

UNCLASSIFIED

AD NUMBER

ADB087721

NEW LIMITATION CHANGE

TO

Approved for public release, distribution
unlimited

FROM

Distribution authorized to U.S. Gov't.,
agencies only; Software Documentation; 6
Nov 1984. Other requests shall be referred
to: Dir/USACAA, 8120 Woodmont Ave.,
Bethesda, MD 20814-2797.

AUTHORITY

U.S. Army Concepts Analysis Agency ltr.,
dtd July 19, 1988.

THIS PAGE IS UNCLASSIFIED

ANALYSIS OF FACTORS THAT HAVE INFLUENCED
OUTCOMES OF BATTLES AND WARS:
A DATA BASE OF BATTLES AND ENGAGEMENTS

AD-B087 721

Final Report

DTIC
SELECTED
S DEC 4 1984 D
D

Prepared for the US Army Concepts Analysis
Agency under Contract No.
MDA903-82-C-0363

June 1983

VOLUME V

Part Two: Wars of the 20th Century
Vol. V: World War II, 1939-1945;
Campaigns in North Africa,
Italy, and Western Europe

DTIC FILE COPY

HISTORICAL EVALUATION AND RESEARCH ORGANIZATION
A DIVISION OF T.N. DUPUY ASSOCIATES, INC.
2301 GALLONS ROAD, P.O. Box 157
DUNN LORING, VIRGINIA 22027
(703) 560-6427

84 10 17 120

Accession For	
NTIS GRA&I	<input type="checkbox"/>
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
<i>Per Ltr. on file</i>	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
B/3	

ANALYSIS OF FACTORS THAT HAVE INFLUENCED OUTCOMES
OF BATTLES AND WARS:
A DATA BASE OF BATTLES AND ENGAGEMENTS

Final Report

Prepared for the US Army Concepts Analysis Agency
under Contract No.
MDA903-82-C-0363

June 1983

VOLUME V

Part Two: Wars of the 20th Century
Vol. V: World War II, 1939-1945;
Campaigns in North Africa,
Italy, and Western Europe

Distribution limited to U.S. Gov't. agencies only;
Test and Evaluation; **6 Nov. 84**. Other requests
for this document must be referred to **Dir., USACAA,**
ATTN.: CSCA-MSI, 8120 Woodmont Ave.,
Bethesda, MD 20814-2797

HISTORICAL EVALUATION AND RESEARCH ORGANIZATION
A Division of T.N. Dupuy Associates, Inc.
2301 Gallows Road, P.O. Box 157
Dunn Loring, Virginia 22027
(703) 560-6427

Summary

ANALYSIS OF FACTORS THAT HAVE
INFLUENCED OUTCOMES OF BATTLES AND WARS:
A DATA BASE OF BATTLES AND ENGAGEMENTS

In this report prepared by the Historical Evaluation and Research Organization (HERO) for the US Army Concepts Analysis Agency, HERO has compiled data on 600 major battles of modern history from the beginning of the 17th Century through the first three quarters of the 20th Century, and presented this data in a combination of matrices and narratives. The matrices comprise seven tables which present all of the significant statistical data available on the battles and show how major factors of combat have influenced the outcomes of these battles. There is a concise narrative for each battle, which summarizes the principal sources consulted in the research for that battle. The data, information, and analysis are presented in Volumes II-VI, as follows:

- Volume II: 1600-1800
- Volume III: 1805-1900
- Volume IV: 1904-1940
- Volume V: 1939-1945
- Volume VI: 1939-1973

This volume covers
World War II, 1939-1945
(Campaigns in North Africa,
Italy, and Western Europe).

Table of Contents

List of Engagements Analyzed and Described in Volume V	1
North Africa, 1942-1943	
Tables and Matrices	6
Narratives of Engagements	12
Italy, 1943-1944	
Salerno Campaign, 1943	
Tables and Matrices	20
Narratives of Engagements	26
Volturno Campaign, 1943	
Tables and Matrices	35
Narratives of Engagements	47
Anzio Campaign, 1944	
Tables and Matrices	67
Narratives of Engagements	73
Rome and North Italy Campaign, 1944	
Tables and Matrices	84
Narratives of Engagements	102
Northwest Europe, 1944	
Tables and Matrices	126
Narratives of Engagements	150
Bibliographies	179

