The columns east and west were placed under the commands of Lieutenant Colonels George L. Jaques and Creighton W. Abrams, respectively.

Task Force Jaques was successful in fording the MARNE and captured the high ground northeast of VITRY, encountering only minor resistance. No attempt was made at this time to capture the town. Meanwhile, Task Force Abrams forded the MARNE near the town of MAIRY (T5736), bridged the canal at St. GERMAIN (T6035), and went into position on the dominating terrain east of CHALONS in the vicinity of MARSON (T6539) cutting all roads east and northeast from CHALONS.

At the time of this action, CCB was moving east in two columns crossing the SEINE River in TROYES and south of it at ST. JULIEN (Y3071) to a position near PINEY (Y4779) to protect the flank and rear of CCA and prepare to force a crossing of the AUBE River toward BRIENNE (Y6283). Again only a token resistance was offered by the enemy.

In the gathering dusk, advanced elements of CCA made contact with an unidentified force. Fortunately, before shots could be exchanged the other unit was recognized as the 80th U.S. Infantry Division, who, unbeknown to the 4th Armored Division, had also been given the mission of seizing CHALONS. Excellent coordination between the two units resulted in a plan providing for a combined effort on the town. Arrangements were made for the Infantry Division to cross a combat team over the bridge constructed by CCA and to attack CHALONS the following morning supported by Task Force Abrams.

As scheduled, the attack jumped off at 0700. Task Force Abrams racing in from the northeast while the combat team from the 80th Infantry Division moved on the city from the southeast. "Mission accomplished" was flashed back to the CCA Command Post at 1100. Upon reaching the town, it was discovered that the enemy had evacuated his positions during the night, leaving behind only a minute covering force. These troops were overrun before they actually realized what was taking place.

An interesting explanation for the lack of enemy resistance was reported to the attacking force by the mayor of CHALONS. The local enemy commander had identified the two armored task forces as two armored divisions while they were crossing the MARNE the previous afternoon. Upon reporting two divisions to his superior officer, he was ordered to withdraw his forces from CHALONS without delay due to what he thought to be over-whelming odds.⁶

In addition to protecting CCA, CCB was also assigned the mission of screening and protecting the right flank of the entire XII Corps by holding the line BAR SUR AUBE (Y7564) - ST. DIZIER (T9508). The enemy forces remained in a disorganized state and continued to offer extremely weak resistance.

By this time, (29 August) the Third Army was beginning to outrun its supply lines, consequently the urgent need for rigid control of advance of all units within the Third Army was becoming painfully evident. In accordance with this idea, CCA was assigned the mission of securing the town of ST. DIZIER and the high ground

to the northeast in preparation for a general advance of the XII Corps which was to begin on 31 August. The Combat Command was further instructed to avoid bringing on a general engagement at this time.

The assault on ST. DIZIER began at the usual time of 0700, 30 August and, despite heavy artillery and antitank fire, the town was cleared of enemy activity by noon. Shortly thereafter, sporadic artillery fire began falling on the town from enemy gun positions in the woods to the northwest. A detachment of tanks and infantry was dispatched to silence these guns. The task was accomplished with the loss of only one tank,

Meanwhile, during the course of this action, an Armored Engineer Company attacked across the canal east of town, seizing a first class airfield which had been prepared for demolition by Luftwaffe personnel. This airfield was later used by the XIX TAC as a fighter base to provide close support to the 4th Armored.

Carrying out its original plan, CCB completed clearing the area to the south between the SEINE and AUBE Rivers to the line BAR SUR SEINE (Y4952) - BAR SUR AUBE (Y7564) then marched east across the AUBE River, establishing a position east of BRIENNE.

The Division began drawing up plans for a continuation of the attack to the east to seize and hold the crossing of the MEUSE River at COMMERCY (U4320) and VAUCOULEURS (U4902). The plan as evolved, required CCA to move initially in one column as far as LIGNY (U2313) then to divide into two columns on parallel routes. CCB was to make its advance in two columns on parallel routes throughout the entire attack.

The Division moved out early on the morning of 31 August, proceeding without incident for some time. Upon reaching LIGNY, CCA found the bridge over the canal mined and ready for demolition but the speed of the armored thrust had surprised the enemy to the point that the bridge remained intact when the column drove up to it.

Task Force Abrams, moving on the south flank of the Combat Command, pushed all resistance before it, arriving at COMMERCY at 1135. Crossing the MEUSE River, they took up positions on the high ground in BOIS de VIGNOT, east of the city. Again tactical surprise was gained through, as Colonel Clarke said, "Deliberate planning and violent execution". This position commanded all roads north, west, and south of COMMERCY. Elements of an enemy SS Division launched several limited attacks during the night but with little success. A strong counterattack by Task Force Jaques early the following morning caught the enemy personnel in a defile and almost completely destroyed it.

This was to be the last move for some time. Although the disorganized and panicky enemy was still within range, the 4th Armored Division was forced to break off the exploitation and go in to a bivouac area in the vicinity of COMMERCY - HOUBLAINCOURT-VAUCOULEURS due to lack of gasoline and lubricants. The speed of its advance had overextended the supply line of Third Army.

While in bivouac, plans for the crossing of the MOSELLE River and the seizing of the commanding ground east of NANCY (U8511) were developed and submitted to higher headquarters.

All movement was restricted to a minimum, only small patrols of the Reconnaissance Squadron were permitted the use of the ever-dwindling supply of gasoline.

Despite appearances this period was not spent in aimless activity. Extensive maintenance operations were performed to insure that each and every vehicle would be ready to move on a moments notice when the word was forthcoming.

On 11 September, adequate supplies were again made available and orders were received to establish a bridgehead across the MOSELLE River south of NANCY. CCB, through herculean efforts of the division engineers, was able to cross at BAYON (Z9688) and set up a bridgehead as directed. CCA was instructed to cross south of DIEULOUARD (U7828) through a bridgehead maintained by the 80th Infantry Division.

In a period of three weeks, the 4th Armored Division had exceeded the ambitious plans made at ORLEANS. SENS, TROYES, and numerous towns and villages had fallen to the slashing might of its armored thrusts. A bridgehead over the MOSELLE for further advance to the east had become a reality. The concept of attacking from an unexpected direction, at an unexpected time, and in unexpected strength was the key to the tactical surprise so often attained.

The ten day delay due to lack of supplies had given the enemy time to reorganize, consolidate, and strengthen his defenses. From this point on, the 4th Armored Division was forced to fight a bitter and bloody engagement each time a move was attempted. The spectacular advances made during the exploitation across France were at an end.

NOTES FOR CHAPTER IV

¹From the Breakthrough to the MOSELLE with the Spearpoint of the Spearhead - Lt Col Hal C. Pattison, Cav, CCA Executive.

²Ibid.

³Ibid.

⁴Combat History - CC "A", Fourth Armored Division.

⁵From the Breakthrough to the MOSELLE with the Spearpoint of the Spearhead - Lt Col Hal C. Pattison, Cav, CCA Executive.

⁶Ibid.

⁷Combat History, Fourth Armored Division.



4th Armored Division tanks pass through French village in pursuit of the enemy.

CHAPTER V

SUMMARY AND CONCLUSIONS

The 4th Armored Division halted on the MOSELLE River line and remained immobile for a period of ten days. The overextended supply lines were unable to supply the necessary gasoline. Before them lay an open road to GERMANY, unimpeded by the enemy. But for the time being at least, the great opportunity was lost. When they were again able to go forward, with gas tanks full and ammunition racks replenished, the Nazi had reformed his lines. Many months of bitter fighting were to pass before real progress was to again be made.

No stronger lesson on the importance of logistics to tactical operations could be related. Here was an armored division, one that had already made history, on the threshold of what may well have been the prelude to final victory in the west. The enemy was reeling; his forces disrupted and disorganized. He was no longer capable of maintaining a continuous battle line nor did he possess sufficient mobility to stay the mighty thrusts of our armor. It is now only a matter for conjecture how long and how far the 4th Armored Division could have continued eastward had their logistical support been adequate to the occasion. This is in no way a criticism of our supply forces in FRANCE. They performed magnificently, supplying the ever-growing numbers of American units on the continent. Sufficient transport was not available to keep extending supply lines in order that combat units would not have to halt for logistical reasons.

Nonetheless, the enforced ten day delay enabled the harried Germans to reform a semblance of a line and to man their SIEGFRIED LINE defenses.

In the preceding chapters we have followed the 4th Armored Division in its historic drive from AVRANCHES to the MOSELLE River. We have viewed their important actions and considered the many vexatious problems of supply and maintenance. We have seen how commanders met and overcame tactical problems, the solution of which required mature and balanced judgement. The task of keeping the divisional units adequately supplied with fuel, ammunition, and equipment, and assuring necessary medical and ordnance maintenance support posed numerous problems of which the field manuals had not forewarned them. Consequently many expedients were devised and employed in order that the 4th Armored Division could maintain its forward momentum. Many of these expedients as set down below have since been accepted as valuable and proven tactics and techniques to be added to the doctrines of armored warfare.

Mission Type Orders

The fighting during the months of July and August taught many important lessons, not only to the 4th Armored Division, but to the entire U.S. Army. For example, it was discovered during the first days in the COTENTIN Peninsula, and even in NORMANDY, that mission type orders are best suited to the armored division. General Patton recognized this principle so thoroughly that armored units of his Third Army were usually ordered to continue until stopped by

enemy action. This prevented armored units from having to halt when advances against the enemy were still possible. Phase lines were used merely as points from which to report progress and were not used to restrict the movement of armored columns. Continuing along the same line of thought it was found inadvisable to contain armored units within certain narrow zones cramped by boundaries or other limiting points which restricted the inherent mobility of armor.

Secondary Roads

Main highways were often found to be good axes of advance but they too often led to strong enemy road blocks and perhaps ambush. Secondary roads grew in favor as routes of advance often proved to be the path of least resistance and produced a maximum of surprise. It was also found that secondary roads lent themselves to greater rapidity of the advance.