ENGAGEMENTS ANALYZED AND DESCRIBED IN VOLUME V

World War II

North Africa, 1942-1943

Alam Halfa 31 Aug-2 Sep 1942

El Alamein II 23 Oct-4 Nov 1942

 Operation "Lightfoot," the Break-in 23-25 Oct 1942

 Expansion of the Allied Bridgehead 26 Oct-1 Nov 1942

 Operation "Supercharge," the Breakthrough 2-4 Nov 1942

Chouigui Pass 26 Nov 1942

El Guettar 23 Mar 1943

Sedjenane-Bizerte 23 Apr-6 May 1943

Italy, 1943-1944

Salerno Campaign, 1943

Amphitheater 9-11 Sep

Port of Salerno 9-11 Sep

Sele-Calore Corridor 11 Sep

Battipaglia I 12-15 Sep

Vietri I 12-15 Sep

Tobacco Factory 13-14 Sep

Battipaglia II 17-18 Sep

Eboli 17-18 Sep

Vietri II 17-18 Sep

Volturno Campaign, 1943

Grazzanise 12-14 Oct
Caiazzo 13-14 Oct
Capua 13 Oct
Castel Volturno 13-15 Oct
Monte Acero 13-14 Oct
Triflisco 13-14 Oct
Dragonni 15-17 Oct
Canal I 17-18 Oct
Monte Grande (Volturno) 16-17 Oct
Canal II 18-20 Oct
Francolise 20-22 Oct
Santa Maria Oliveto 4-5 Nov
Monte Camino I 5-7 Nov
Monte Lungo 6-7 Nov
Pozzilli 6-7 Nov
Monte Camino II 8-10 Nov
Monte Rotondo 8-10 Nov
Calabritto 1-2 Dec
Monte Camino III 2-6 Dec
Monte Maggiore 2-3 Dec

Anzio Campaign, 1944

Aprilia I 25-26 Jan
The Factory 27 Jan
Campoleone 29-31 Jan

Anzio Campaign, 1944 (Continued)

Campoleone Counterattack 3-5 Feb

Carroceto 7-8 Feb

Moletta River Defense 7-9 Feb

Aprilia II 9 Feb

Factory Counterattack 11-12 Feb

Bowling Alley 16-19 Feb

Moletta River II 16-19 Feb

Fioccia 21-23 Feb

Rome Campaign, 1944

Santa Maria Infante 12-13 May

San Martino 12-13 May

Castellonorato 14-15 May

Spigno 14-15 May

Formia 16-18 May

Monte Grande (Rome) 17-19 May

Itri-Fondi 20-22 May

Terracina 22-24 May

Moletta Offensive 23-24 May

Anzio-Albano Road 23-24 May

Anzio Breakout 23-25 May

Cisterna 23-25 May

Sezze 25-27 May

Velletri 26 May

Campoleone Station 26-28 May

Rome Campaign, 1944 (Continued)

Villa Crocetta 27-28 May

Ardea 28-30 May

Fosso di Campoleone 29-31 May

Lanuvio 29 May-1 Jun

Lariano 1-2 Jun

Via Anziate 1-2 Jun

Valmonte 1-2 Jun

Tarto-Tiber 3-4 Jun

North Italian Campaign, 1944

Il Giogio Pass 13-17 Sep

Northwest Europe, 1944

St. Lo 11-18 Jul

Operation "Goodwood" 18-20 Jul

Operation "Cobra" 24-26 Jul

Mortain 6-12 Aug

Chartres 16 Aug

Melun 23 Aug

Seine River 23-25 Aug

Moselle-Metz 6-11 Sep

Metz 13 Sep

Arracourt 19-22 Sep

Westwall 2-7 Oct

Schmidt 1-14 Nov

Seille-Nied 8-12 Nov

Northwest Europe, 1944 (Continued)