Combined Arms Tactics

That advancing columns should always be made up of combined arms teams, including armor, infantry, engineers, and with field artillery well forward in the column ready to go into firing positions at the first sign of a target. It was learned early in the campaign that the efforts of all combat arms were necessary to reduce enemy resistance with the greatest rapidity and the least number of casualties.

Advancing Columns Led by Tanks

Previous to the 4th Armored Division breakthrough at AVRANCHES there was a common conception that it was uneconomical for tanks to lead columns against very strong opposition. Experience proved that the tank was the very best lead-off weapon in certain types of operations. The exploitation phase in a breakthrough the enemy lines is a good example. This is especially true when Air Force fighter planes are providing column cover and the organic liaison planes hovering over the head of the advancing column provide eyes for the armored chariots.

Tanks in Attack of Cities

Several interesting conceptions on the employment of armor were proven to have their exceptions during this drive across FRANCE. One of these was that armor should not be employed in the attack of cities. In the capture of ORLEANS on 16 August and again in a similar action against TROYES on 25 August this idea was proved false. Led by a commander willing to take a calculated risk, tanks can be used to a definite advantage in the attack of cities. The 4th Armored Division did not lose a single tank in either of these attacks in spite of enemy antitank guns; the Panzerfaust at TROYES, an attack across three and one half miles of open terrain culminated by an antitank ditch was outstandingly successful.



Brigadier General Holmes E. Dager
Commanding General, Combat Command "B"
4th Armored Division

Calculated Risks

Boldness in execution and the acceptance of calculated risks by unit commanders should be accepted doctrine by all concerned. The operation at TIREPIED on 30-31 July by the Eighth Tank Battalion is an excellent example of a Battalion Commander recognizing that certain risks were present. By driving resolutely through the darkness and accepting the gamble presented by the unknown the seizure of the objective was of sufficient importance to warrant the acceptance of the risk.

Flexibility

An excellent example of flexibility is the operation in the vicinity of AVRANCHES on the 30-31 July when CCA broke up into four separate task forces to converge upon the SELUNE River crossings. Upon the seizure of these critical objectives the task forces promptly reassembled again as CCA and by 10:00 1 Aug were moving on RENNES.

Employment of Armored Infantry

While it is true that the leading combat command was generally heavily weighted with tanks the value of the armored infantry seemed to increase as the campaign progressed. The seizure of important objectives would have been useless without the presence of armored infantry to hold the ground, supported by tanks. In numerous instances it was found desirable to attach infantrymen from infantry divisions to the 4th Armored Division

to secure objectives and permit the armor to continue the advance. The containment of RENNES in conjunction with the 8th Infantry Division is a good example. The then shortage of armored infantry in the armored division necessitated the procurement of additional infantry from other sources. The new Tables of Organization for the armored division has somewhat alleviated this situation by the addition of more armored infantry.

Field Artillery

Although the armored division of World War II did not contain organic medium artillery (155-mm howitzer) it was found desirable in nearly all actions to have medium artillery support available. Corps medium artillery battalions were employed and the association proved to be quite satisfactory. Fire support was as effective and continuous as if it had been organic. Armored and armored infantry commanders were often unaware of the status of their artillery, whether attached, organic, or supporting, nor did it matter. The fire support was effectively present. Since the war, however, the armored division organization has included one medium artillery battalion, self-propelled. This is considered advisable so that in the future armored commanders will always be assured of divisional organic medium artillery support.

Employment of Reconnaissance Units with an Armored Division

Armored cavalry (light) was used constantly and effectively. In addition to their traditional reconnaissance missions

the attached cavalry units were used for multiple other tasks. The division learned to use them in front on the very easy going or when it had several hours of time in which the cavalry could be sent ahead to check routes and areas to give the following armored elements several miles of clear going at the very start of an advance. One use which appeared at the time to be rather novel was to dispatch them at night just before an advance to secure crossings of small streams and other minor water barriers, and then were used to screen or protect the exposed flank or flanks. The cavalry was likewise used to maintain contact between the widely separated columns and task forces of the division.

Logistics General

The armored division cannot extend itself for long and protracted drives without heavy logistical support. This not only includes the all important gasoline, but also ordnance support. The more miles the more maintenance. Additional ordnance support is mandatory if the tank is to smash its way miles to the enemy's rear.

Attached Transportation

The Fourth Armored Division was forced to resort to all sorts of field expedients in order to keep their over extended supply lines functioning. It would appear then that the transportation truck battalions as now constituted should be attached to the armored division especially when it becomes apparent that

the supply lines will be stretched beyond their capacity to give the proper logistical support. Air lifts may be resorted to, but this at best is a stopgap measure and the problem of supplying gas to an armored column on the move or to an armored division rampaging on the loose soon becomes prohibitive.

Engineer Support

We find that many other lessons were also learned during this eventful month of August 1944. Engineer support for example. Numerous water barriers were crossed during the drive--hence a squad of engineers was always kept forward with the leading team. This squad carried considerable bridging equipment with it. Many miles and hours were often saved by this procedure.

Medical Support

It was found best to have a medical company actually attached to the leading combat command since the combat commands often outran the division trains by many many miles. The medical company thus attached was placed in the combat command trains along with the service companies of the attached units.

Ordnance Support

The ordnance maintenance company was likewise often attached directly to the combat command it supported and moved with the combat command trains.

Signal Support

It is recommended that armored signal repair and supply units be moved along with the supporting ordnance maintenance



Colonel Alexander Graham
Commanding Officer, 4th Armored Division Artillery
4th Armored Division

companies since radio is the primary means of communication in armored units.

Movement of Trains

Early in the game it had been believed that to keep the field trains of the combat commands in the column during the advance was foolhardy; however, experience proved otherwise. The best place for them was to tag right along at the tail of the fighting column. The shock of an armored column rolling through the country was such effective medicine against the enemy that they seldom recovered sufficiently to inflict a great deal of damage on the field trains and the closer the trains to the fighting elements of the column the safer they were. Seldom was a large security force for these service elements needed. COA, for example, employed one platoon from the antiaircraft battery and one platoon from the attached tank destroyer company as train guards and COA's trains often exceeded 300 vehicles. When not moving it was found that the safest way to protect these supply units was by coiling. This system likewise proved very effective for the balance of the combat command. No vehicle was allowed to halt on the road if there was a way off. If the head of the column stopped, the units behind kept moving to a point where they could get off the road into an assembly area and put out local security. This was called "coiling" and served to keep the column to the minimum length at all times and thus to make the advance smoother from a marching

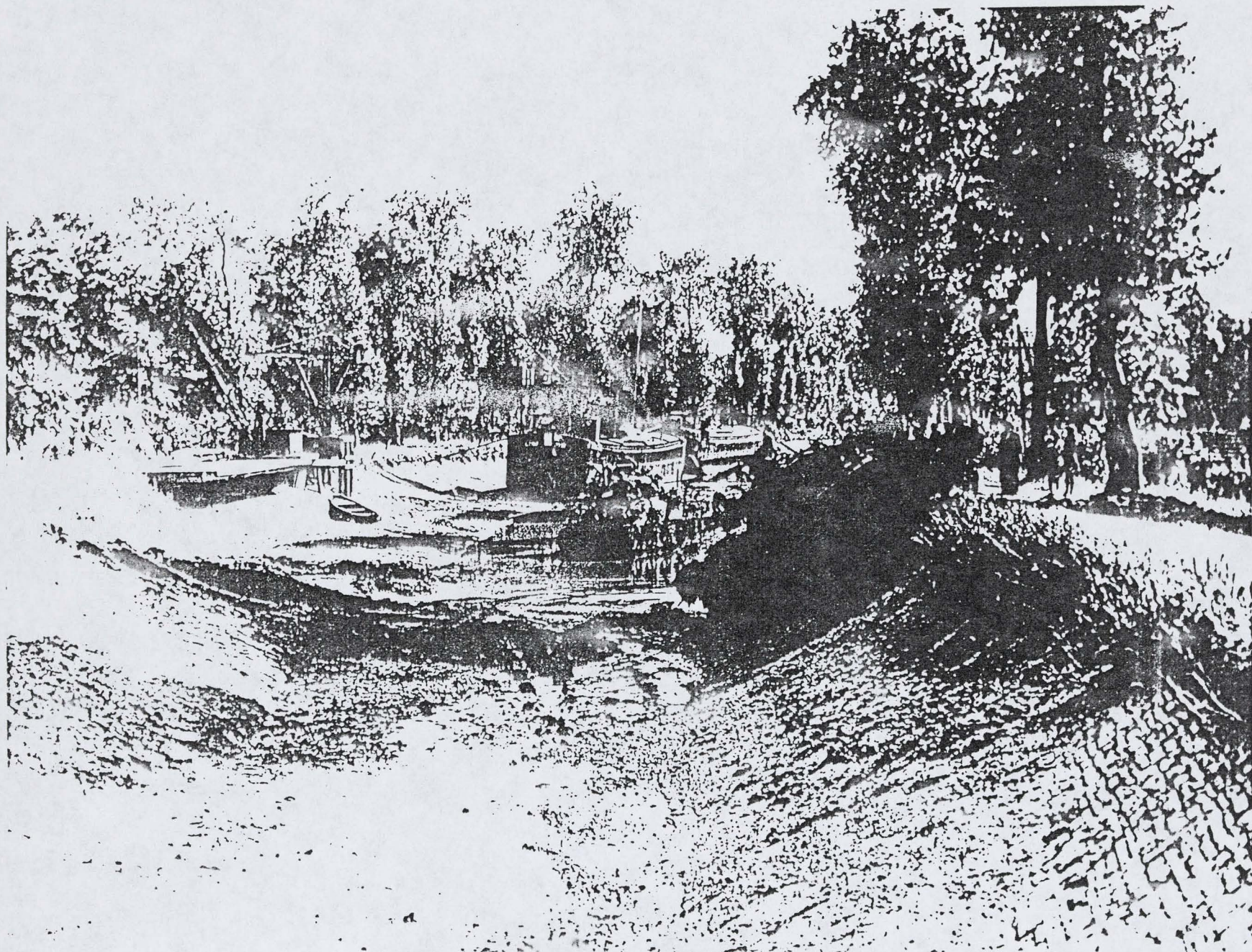
standpoint. This system helped stop^{up} the speed of the advance since it was discovered shortly after the NORMANDY breakthrough that much of the security of the armored columns was derived from this speed of the advance.