Foret de Chateau-Salins 10-11 Nov

Morhange 13-15 Nov

Morhange-Faulquemont 13-16 Nov

Bourgaltroff 14-15 Nov

Sarre-St. Avold 20-27 Nov

Baerendorf I 24-25 Nov

Baerendorf II 26 Nov

Burbach-Durstel 27-29 Nov

Durstel-Faerbersviller 28-29 Nov

Sarre-Union 1-2 Dec

Sarre-Singling 5-7 Dec

Singling-Bining 6-7 Dec

Ardennes Campaign, 1944

Sauer River 16-17 Dec

St. Vith 17-23 Dec

Bastogne 18-20 Dec

1. IDENTIFICATION
War: World War II
North Africa, 1942-1943

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Alam Halfa, Egypt	A 31 Aug- 2 Sep D 1942	North Africa, 1942	Ger-Ital Pz Army Africa Br Eighth Army	GFM Rommel Lt Gen Montgomery	3	24.0
El Alamein II, Egypt	A 23 Oct-4 Nov D 1942	North Africa, 1942	Br Eighth Army Ger-Ital Pz Army	Lt Gen Montgomery GFM Rommel	13	61.0
Operation "Light- foot", Egypt	A 23-25 Oct 1942	North Africa, 1942	Br Eighth Army Ger-It Pz Army	Lt Gen Montgomery Gens Stumm & Thom	3	61.0
Alamein Bridge- head Expansion, Egypt	A 26 Oct-1 Nov D 1942	North Africa, 1942	Br Eighth Army Ger-It Pz Army	Lt Gen Montgomery FM Rommel	7	61.0
Operation "Super- charge," Egypt	A 2-4 Nov 1942	North Africa, 1942	Br Eighth Army Ger-It Pz Army	Lt Gen Montgomery FM Rommel	3	61.0
Chouigui Pass, Tunisia	A 26 Nov 1942 D	Tunisia, 1942	Ger 190th Pz Bn, 10th Pz Div (elms) (+) US 1st Armd Div (elms)	Col Broich Lt Col Waters	1	1.6
El Guettar, Tunisia	A 23 Mar 1943 D	Tunisia, 1943	Ger 10th Pz Div (+) US 1st Inf Div (+)	Gen Broich MG Allen	1	25.0
Sedjenane-Bizerte, Tunisia	A 23 Apr-6 May D 1943	Tunisia, 1943	US 9th Inf Div (+) Ger von Manteuffel Div (2/3)	MG Eddy Lt Gen Bulovius	11(combat)	32.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
North Africa, 1942-1943

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Alam Halfa	A D	P/FD	FB/RE	DST	SD	N	--	x
E1 Alamein II	A D	FD	FB/RB	DST	FD	Y	x	x
Operation "Lightfoot"	A D	FD	FB/RB	DST	FD	Y	x	x
Alamein Bridgehead Expansion	A D	FD	RB/RB	DST	FD	N	--	x
Operation "Super-charge"	A D	FD	FB/RB	DST	FD	N	--	x
Chouigui Pass	A D	HD	RB	DST	FT	Y	x	N
E1 Guettar	A D	HD	RB/RgB	DST	SpD	Y	x	N
Sedjenane-Bizerte	A D	FD	RgM	DST	SpT	N	--	x

3. STRENGTHS AND COMBAT OUTCOMES
World War II: North Africa, 1942-1943

War:

Engagement	Strength				Battle Casualties				Arty Pieces Lost				Aircraft Losses		
	Total	Personnel	Lt.	NBT	Arty Pieces	Air Sorties	Total	\$/Day	Armor Losses	Total	\$/Day	Total	Sorties/Day		
Alam Halfa	A 124,000 D 120,000	515 450	?	?	558 576	?	2,940 2,680	0.8 0.5	50 67	3.2 5.0	15 0	0.9 0	41 68	?	0.8
E1 Alamein II	A 220,476 D 105,223	1,037 593	119 51	918 542	908 592	?	11,586 3,120	13,560 15,995	0.5 1.2	500 591	3.7 7.7	2 197	0.02 2.6	97 84	0.1 0.2
Operation "Light-foot"	A 220,476 D 105,223	1,037 593	119 51	918 542	908 592	?	6,140 3,695	0.9 1.2	302 127	9.7 7.1	2 ?	0.1 --	16 --	?	?
Alamein Bridgehead * Expansion *	A 214,336 D 101,528	735 470	88 ?	657 352	906 ?	?	3,000 4,500	0.2 0.6	38 180	0.7 5.5	?	--	?	--	--
Operation "Super-charge" *	A 211,000 D 97,000	700 310	?	?	906 ?	?	4,420 7,800	0.7 2.7	160 284	7.6 30.5	?	--	?	--	--
Chouigui Pass	A 465 D 188	13 25	0 3	13 0	0 3	0	?	--	9	69.2	0	--	0	--	--
E1 Guettar	A 10,300 D 22,019	103 75	7 0	96 75	62 124	?	123 203	4.4 0.9	42 31	40.8 41.3	?	--	4	3.3	--
Sedjenane-Bizerte	A 24,098 D 5,000	94 5	22 0	72 5	100 34	?	75 605	0.4 1.1	?	--	0	--	0	--	--

* Data (in certain categories) estimated; considered accurate to within +5%.
Over 16,000 captured in the pursuit not included.

4. INTANGIBLE FACTORS

War: World War II: North Africa, 1942-1943

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Alam Halfa	A D	N C	N C	C N	N X	O N	N X	C C	X X	X X	4.0 2.0	5 7
El Alamein II	A D	C C	C C	C N	N X	N N	X X	C C	X X	X X	2.0 2.0	6 8
Operation "Lightfoot"	A D	C C	C C	C N	N X	N N	X N	C C	X X	X X	0.0 1.0	7 6
Alamein Bridgehead Expansion	A D	C C	C C	C N	N X	N N	N N	C C	X X	X X	5.0 1.0	7 6
Operation "Supercharge"	A D	C C	C C	C N	N X	X N	N N	C C	X X	X X	0.0 0.0	9 5
Chouigui Pass	A D	N N	N N	N X	N N	N N	O N	C C	X X	X X	6.0 6.0	5 7
El Guettar	A D	N N	N N	N C	N O	N O	N X	C C	X X	X X	4.0 4.0	7 4
Sedjenane- Bizerte	A D	N N	N N	N C	N O	N O	N X	C C	X X	X X	0.0 0.0	5 4

6. FACTORS AFFECTING OUTCOME

War: World War II: North Africa, 1942-1943

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Front Narrow, Masses, Maneuver,	Logistics	Fortifi-cations	Depth
Alam Halfa	A D	N X	N X	N X	N N	X X	N N	N N	N N	X X	X X	X X	X X	X X
El Alamein II	A D	N X	N X	N X	N N	X X	N N	N N	N N	X X	X X	X X	X X	X X
Operation "Lightfoot"	A D	N X	N X	N X	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
Alamein Bridgehead Expansion	A D	N X	N X	N X	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
Operation "Supercharge"	A D	N X	N X	N X	N N	N X	N N	N N	N N	N X	N X	N X	N X	N X
Chouigui Pass	A D	N X	N X	N X	N N	N X	N N	N X	N X	N X	N X	N X	N X	N X
El Guettar	A D	N X	N X	N X	N N	X X	N N	X X	N N	N X	N X	N X	N X	N X
Sedjenane-Bizerte	A D	N X	N X	N X	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War II: North Africa, 1942-1943

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Alam Halfa	A D	E (LR) D/O, E (RR)	FE --	X --
El Alamein II	A D	F D/O, F	FE --	X --
Operation "Lightfoot"	A D	F D/O, F	FE --	X --
Alamein Bridgehead Expansion	A D	F D/O, F	-- --	X --
Operation "Supercharge"	A D	F D	-- --	X --
Ghouigui Pass	A D	F D/O, FE	-- --	X --
El Guettar	A D	F D	-- --	X --
Sedjenane-Bizerte	A D	F D	-- --	X --

WORLD WAR II (NORTH AFRICA , 1942)

Alam Halfa, 31 August-2 September 1942

In June 1942 the British Eighth Army in North Africa retreated eastward, pursued by Italo-German forces under General Erwin Rommel. After a delaying action at Mersa Matruh on 28 June, the British fell back on the Alam Halfa Ridge in a fortified line between El Alamein on the Mediterranean Sea and the Qattara Depression some 65 kilometers inland, and on 13 August Lieutenant General Bernard L. Montgomery assumed command of the Eighth Army.

Rommel's attack plan at Alam Halfa entailed an envelopment of the British left flank by armored units of the Afrika Korps. Severe supply shortages necessitated immediate action, and since the main Alamein defenses were too strong for a frontal assault, Rommel chose to break through on the British left flank over terrain covered by an extensive British minefield. On 31 August the attack got off to a slow start, delayed by the British mines. Despite a stiff defense by the British 7th Armored Division, the 15th Panzer Division penetrated and drove to the left rear of the Alamein position. Another panzer division and a light infantry division also broke through but their penetration was not so deep. A stand by British tanks dug in on the Alam Halfa Ridge prevented the Germans from exploiting their breakthrough, and under increasing British pressure Rommel commenced to withdraw on 2 September. Montgomery elected not to pursue.

Significance: This was the last opportunity for a major German offensive in North Africa, and it had failed. Although German supply shortages restricted operations, British air and artillery superiority and well prepared defenses manned by determined veterans had stopped Rommel. The decisive battle of El Alamein followed two months later.

Sources: P.1; P.3; P.7; Q.8; Q.10; Q.16

WORLD WAR II (NORTH AFRICA, 1942)

El Alamein II, 23 October-4 November 1942

Following the Battle of Alam el Halfa the lines of the opposing Axis and Allied armies in western Egypt stabilized on a 61-kilometer front extending southward from the coastal village of El Alamein to the impassable Great Qattara Depression. During the following two months, both sides built up for the next round. The British logistical buildup was much more successful than that of the Germans, whose line of communications across the Mediterranean was severely restricted by Allied air and naval forces.