Map Supply

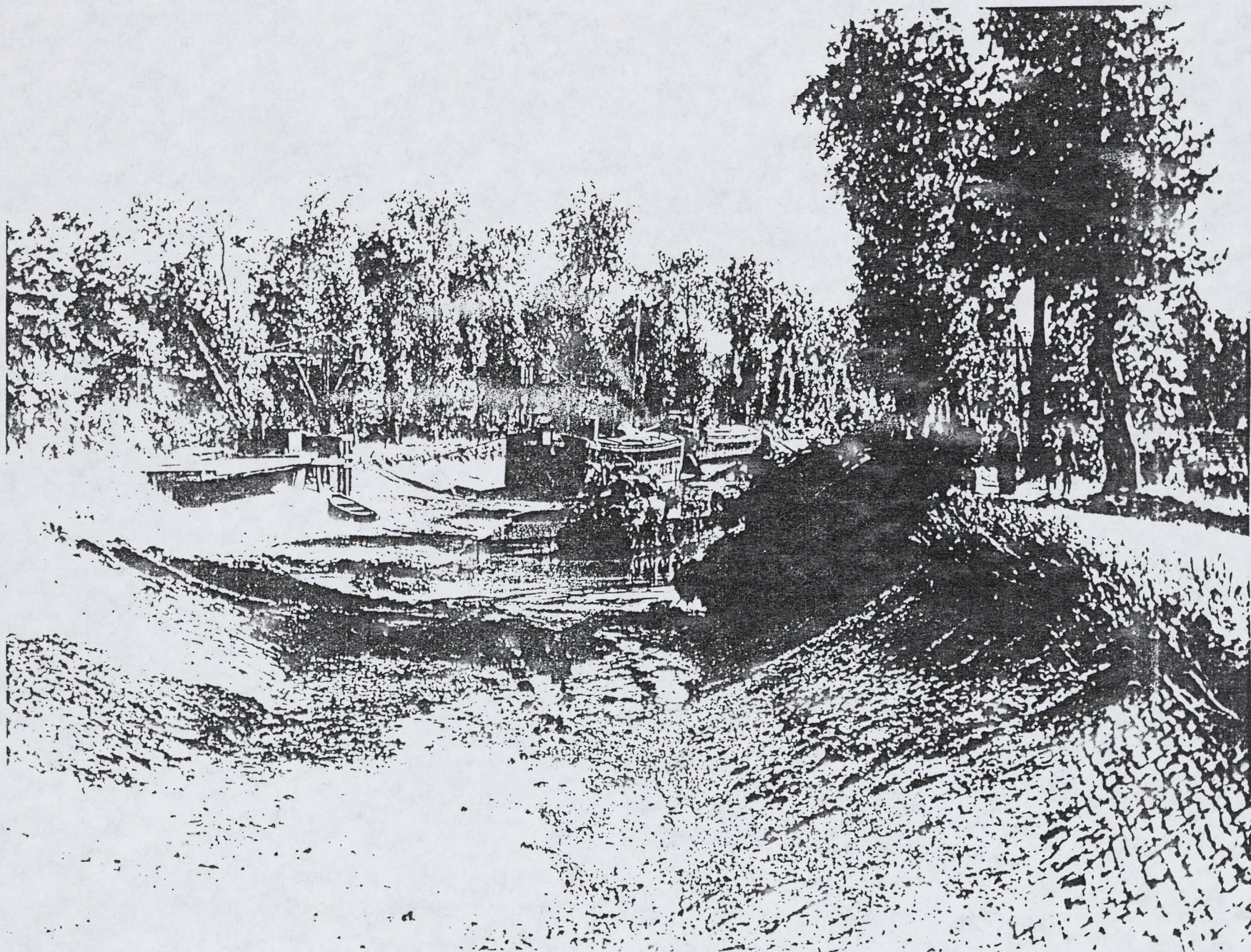
Another item of supply that seriously restricted the rapid advance of The Fourth Armored was the shortage of maps. Several times the division actually ran itself right off the map. In future operations, map supply must always be continuous and up to date in order to meet any emergency.

The 4th Armored Division advanced 1057 combat miles in thirty five days. This was the actual speedometer distance of the axis of movement and does not represent by perhaps an additional 25% the actual distance covered by the combat vehicles. Due to the mobility and flexibility of armor it was possible to thrust the 4th Armored Division across FRANCE with a minimum of personnel and vehicle casualties in this remarkable time. There were frequent changes in direction, but due to the characteristics of flexibility of organization and mobility of armor, the 4th Armored Division was able to drive into, around, through, and pursue the enemy forces, keeping the German off balance and in a state of confusion. The adage "Deliberate Planning, Violent Execution" was adequately proven in this operation of World War II. Today's armored division well balanced with proportionate representatives of the arms and services; with increased armament; better armor; and with no loss in mobility can not be exceeded

for shock action, fire power, and mobility. As a weapon of destruction and exploitation the armored division constitutes the prime offensive power in ground warfare and is the "Sunday Punch" of the United States Army.



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ANNEX I

A Terrain Study of Northwestern and Central France

ANNEX NO. 1

TERRAIN STUDY OF NORTHWESTERN AND CENTRAL FRANCE

This annex is a terrain appreciation study of the terrain of Northwestern and Central FRANCE over which the Fourth Armored Division fought and extending Eastward to the MOSELLE River. For the purpose of study, this area is sub-divided into five main topographic regions namely NORMANDY, BRITTANY, the LOIRE Basin, the PARIS Basin, and VOSGES Mountains and LORRAINE region. These main regions are further sub-divided into sub-regions which are discussed in the order of which they were fought over by the Division. The first of these sub-regions to be discussed is the southwestern portion of the NORMANDY Peninsula beginning with the breakthrough from AVRANCHES.

SELUNE River Valley

The key terrain feature and the main obstacle to the advance of our forces to the south from AVRANCHES and into the heart of FRANCE from the NORMANDY Peninsula is the SELUNE River. The headwaters of this river originate southeast of MORTAINS and flow due west into the Atlantic Ocean at PONTAULT south of AVRANCHES. Along the river are several hydroelectric dams which back up the waters of this river, and actually become the obstacles rather than the river. However, the dammed up waters could easily be released to flood the narrow SELUNE River valley, which would then cause the river to become the major obstacle to any advances to the south.¹

The Rennes Basin

The second area to be considered in the southerly advance of our forces into the heart of France is the area which comprises the RENNES Basin.² This area touches the eastern edge of the BRITTANY Peninsula, and on the west it borders the MAYENNE-SARTHE Basin.

The principle rivers in the area are the RANCE River which flows north into the English Channel, and the VILLAINÉ River which flows south into the Bay of Biscay. The larger and longer river, the VILLAINÉ, drains two-thirds of the entire area, and has many tributaries—some of which are connected by canals. There is no dry period in the river.

South of RENNES, the VILLAINÉ River has a water gap of about 200 feet, widening out to the mouth. In the vicinity of REDON, converging plains of several small rivers which are subject to flooding become obstacles to armored movement in rainy weather. The stream crossings present no serious problems, except the OUST River which has a water gap of 85 feet at JOESLIN, while at PLOERMEL the water gap is 150 feet.³

The RENNES Basin is characterized by rolling terrain and countless small fields. Hedgerows form a geometrical pattern with many landline embankments. The sub-soil is composed of rock with many rock out-croppings.

Movement in the direction of RENNES is favored by the road net, while cross-country movement is favored in the direction of

FLOREMEL, JOESLIN, LOCMINE, and HENNEBON. The city of RENNES is the hub of the communications and road net.

The most serious obstacles in this area are the rivers and their tributaries, sunken roads, hedgerows, and stone walls.

Observation and fields of fire are restricted to small area due to the rolling nature of the terrain, while cover and concealment is afforded by sunken tree-lined roads, and by the forests and wooded areas which are scattered throughout the area.

South of the RENNES Basin is an expanse of hilly country. This area is bounded by the VILLAIN River on the west, by the MAYENNE River on the east and by the RENNES Basin on the north. The tributaries of the VILLAIN and MAYENNE Rivers form the principle drainage system, and cut the region into a system of east-west ridges.⁴ Except for the river crossing, cross-country movement is unrestricted. Concealment is limited to the few scattered forests in the area, while ground cover is excellent due to the nature of the terrain.

The area has an excellent road net. The first class highways converge on NANTES which is the center of communications.

Mayenne-Sarthe Basin

The next sub-region which requires consideration is the MAYENNE-SARTHE Basin which lies in a triangle formed generally by the cities VIEN, ANGERS, and LEMANS. Both the MAYENNE and the SARTHE Rivers lie in valleys which average one and a half miles in width, forming the north and south corridors in the area. The

entire area is well drained by these rivers and their tributaries. Soils are of the impervious clay type and make cross-country movement in wet weather difficult.⁵ The headwaters of these rivers, which are unfordable due to their constant water supply, have cut steep valleys. However, in the southern, lower courses of the rivers, the terrain flattens out into rolling, undulating country.

In the northern part of the region, observation is afforded by the higher hill masses, while in the southern flatter country, church steeples must be depended on for most of the observation. Fields of fire are generally hindered by the hilly masses in the north and by the forested areas. These same terrain features afford good ground cover, while the forested areas provide excellent concealment from both air and ground observation.

Cross-country movement in the southern part is generally unrestricted. In the north however, the steep valleys limit the cross-country movement to a considerable degree. The road net is excellent and generally of the macadam type surface, but is not as dense as in the area of the RENNES Basin.

The Loire River Basin

In this study we shall consider only the northern half of the region which lies north of the LOIRE river, and to the south-east of the SARTHE and EUISE Rivers. Generally the land here is comprised of low rolling plains which are drained by the above rivers and especially by the LOIR River which runs southwest through the center of the area. The climate of the region is mild and the

rainfall is twenty to thirty/~~inches~~^{a year.} The most frequent rainfall is in the winter months but the greatest amounts of rain fall during the summer.