During October British Lieutenant General Bernard Montgomery prepared the Allied Eighth Army for an attack against the fortified position of Field Marshal Erwin Rommel's German-Italian Panzer Army west of El Alamein by penetrating its center with a strong attack of infantry and armor. The attack was to be preceded by a carefully planned artillery preparation. The Eighth Army's offensive, code-named Operation "Lightfoot," began on the night of 23/24 October. The artillery preparation preceding the operation was successful, but the British and Commonwealth forces became bogged down in the Axis minefields and were unable to penetrate deeply into the Axis position. As a result, it was not possible for the Allied armor to carry out its part of the plan, which was to engage and destroy the Axis armor in the open country beyond the depth of the Axis fortifications and minefields.

Montgomery therefore prepared for a second offensive, code-named "Supercharge," to be launched on the night of 2 November. Strongly supported, Supercharge succeeded in breaking through the depth of the Axis defenses. Rommel ordered a withdrawal on 3 November, and the Eighth Army began its pursuit on 4 November.

Significance: El Alamein ranks as one of the decisive battles of World War II. Rommel's army incurred serious personnel and material losses, both in the battle and during the subsequent withdrawal to Tunisia. The Panzer Army retreated from Egypt and across Libya to Tunisia, where it reorganized behind the defenses of the Mareth Line. The British pursued, but not as vigorously as Montgomery wished, due to logistical problems. The battle ended the Axis threat to the Suez Canal and was a serious blow to Axis morale.

Sources: Q.4; Q.10; Q.11; Q.17; Q.21.

WORLD WAR II (NORTH AFRICA, 1942)

El Alamein II: Operation "Lightfoot," 23-25 October 1942

At 2140 hours 23 October the artillery of the British Eighth Army began firing the artillery preparation for Operation "Lightfoot," the break-in phase of the Eighth Army's plan for the Battle of El Alamein. The fires of the artillery were supplemented by aerial bombardment and by jamming of the Panzer Army's communications by specially-equipped aircraft. The attack of the British and Commonwealth infantry of the XXX Corps, made against the left-center of the Panzer Army's defenses beginning at 2200 hours, achieved substantial surprise and made excellent progress despite dense minefields and resistance that grew stronger by the hour. Before dawn the infantry was able to establish a trapezoid-shaped bridgehead ("Oxalic") in the depth of the enemy's defenses that was 13 kilometers long on its front, eight kilometers deep on its right flank, and five kilometers deep on its left flank. However, the armor of the X Corps, which followed the infantry, was unable to break out of the bridgehead and exploit the penetration. In the south, a holding attack by the XIII Corps in the region north of Mount Himeimat was successful in preventing the transfer of two enemy armored divisions to the main effort sector.

In Field Marshal Rommel's absence (he was in Europe on sick leave) the Panzer Army was commanded by General George Stumme, who died of a heart attack on the morning of the 24th. His place was taken by General Wilhelm Ritter von Thoma until Rommel returned at dusk on the 25th.

After some initial confusion caused by the effects of surprise and indecision on the part of Stumme and Thoma, the Panzer Army recovered and put up a staunch defense. Elements of the German 15th Panzer Division and the Italian Littorio Armored Division counterattacked several times on the 24th but were unable to eliminate the British bridgehead.

The British, however, were unable to project their armor beyond Oxalic and had to content themselves with eliminating pockets of German and Italian resistance within the bridgehead and defeating the enemy's counterattacks.

Significance: The Eighth Army established a bridgehead in the depth of the Panzer Army's defenses but had been unable to engage the enemy's armor in the decisive battle Montgomery desired. The unsuccessful counterattacks of the Panzer Army had resulted in heavy material losses which could not be replaced.

Sources: Q.4; Q.10; Q.11; Q.17; Q.21.

WORLD WAR II (NORTH AFRICA, 1942)

El Alamein II: Bridgehead Expansion, 26 October-1 November 1942

During the period 26 October-1 November the Eighth Army expanded its bridgehead and prepared for the decisive breakthrough operation, code-named Operation "Supercharge." The chief concern, so far as the security of the bridgehead was concerned, was the Panzer Army's defensive zone north of the bridgehead, between Tel el Eisa and the sea. This zone was largely reduced by the 9th Australian Division (reinforced) in two operations, both massively supported by artillery, during the nights of 28/29 and 30/31 October. The Panzer Army resisted these operations violently, since they threatened its only practicable line of withdrawal along the coast road. Counterattacks by German and Italian units, chiefly armored, were frequent but were defeated. Meantime, General Montgomery redeployed his army for Supercharge, which was to be launched from Oxylic during the night of 1/2 November. Rommel, aware of the danger in the northern sector, transferred the German 21st Panzer Division and part of the Italian Ariete Armored Division to the north, facing Oxylic.