The ground in this area is extensively cultivated and is cut by numerous vineyards and cross-country movement is virtually unrestricted except for a few small streams which require bridging. The flatness of the terrain limits ground cover but affords good fields of fire. Wooded and forested areas provide excellent concealment.

Loir Hill Lands

To the north of the LOIRE River Basin is the area of the LOIR Hill lands which comprises a broken and indented plateau which is open and level in the eastern portion. The valley formed by the LOIR River forms a corridor running east and west in which cross-country movement is generally unrestricted. However, on the western edge of the region, cross-country movement is somewhat restricted by forested areas and hedgerows which at the same time are minor obstacles. Soils of the area are of the impervious clay type and tend to restrict cross-country movement in wet weather.⁷

Drainage of the area is considerably better in the eastern part, and the ground firmer for cross-country movement.

East of VENDOME, good ground cover is available due to the rolling nature of the terrain, while concealment is afforded by the wooded areas and hedgerows. In the western part, fields of fire are restricted by the stream valleys and wooded areas.

The road net is poor and in a bad state of repair.

The Paris Basin

From the LOIRE Basin and the LOIR Hill lands, easterly advances in the regions east of ORLEANS and south of PARIS are restricted to a marked degree by the rivers YONNE, SEINE, AUBE, and the MARNE and the valleys and plains which lie between them. These had to be considered in the advances of the Fourth Armored Division on GERMANY.

Lying between the SEINE River and the great bend of the LOIRE River and between ORLEANS and PARIS is the PLAIN DE BEAUCE, possessing the characteristics of a plateau. Between ORLEANS and VERSAILLE, and between CHARTRES and PITHIVERS, the ground surface is almost flat, having no rivers and very few trees. The soil here is composed mainly of fissured limestone, permitting unrestricted cross-country movement.⁸ Ground cover due to the flatness of the terrain in this area is not available; however, observation and fields of fire are excellent. Concealment is limited to the few trees scattered mainly along the river valley. There is a dense road net with the main highways converging on the city of PARIS.

East of the PLAIN DE BEAUCE lies the dry Champagne country. This is a dry, semi-arid region of open plains, favorable for motor movement.

Between the SEINE and the MARNE River lies the region known as the PLAIN DE BRIE. These two rivers form the main obstacles to easterly movements and require the use of bridges for crossing since

they are not fordable. The soils of the region consist mainly of clay, and the drainage is poor in wet weather. The eastern part of the plain is heavily forested and limits cross-country movement. Observation due to the open nature of the farm land is good. The hills in this area are of limestone and are one hundred to one hundred and fifty feet in height.⁹ Cover and concealment due to the rolling nature of the terrain and the densely forested area in the eastern part, are excellent. The main highways and the secondary road net are also excellent.

Further advancement to the east from the MARNE Valley become increasingly more difficult. Between the MARNE and the MEUSE Rivers the terrain is hilly, broken, and cut by small streams. The hills in this region rise steeply from the floor of the MARNE Valley and reach heights of from two hundred to four hundred meters above sea level. Cross-country movement is restricted to a degree, but the road net which runs in an easterly direction between the hill masses favors movement. The area is well forested and provides excellent concealment from ground and air observation. The main roads in this area are first-class highways and converge on COMMERCY. The secondary road net is limited by the nature of the terrain.

Between the MEUSE and the MOSELLE River, the country levels off and becomes a rolling plain. East of COMMERCY the terrain is quite flat and has many small lakes which restrict cross-country movement. The entire area is well forested and

affords excellent cover and concealment from both air and ground observation.

In the area of the triangle formed by NEUFCHATEAU, NANCY, and MIRECOURT, the terrain is flat, open, and cut by many small streams. Though they are not serious obstacles, they do restrict cross-country movement. North of a line between NEUFCHATEAU and MIRECOURT is a hill mass which rises from 100 to 150 meters above the floor of the plain. Both observation and fields of fire are excellent.

NOTES FOR ANNEX

¹ Lt. Colonel H. C. Pattison, An Account of Clarke's Combat Command "A" of the Fourth Armored Division, p6.

² After Action Reports, Third United States Army,
Vol 11 G-2 Annex 4

³ After Action Reports, Third United States Army,
Vol 11 G-2 Annex 5

⁴ Ibid G-2 Annex 4.

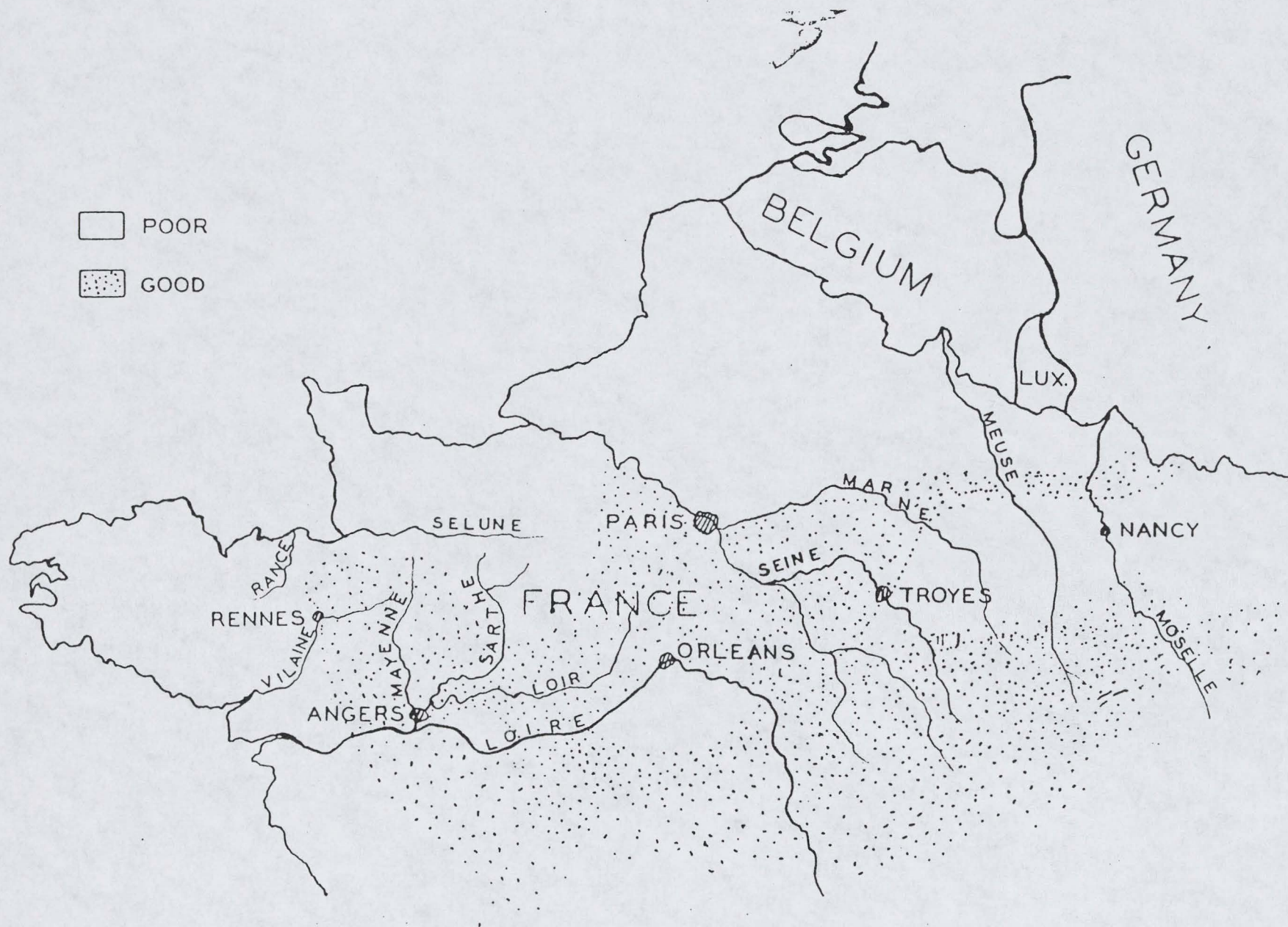
⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.



ARMOR CROSSCOUNTRY TRAFFICABILITY MAP

APPENDIX II

A Discussion of Maintenance Problems
Encountered by The 4th Armored Division
in its Exploitation Across The
Area of Northern France.

MAINTENANCE

The mobility of the Armored Force depends on a number of factors, one of the most important being adequate and efficient maintenance support of vehicles. Not only does maintenance affect mobility, but also the shock effect of armor gained through mass by allowing an efficiently operating unit to place the maximum number of vehicles against the enemy at any one time.

Records show that the 4th Armored Divisions maintenance of vehicles was excellent and that maintenance was a prime factor in maintaining mobility. To the vehicular crews of the units of the 4th Armored and to the support given by the 126th Armored Ordnance Maintenance Battalion credit must be given. The right hook which the Division made covered over 1000 across the heart of France. In leading the Third Army's drive, leading tanks registered some 1500 miles on their speedometers, while the over-loaded supply trucks which followed the battle trails of the combat commands registered some 3000 miles when the Division halted at the MOSELLE River.¹

After establishing itself on the Continent (15-18 July 1944) the 126th Armored Ordnance Maintenance Battalion began its job of supporting the Division. A variety of problems presented themselves, including the task of constructing field expedients. On 20 July 1944, the Battalion began constructing .30 caliber machine gun mounts to facilitate hedge-row fighting.² On the 25th of July, with materials salvaged from the beaches, the Battalion

undertook the job of building a hedge-row cutting device called a "hedge-rooter" which reduced the hazard of the hedge-row by permitting the tank to charge through the hedgerow without stopping.³ With this ingenious device the hedgerow ceased to present the problem to mobility it formerly had.

Companies A and C were placed in support of Combat Commands A and B respectively on the 29th of July. On 30 July, Company C moved out to join Combat Command B. That night while looking for CCB, Company C turned into the village of SARTILLY (T2224) which, unknown to them was held by at least a company of Germans supported by a minimum of two 88mm antitank guns. The ensuing battle forced the company to scatter in order to escape the trap. Several vehicles were lost to enemy action. Personnel casualties amounted to 7 killed, 7 wounded, and 12 missing.⁴

The month of August started a new phase for the 126th. The Division was pursuing a rapidly retreating enemy and the maintenance companies supporting the Combat Commands had to move often. This fact presented new problems, and for the first time, the Battalion experienced working under combat conditions.

In order for the Battalion to best support the Division, it was decided to have Company A support CCA and Company B to support CCB. Headquarters and Headquarters Company and Company C took the remainder of the Division and the overflow from the other companies. Many systems were tried, but this one remained the rule.⁵

The problem of what to do with the M25 tank transporters which slowed down the companies in their moves was solved by pooling them in Headquarters and Headquarters Company and drawing them as needed. This solution worked out satisfactorily in other ways as well, for example, the Supply Section of the Battalion used the transporters to haul heavy supplies such as tank engines and tracks.⁶

Following the attack on VANNES, CCA moved on to attack LORIENT. In this action, A Company of the 126th was left with the remainder of the Battalion at VANNES from which it was felt the company could support the combat command.⁷

After the attack on LORIENT, CCA moved out with the order to contain NANTES. During this phase Company A of the 126th remained at VANNES, but its support of the command was inadequate. Vehicles of the combat command had to be towed back to VANNES to be repaired. These vehicles could have been more easily repaired if the maintenance company had been brought up for closer support.⁸

The eastward drives of the Division continued with great speed. By the 17th of August, the Division, after a long march during which nothing but hasty maintenance on vehicles was accomplished, assembled in the vicinity of ORLEANS. Because of this long run, the entire Division was in a poor state of maintenance. Every effort was made to put the vehicles in top shape.⁹

During the period 17-23 August, the 126th had accumulated a great backlog of tank work. At this time the 501st Ordnance Company HMT was attached to the Battalion to assist in catching up

on maintenance and repairs. Until now the Battalion had been making only hasty repairs, and the effects were becoming evident.¹⁰ By the time the Division moved again, deadlined vehicles were at a minimum.

From the vicinity of ORLEANS movement of the Division was again very rapid, and by the end of the month, the Battalion was in the vicinity of COMMERCY. The 126th had moved almost continuously; many times when vehicles fell out of the column, mechanics were dropped off with the vehicles which were repaired and allowed to continue to catch the column. If a vehicle could not be repaired, it was reported and left to be picked up by the Battalion.¹¹

For the month of August, the Battalion repaired the following equipment:¹²

- 256 Vehicles and tanks.
- 22 Artillery pieces.
- 63 Small arms.
- 88 Instruments.
- 103 Watches.

Lack of fuel had by now slowed the march of the Division, and it remained in the vicinity of COMMERCY. Great emphasis was placed on maintenance and getting the vehicles in shape.

In the period 2 - 10 September, the 126th continued the job of reducing the Division's vehicle deadline list by changing engines and making vehicles replacements in preparations for further advances to the east.

NOTES FOR APPENDIX II

¹ The Fourth Armored from the Beach to Bavaria, Capt. Kenneth Koyen, p34.

² After Action Report, 126th Armored Ordnance Maintenance Battalion 20 July 1944.

³ Combat History of the Fourth Armored Division, p4

⁴ Ibid, p.18

⁵ Ibid, p.16

⁶ Ibid, p.16

⁷ An Account of Clarke's Combat Command A, Lt. Col. Pattison, p.17.

⁸ Ibid, p.20

⁹ Combat History of the Fourth Armored Division, p.14

¹⁰ After Action Report, 126th Armored Ordnance Maintenance Battalion, p.15.

¹¹ Interview, Lt. Col. Reynold's, Ordnance Supply Officer, 4th Armored Division.

¹² After Action Report, 126th Armored Ordnance Maintenance Battalion, p.16.

A P E N D I X I I I

4th Armored Division

Troop List and Combat Organization

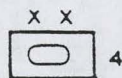
FOURTH ARMORED DIVISION

Organic Units:

Eighth Tank Battalion
Thirty-fifth Tank Battalion
Thirty-seventh Tank Battalion
Tenth Armored Infantry Battalion
Fifty-first Armored Infantry Battalion
Fifty-third Armored Infantry Battalion
Twenty-fourth Armored Engineer Battalion
Twenty-second Armored Field Artillery Battalion
Sixty-sixth Armored Field Artillery Battalion
Ninety-fourth Armored Field Artillery Battalion
Twenty-fifth Cavalry Reconnaissance Squadron
One-hundred Twenty-sixth Armored Ordnance Maintenance Battalion
Fourth-Sixth Armored Medical Battalion
Headquarters and Headquarters Battery, Division Artillery
CCA Headquarters and Headquarters Company
CCB Headquarters and Headquarters Company
CCR Headquarters and Headquarters Company
Division Headquarters Company
One-hundred forty-fourth Armored Signal Company
Trains Headquarters and Headquarters Company
Forward Echelon
Rear Echelon
Military Police Platoon
Division Band

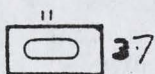
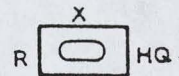
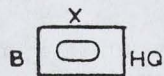
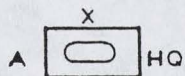
Attached Units in Combat:

704th Tank Destroyer Battalion
489th Antiaircraft Artillery (AW) Battalion (SP)
3804th Quartermaster Truck Company
444th Quartermaster Truck Company
995th Engineer Treadway Bridge Company
696th Armored Field Artillery Battalion
1st Platoon 16th Field Hospital
456th Ambulance Company
5th Detachment, 166th Signal Photo Company
Counterintelligence Corps Detachment No. 504
Interrogation of Prisoners of War Teams No. 56 and 61
Order of Battle Team No. 24
Air Support Party No. 2, XIX Tactical Air Command
Photo Intelligence Team No. 56
Advance Section Communications Zone
Prosthetic Team No. 4

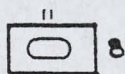


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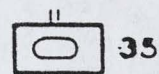
30 JULY 1944



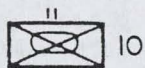
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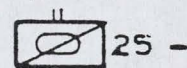
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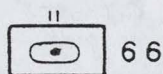
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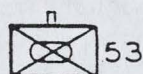
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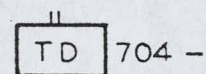
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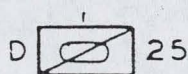
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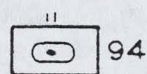
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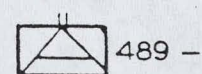
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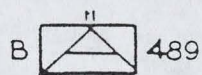
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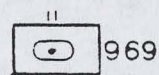
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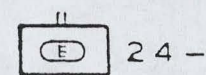
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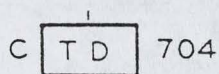
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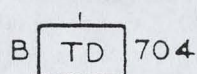
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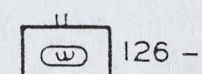
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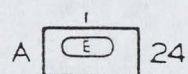
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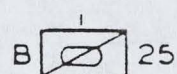
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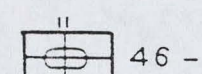
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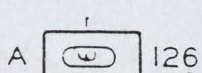
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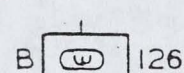
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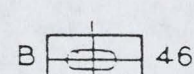
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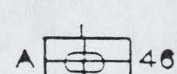
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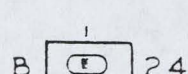
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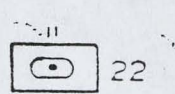
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46



24



22

x ix

A  HQ

 10(-)

 35(-)

C  25

 53

 66

1B  489

C  24

A  126

B  46

 704(-)

 2(GP)

 473

 988 BR

 4

B  HQ

 8

 51

 42

B  25

 320

B  35

B  10

 179

 253

 22

 696

 94

A  489

A  704

BC  166

 24(-)

B  126

C  46

10 AUGUST

R  HQ

 256

B  704

 489

 466

 1266

 37

XX
 4

16-17 AUGUST 1944

A  HQ

 35

I  137

 10

 HQ

 94

 66

 191

 219

B  489

 3

D  25

A  24

A  126

 704(-)

B  46

B  HQ

 8

 37

 51

 53

 22

A  489

B  25

B  704

B  24

B  126

C  46

R  HQ

 25(-)

A  704

 489(-)

 24(-)

 126(-)

501  (HMT)

 46(-)

A P P E N D I X I V

P E R S O N A L I T I E S

MAJOR GENERAL JOHN S. WOOD

John S. Wood was born on 11 January 1883. Graduated from the United States Military Academy on 12 June 1912, and commissioned Second Lieutenant of Artillery. He was promoted through the grades to Major General in June 1942.

General Wood commanded the 2d Armored Division Artillery during April - June 1941, assigned to I Armored Corps, Fort Knox, Kentucky, June - November 1941, commanded 5th Armored Division, December 1941 to May 1942, and then assigned as Commanding General, 4th Armored Division in training and combat from May 1942 to December 1944.

General John S. Wood was retired 31 August 1946, with rank of Major General. General Wood won many decorations during his long and distinguished military career, including the Distinguished Service Cross, Distinguished Service Medal, Silver Star, Bronze Star with cluster, Air Medal with cluster, Officer of Legion of Honor (French), and the Croix de Guerre with Palm (Belgian).

Brigadier General BRUCE C. CLARKE

Bruce C. Clarke was born at Adams, New York on 29 April 1901. He enlisted in the United States Army on 5 April 1918, and was discharged therefrom on 6 July 1918. On 5 January 1920, he enlisted in the National Guard of New York and served as private first class and corporal in the 65th Field Artillery. He graduated in 1921 from Masten Park High School, Buffalo, New York. Upon

graduation from the United States Military Academy on 12 June 1925, he was commissioned a Second Lieutenant of Engineers.