Significance: The Eighth Army maintained the initiative by reducing the Panzer Army's defenses north of Oxylic. The Panzer Army was further ground down by futile counterattacks.

Sources: Q.4; Q.10; Q.11; Q.17; Q.21.

WORLD WAR II (NORTH AFRICA, 1942)

El Alamein II: Operation "Supercharge," 2-4 November 1942

Operation "Supercharge," the Eighth Army's successful attempt to break through the Panzer Army's defensive zone west of El Alamein, was very much a repetition of Operation "Lightfoot." At 0105 hours 2 November, following a massive artillery preparation, British and Commonwealth infantry supported by armor advanced from the Omdurman bridgehead in an attempt to break through the Panzer Army's last defensive line, which was forward of and astride the Rahmes Track, a road running generally southwest from the coast and ten kilometers west of Omdurman.

The British attack was pressed continuously throughout the 2d and 3d and was fiercely resisted by the Panzer Army, although Rommel had ordered elements of his army to begin withdrawing on the night of 2/3 November. The destruction of the Panzer Army's armor was accomplished in tank battles during 2-4 November, but the Axis final defensive line was not decisively broken until the morning of 4 November. About midday 4 November the Eighth Army began its pursuit of the Panzer Army.

Significance: Supercharge resulted in the breakthrough of the Panzer Army's position at El Alamein. The Eighth Army was exhausted by 13 days of battle but pursued the Axis forces into Libya. The Panzer Army suffered a defeat from which it would not recover.

Sources: Q.4; Q.10; Q.11; Q.17; Q.21.

WORLD WAR II (NORTH AFRICA, 1942)

Chouigui Pass, 26 November 1942

As part of the effort to intercept Field Marshal Erwin Rommel's retreating German-Italian army, on 24 November the 1st Battalion, 1st Armored Regiment, of the 1st Armored Division, the only US armored division in Tunisia, moved to the area west of Chouigui Pass to cover the area and a road junction near the pass. After a day of reconnaissance, in which C Company raided an Axis airfield, the US positions were approached from the north on 26 November by six PzKpfw III and seven PzKpfw IV tanks of the German 190th Panzer Battalion, 10th Panzer Division. A and B companies, with three halftracks with 75mm howitzers and 25 M-3 light tanks were deployed astride the north-south road by which the German tanks advanced. The US force was outgunned by the German tanks with their 50mm and 75mm high-velocity cannon.

After a brief skirmish between the halftracks, which were on the road, and the German tanks, the halftracks withdrew, and the M-3s advanced. A Company, attacking first, on the right flank, found the German tank armor impervious to its 37mm guns, and the US tanks were badly damaged by the German 75mm fire. But while A Company was distracting the Germans, B Company advanced undetected around the Germans' left flank and attacked from the rear. Relying on speed and maneuverability, B Company knocked out nine German tanks by hitting them in the thinner rear armor. As the remaining German tanks withdrew, the US tanks pursued to a fortified farmhouse, which was overrun and secured.

Significance: Although this was a minor victory, it showed that with bold tactics, capitalizing on speed, maneuverability, and deception, the light US tanks could overcome the more powerful German tanks.

Sources: P.2; Q.2; Q.3; Q.6; Q.18; Q.20.

WORLD WAR II. NORTH AFRICA, 1943)

El Guettar, 23 March 1943

The US 1st Infantry Division moved out on 17 March 1943 as part of an attack by the US II Corps northwest of Gafsa. This attack was designed primarily to draw Axis forces away from the Mareth Line defenses opposite the British Eighth Army, which was to make the main Allied offensive effort in Tunisia on 20 March. The 1st Division took Gafsa on 19 March and, despite bad weather, which hampered road movement, advanced to positions east of El Guettar by 22 March. The success of the II Corps and the Eighth Army by 22 March prompted the Axis high command to dispatch the German 10th Panzer Division, reinforced with Italian units, to counterattack the 1st Division at El Guettar. The 10th Panzer Division's mission was to check the II Corp's drive, which by this time threatened the rear of Axis units falling back before the Eighth Army. Assembling southeast of El Guettar late on the night of 22 March, the 10th Panzer Division made hurried preparations to counterattack on the following day.