In reviewing his assignments from that date until the present, the following are of special significance:

1. Completion of Civil Engineering Course (C.E. Degree) 1927.
2. Placed in charge of the Engineering Division, Galveston, Texas, June 1936.
3. Received the L.L.B. Degree from La Salle Extension University, 1936.
4. Graduated Command and General Staff School, Fort Leavenworth, Kansas, February 1940.
5. Served for a period of approximately four months as Military Observer in the office of the Military Attache in London, England, returning in April 1941, to Pine Camp, New York where he assumed command of the 24th Engineer Battalion and became Division Engineer and, subsequently Chief of Staff of the 4th Armored Division.
6. On 1 November 1943, he was made Commanding Officer of Combat Command A, 4th Armored Division and, in this capacity participated in many of the actions in the European Theatre outlined in the preceeding narrative.. He was promoted to Brigadier General on 10 November 1944 and assigned to the 7th Armored Division. On 20 June 1945, General Clarke assumed command of the 4th Armored Division, holding this position until ordered to the Pacific Theatre on 6 July 1945. He returned to the Zone of the Interior on 26th

of September 1945. During the ensuing period, his duties included Deputy in the Plans Section, Army Ground Forces; Acting C of S, Plans Section Sept. 1946; Deputy G-3, AGF, Oct 1946; Acting G-3, AGF, April 1947; Assistant C of S, AGF, August 1947 to 15 January 1948. Assistant Commandant, The Armored School, Fort Knox, Kentucky, on 1 February 1948, where he is presently stationed.

During the war, General Clarke gained the reputation of being one of the outstanding Armored Commanders in the European Theatre and was considered by General Patton as the outstanding tank commander in the Third Army.

In his present position at The Armored School, he is in direct charge of the instruction of officers and enlisted students and has had a profound influence on the concepts and teaching of Armored Doctrine.

General Clarke has received the following decorations and awards: Distinguished Service Cross, Distinguished Service Medal, Silver Star with two Oak Leaf Clusters, Legion of Merit, Bronze Star with two Oak Leaf Clusters, Air Medal, Commendation Ribbon, Defense Medal with one star, European Medal with four stars, Pacific Theatre Medal, American Theatre Medal, Victory Medal World War I, Victory Medal World War II, Phillipine Liberation Ribbon, Conspicuous Service Cross (New York State), and Distinguished Unit Citation.

Foreign Decorations include: Legion of Honor and Croix de Guerre with Palm (French), Croix de Guerre with Palm (Belgian) and Fourragere (French).

Major General HOLMES E. DAGER

Holmes E. Dager was born in Asbury Park, New Jersey, on 24 June 1893. He attended Barringin High School, Newark, New Jersey 1909 - 1911, New York Preparatory Academy 1911 - 1913, and Dowds Academy 1916.

General Dager was a second lieutenant, New Jersey National Guard, June - October 1916, and served on the Texas Border with the 51st Infantry in 1916. Reentered the Federal Service March 1917, and commissioned second lieutenant, Infantry, United States Army, on 3 June 1917, advanced to grade of Major (temporary) October 1918, served overseas in World War I from June 1918 - June 1919, fighting in the MEUSE-ARGONNE sector. Following the War General Dager was assigned to Camp Grant 1919 - 1920, Professor of Military Science and Tactics, Clason Point Military Academy Westchester, New York, 1920-1924, graduated The Infantry School, Fort Benning, Georgia in 1925, assigned 29th Infantry Regiment, Fort Benning, 1925 - 1928, completed Advance Course, Fort Benning, 1930, with the 65th Infantry, San Juan, Puerto Rico, 1931-1934, Special Troops, 1st Division, Fort Hamilton, New York, 1934 - 1935, graded Command and General Staff School, Fort Leavenworth, Kansas, 1936, Instructor, Command and General Staff School, 1936 - 1940, Assistant Chief of Operations, Headquarters First Army, Governor's Island, New York, 1941 - 1942. Then assigned as Commanding Officer, 4th Armored Infantry, 2d Armored Division, Fort Benning, January-June 1942, Commanding Officer, Combat Command "B", 8th Armored Division, Fort Knox, Kentucky,

1942, Commanding General, Combat Command "E", 4th Armored Division, 1942-1945, and Commanding General 11th Armored Division, March 1945. Promoted to Major General in May 1945.

General Dager was retired on 31 October 1947. Among his many decorations are included; Distinguished Service Cross, Legion of Merit, Silver Star with Oak Leaf Cluster, Bronze Star with two Oak Leaf Clusters, Chevalier Legion of Honor (France), and Croix-de-Guerre with Palm (Belgium).

Brigadier General ERNEST A. BIXBY

Ernest A. Bixby was born in New Hampshire on 22 February 1899. Following his graduation from the United States Military Academy in 1918, he was commissioned a Second Lieutenant of Field Artillery.

General Bixby completed the basic course of the Field Artillery School, Fort Sill, Oklahoma in 1920, graduated from the Command and General Staff School, Fort Leavenworth, Kansas in 1937, and from the Army Industrial College in 1940. He was with the General Staff Corps during the period 25 January 1941 - 16 April 1942, and from 1 August 1942 to 17 November 1942.

During World War II, he attained the rank of Brigadier General serving as Division Artillery Commander of the 4th Armored Division. On the 7th of September 1944, he became the Division Chief of Staff, and on 12 September of the same year he was transferred to the 90th Infantry Division as Division Artillery Commander.

General Bixby's decorations include the Legion of Merit, Silver Star with two Oak Leaf Clusters, and the Bronze Star Medal with one Oak Leaf Cluster. In addition to the above, General Bixby holds a Distinguished Unit Citation ribbon awarded during his tour with the 4th Armored Division.

Lieutenant Colonel Alexander Graham

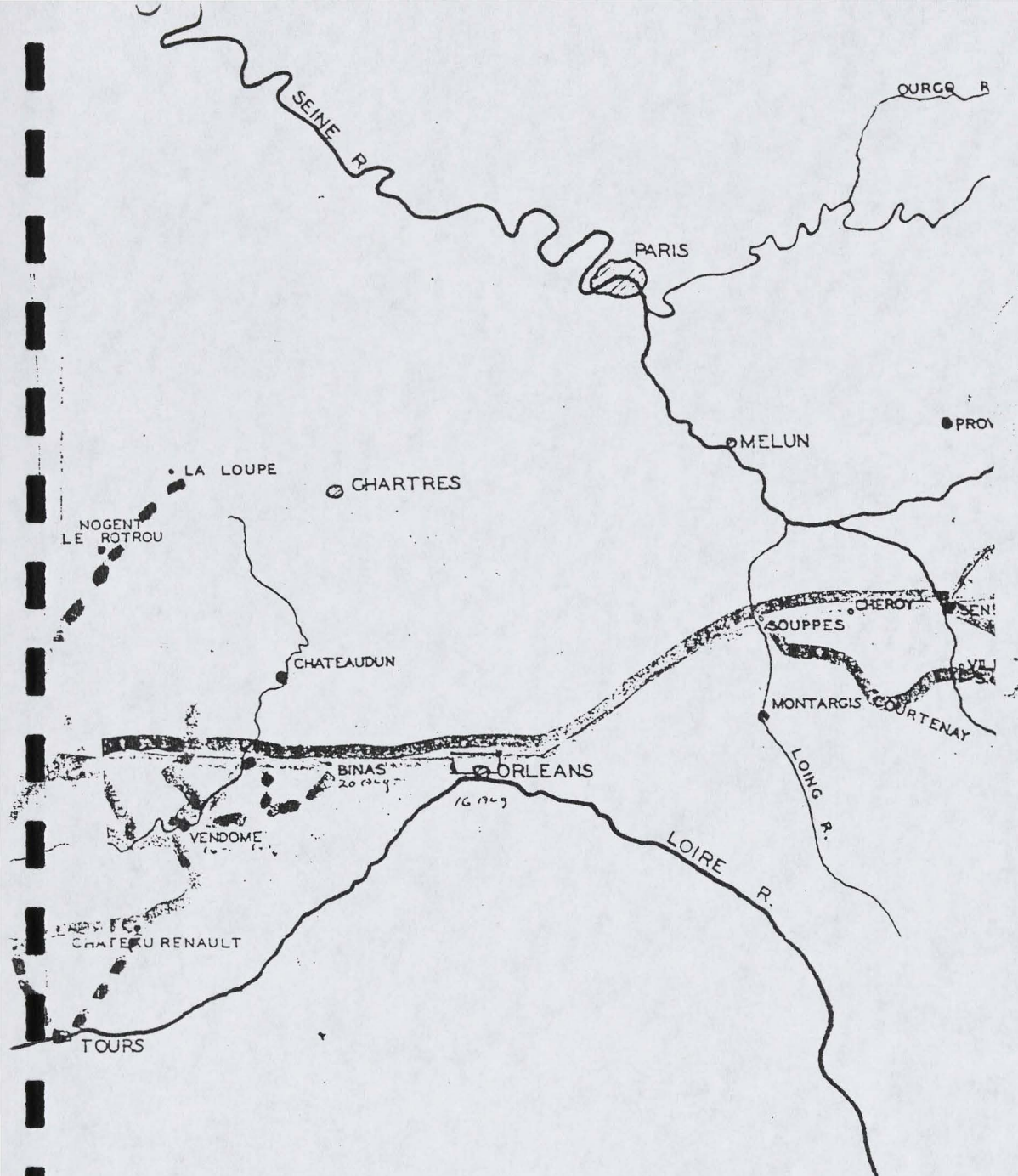
Alexander Graham was born in Iowa on 9 January 1909. He graduated from the United States Military Academy in 1932 and was commissioned a Second Lieutenant of Field Artillery. In 1940, Lt. Col. Graham graduated from the Field Artillery School, Fort Sill, Oklahoma.

During World War II, Colonel Graham served as Commanding Officer of the 94th Armored Field Artillery Battalion of the 4th Armored Division, and as 4th Armored Division Artillery Commander. At present, he is serving as the Director of weapons Instruction at The Armored School, Fort Knox, Kentucky.

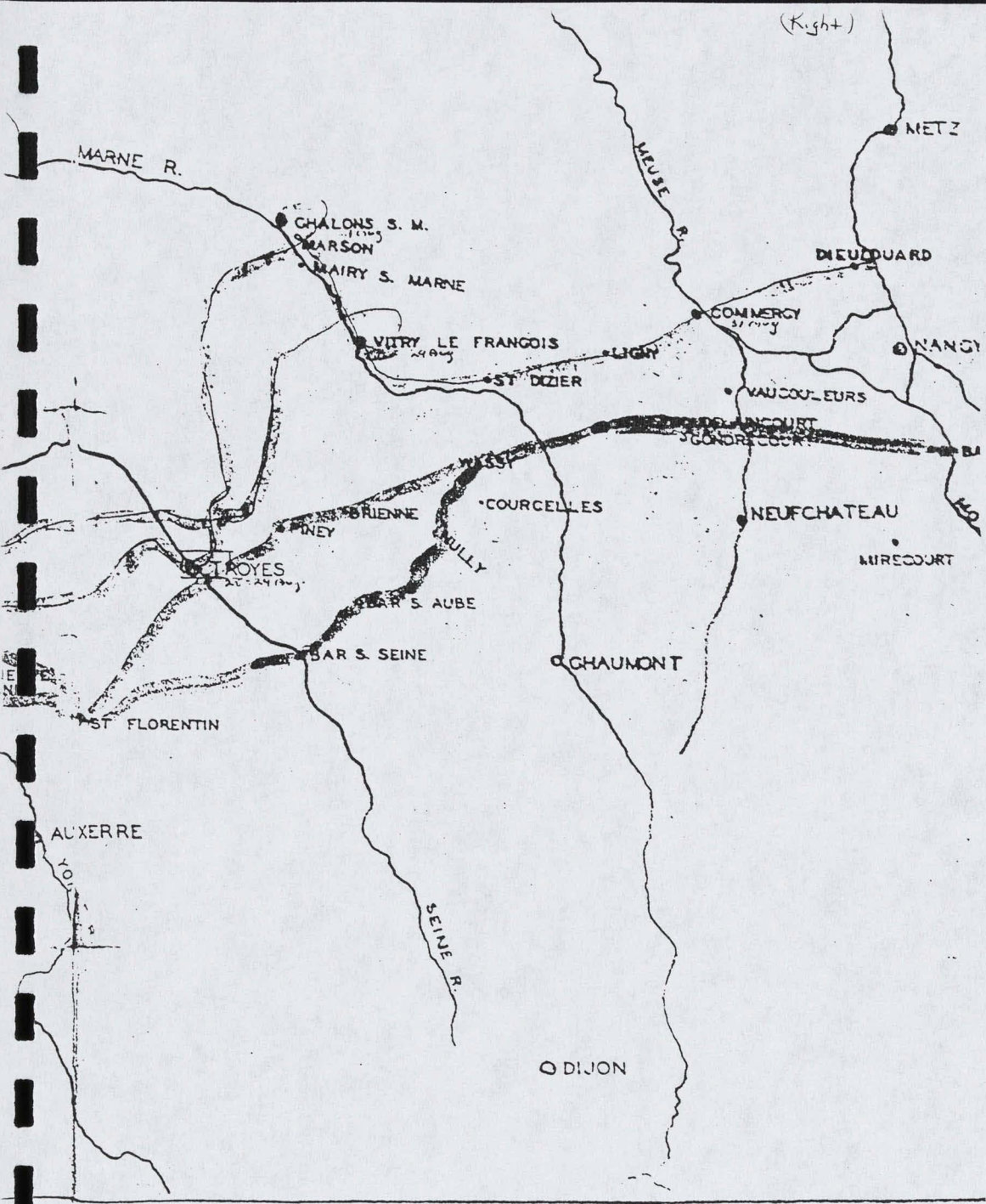
Colonel Graham's decorations include the Silver Star, the Legion of Merit, Bronze Star Medal with one Oak Leaf Cluster, and the Purple Heart.

A P P E N D I X V

MAPS



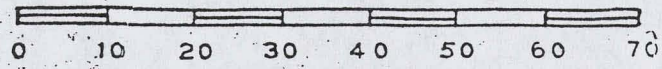
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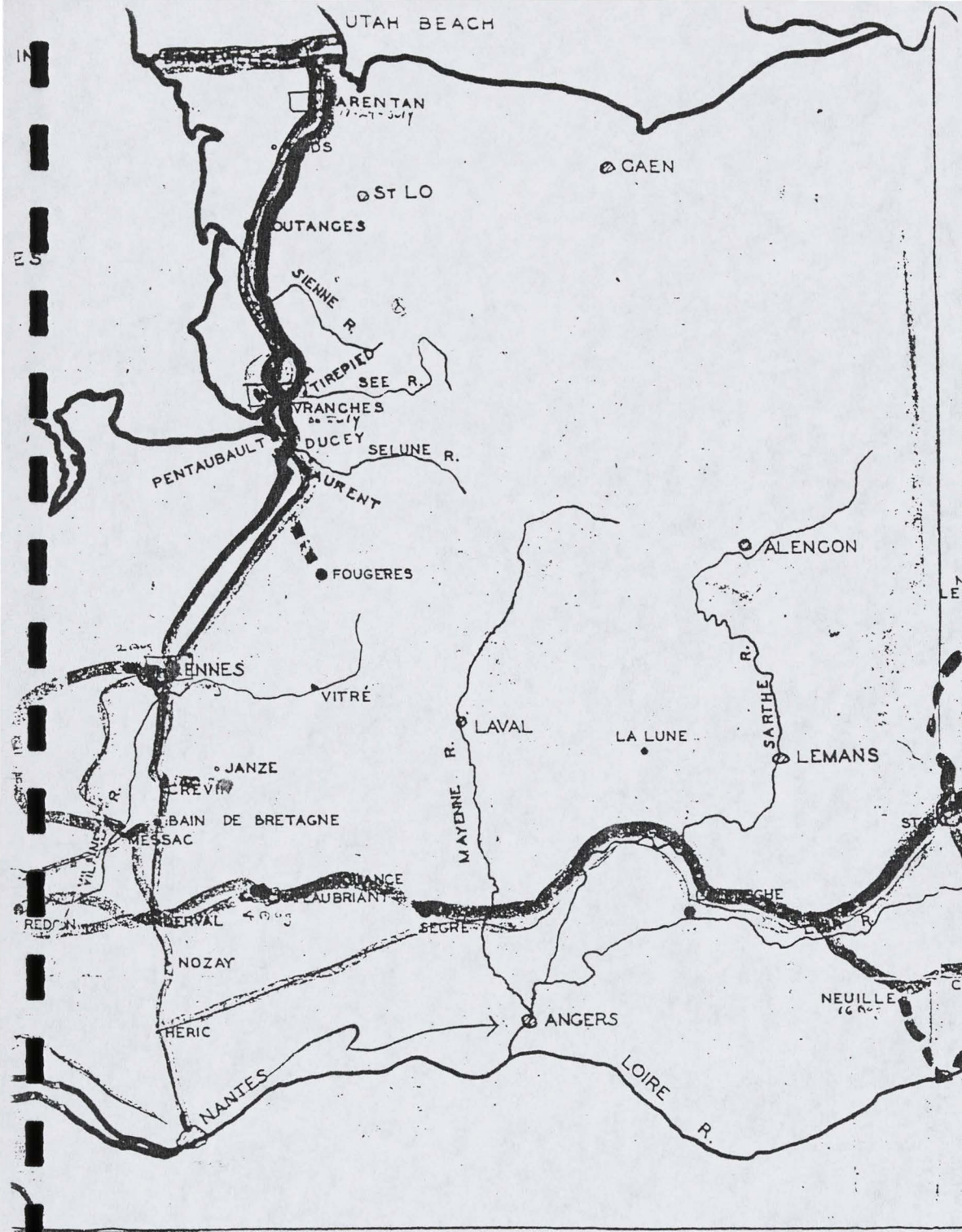


FROM UTAH BEACH TO THE MOSELLE RIVER

MAJOR BATTLES

SCALE 1:1,000,000





(L64+)