In the early morning of 23 March, the 10th Panzer Division attacked, achieving minor tactical surprise. Penetrations of up to six kilometers were made, but a stubborn US defense, aided by intense artillery fire and a minefield blocking the Gafsa-Gabes road along which the axis of the German attack ran, contained the attack. The attackers then withdrew and prepared to launch another assault in the afternoon. Anticipating this move, the 1st Division crushed the second attempt when it came in the late afternoon, once again employing effective artillery fire. As a result, the 10th Panzer Division, having suffered heavy losses, particularly among its armored units, retired for the night.

Significance: A determined defense by the US 1st Division, facilitated by excellent observation points on high terrain, which permitted accurate artillery fire, contained the 10th Panzer Division's attack. However, although the attackers did not drive the 1st Division back, they did help delay the II Corps advance toward Gabes, keeping open the withdrawal route of Axis forces opposite the British Eighth Army.

Sources: Q.6; Q.7.1; Q.12; Q.15; Q.22.

WORLD WAR II NORTH AFRICA, 1943)

Sedjenane-Bizerte, 23 April-6 May 1943

On 23 April 1943, the US 9th Infantry Division, reinforced with units that included the Corps Franc d'Afrique, attacked on the northern wing of the US II Corps as part of a general Allied offensive to destroy Axis power in Northwest Africa. The 9th Division's attack plan involved the encirclement of high ground near Djefna in conjunction with other II Corps units to the south, by using the division's 47th Regiment in a holding attack west of Djefna while most of the rest of the division made the main attack to the north. Defending from well-fortified positions in rugged terrain was the German Von Manteuffel Division, whose mission was to stop or delay Allied thrusts from reaching the port town of Bizerte through its sector and to make Allied attacks as costly as possible.

German resistance and rugged terrain slowed the 9th Division's attack from the start. The German defense west of Djefna was particularly stubborn since this was a key position in the German line. Along the Mediterranean coast, the Corps Franc d'Afrique also encountered stubborn resistance. By 29 April, the left wing of the 9th Division had advanced substantially, but west and northwest of Djefna German defenses had held up the attack. To the south of the 9th Division, the 1st Armored and 34th Infantry divisions had been committed to the II Corps's attack on 26 April. On 30 April, the strain of continuous combat and meager supplies began to tell on the Axis defenders, as the 9th Division broke through in key locations along the front. With the line untenable, the Von Manteuffel Division began to withdraw to the northeast on the night of 30 April-1 May. From 1-3 May the 9th Division followed closely, while to the south the 1st Armored Division seized Mateur on 3 May. On 4 May, the 9th Division prepared for a final attack on Bizerte. After the 9th Division's attack had penetrated Axis positions north of Garaet Ichkeul, 9th Division elements entered Bizerte on 6 May.

Significance: The 9th Division's attack had driven in the Axis line west of Bizerte. This success was part of the final Allied offensive in Northwest Africa, and therefore was partly responsible for the complete surrender of Axis forces in Tunisia by 13 May.

Sources: Q.6; Q.14; Q.19; Q.22.

1. IDENTIFICATION

War: World War II
Italy, 1943-1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Amphitheater, Italy	A 9-11 Sep 1943 D	Salerno	Br 56th Inf Div Ger 16th Pz Div (elms)	MG Graham MG Sickenius	3	13.0
Port of Salerno, Italy	A 9-11 Sep 1943 D	Salerno	Br 46th Inf Div Ger 16th Pz Div (elms)	MG Hawkesworth MG Sickenius	3	6.0
Sele-Calore Corridor, Italy	A 11 Sep 1943 D	Salerno	US 45th Inf Div Ger 16th Pz Div (A) Br 56th Inf Div (+)	MG Middleton MG Sickenius	1	11.0
Battipaglia I, Italy	A 12-15 Sep 1943 D	Salerno	Ger 16th Pz Div (-) (+) Br 56th Inf Div (+)	MG Sickenius MG Graham	4	16.0
Vietri I, Italy	A 12-15 Sep 1943 D	Salerno	Ger Hermann Goering Pz Div (+) Br 46th Inf Div (+)	MG Schmitz	4	14.5
Tobacco Factory, Italy	A 13-14 Sep 1943 D	Salerno	Ger 16th Pz Div (-) (+) US 45th Inf Div (+)	MG Hawkesworth MG Sickenius	2	9.7
Battipaglia II, Italy	A 17-18 Sep 1943 D	Salerno	Br 56th Inf Div (+) Ger 26th Pz Div (elms) 16th Pz Div (elms)	MG Templer MG Littoritz	2	12.0
Eboli, Italy	A 17-18 Sep 1943 D	Salerno	US 45th Inf Div (+) Ger 26th Pz Div (+) (-)	MG Middleton MG Littoritz	2	7.5
Vietri II, Italy	A 17-18 Sep 1943 D	Salerno	Ger Hermann Goering Pz Div (+) Br 46th Inf Div (+)	MG Schmitz MG Hawkesworth	2	14.5