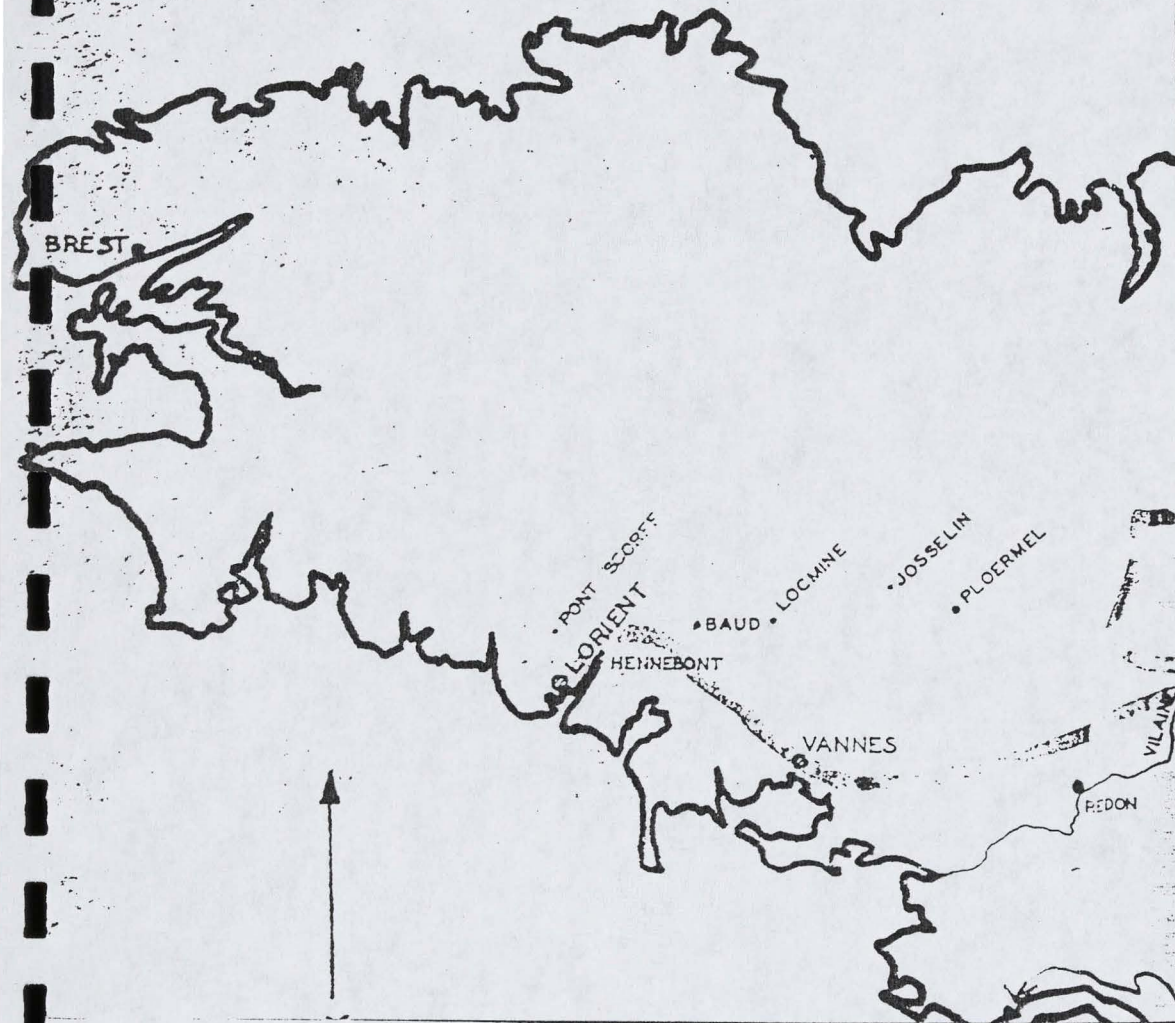
ARMOR ACROSS FRANCE

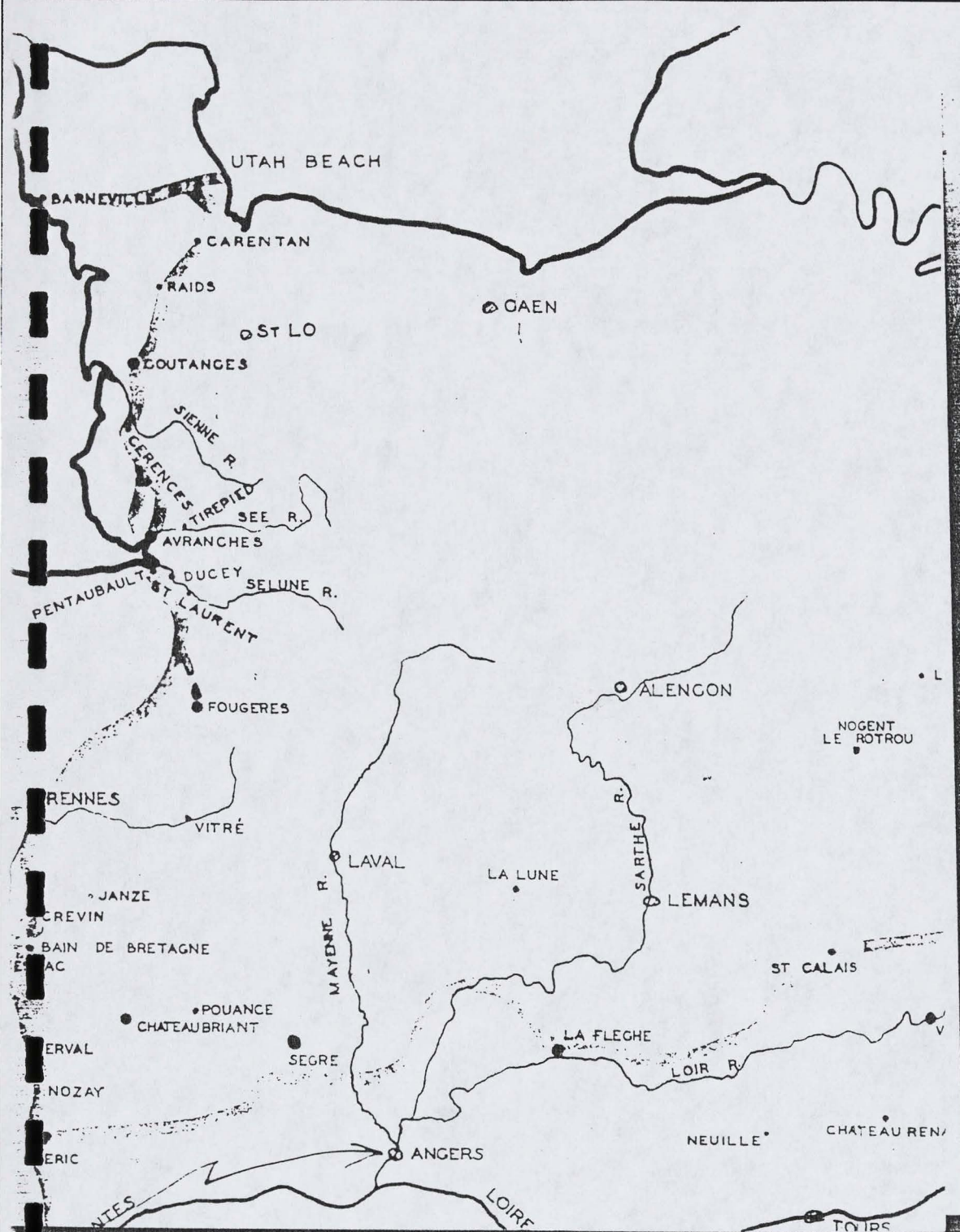
ROUTE OF CC "A" 4TH ARMORED DIVISION
FROM UTAH BEACH TO THE MOSELLE RIVER LINE

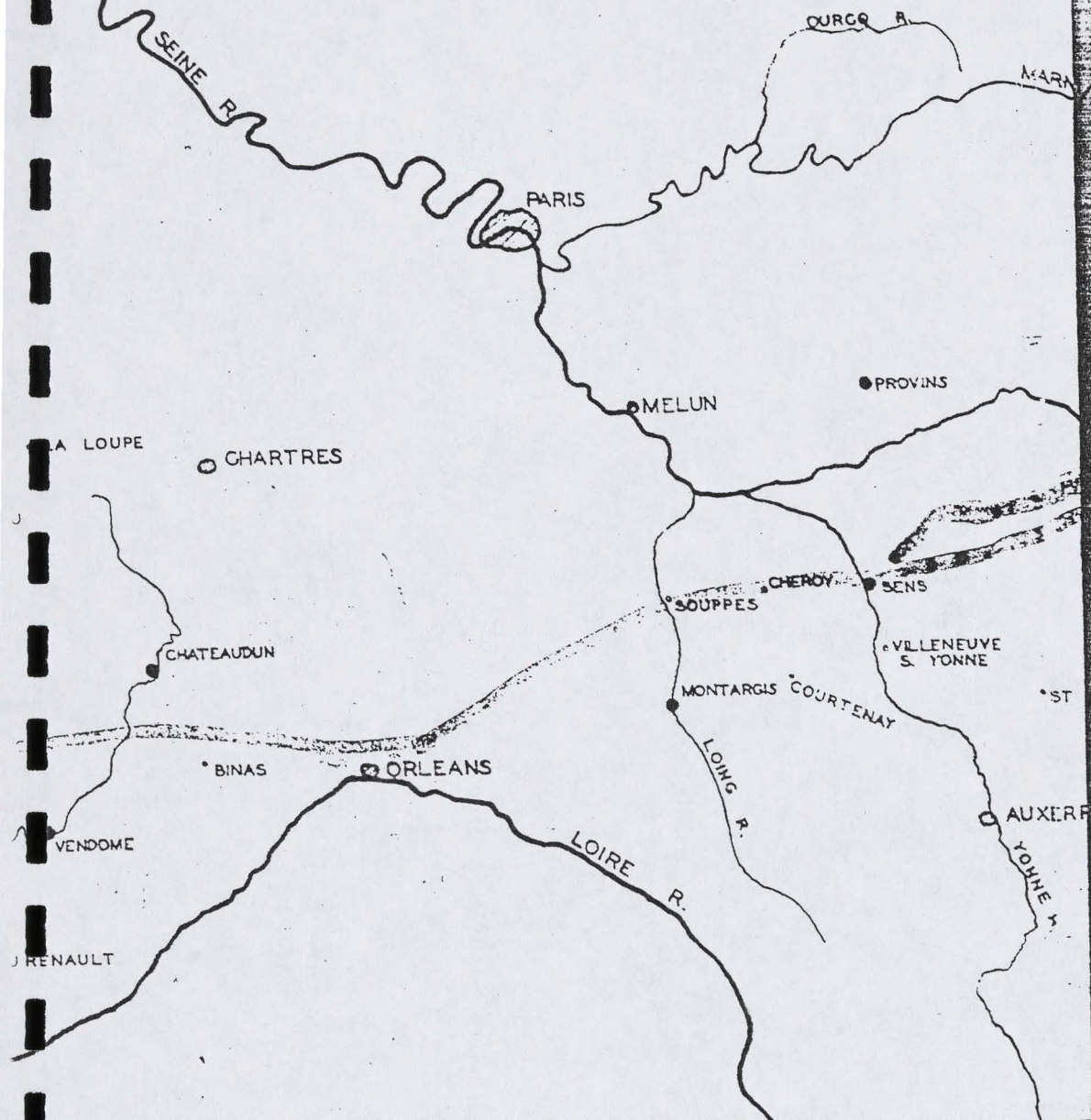
□ MAJOR BATTLES

SCALE 1:1,000,000

0 10 20 30 40 50 60 70 MILES







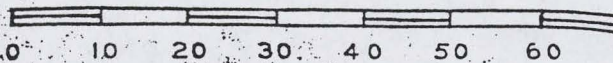
ARMOR ACROSS FRANCE

ROUTE OF CC "B" 4TH ARMORED DIV

FROM UTAH BEACH TO THE MOSELLE

MAJOR BATTLES

SCALE 1:1,000,000



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LOIRE

LA FLECHE

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ANGERS

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