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1943-1944

Engagement	Posture	Terrain	Weather	Season	Surprise	Surpriser	Level	Air Superiority
Amphi theater	A D H/PD	M	DST	FT	X	X	minor	X
Port of Salerno	A D H/PD	M	DST	FT	X	X	minor	X
Selle-Calore Corridor	A D H/PD	M	DST	FT	Y	X	minor	X
Battipaglia I	A D HD	M	DST	FT	N	--	--	X
Vietri I	A D HD	M	DST	FT	N	--	--	X
Tobacco Factory	A D HD	M	DST	FT	N	--	--	X
Battipaglia II	A D Del	M	DST	FT	N	--	--	X
Eboli	A D Del	M	DST	FT	N	--	--	X
Vietri II	A D PD	M	DST	FT	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II, Italy 1943-1944

Engagement	Strength				Air Sorties				Battle Casualties				Arty Pieces Lost				Aircraft Losses	
	Personnel Total	Total	Armor	MTR	Arty Pieces	Total	1/Day	Total	Armor Losses	1/Day	Total	1/Day	Total	1/Day	Total	Sorties/Day		
Aphitheaater	A 12,917	0	0	0	138	131	3.0	0	--	?	?	--	?	?	?	?	--	
	D 4,250	128	0	8	56	115	100	0.8	--	?	?	--	?	?	?	?	--	
Port of Salerno	A 12,917	0	0	0	138	131	3.9	0	--	?	?	--	?	?	?	?	--	
	D 4,250	38	0	38	46	115	120	0.9	--	?	?	--	?	?	?	?	--	
Sele-Calore Corridor	A 12,447	106	17	89	82	18	2.0	1	0.9	--	?	?	?	?	?	?	--	
	D 8,390	78	0	78	90	7	60	0.7	?	--	?	?	?	?	?	?	--	
Battipaglia I	A 14,730	89	0	89	108	112	1.9	?	--	?	?	--	?	?	?	?	--	
	D 11,230	30	0	30	146	539	1,639	3.6	--	?	?	--	?	?	?	?	--	
Vietri I	A 15,000	108	0	108	164	112	900	1.5	--	?	?	--	?	?	?	?	--	
	D 12,917	30	0	30	146	40	1,164	2.3	?	--	?	?	?	?	?	?	--	
Tobacco Factory	A 14,733	98	0	98	106	24	702	2.4	?	--	?	?	?	?	?	?	--	
	D 12,691	106	17	89	112	170	317	1.2	?	--	?	?	?	?	?	?	--	
Battipaglia II	A 14,730	97	4	93	152	94	300	1.0	?	--	?	?	?	?	?	?	--	
	D 6,995	58	0	58	80	31	110	0.8	?	--	?	?	?	?	?	?	--	
Eboli	A 15,576	106	15	89	106	156	386	1.2	?	--	0	?	?	?	?	?	--	
	D 6,702	59	0	59	80	10	120	0.9	--	?	?	?	?	?	?	?	--	
Vietri II	A 13,300	108	0	108	164	31	400	1.5	?	--	?	?	?	?	?	?	--	
	D 18,912	96	4	92	152	33	255	0.7	--	?	?	?	?	?	?	?	--	

4. INTANGIBLE FACTORS

War: World War II
Italy, 1943-1944

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Momen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
Amphitheater	A D	C x	x	C	N	C	N	C	x	x	1.3	5
Port of Salerno	A D	C x	x	C	N	C	N	C	x	x	1.3	6
Sele-Caiore	A D	C x	x	C	N	C	N	N	x	x	3.7	5
Battipaglia I	A D	C x	x	C	N	N	N	C	N	x	0.4	3
Vietri I	A D	C x	x	C	N	N	N	C	N	x	0.4	3
Tobacco Factory	A D	C x	C	x	N	N	N	C	N	x	2.0	4
Battipaglia II	A D	C x	x	C	N	N	N	C	x	x	1.2	7
Eboli	A D	C x	x	C	N	N	N	C	x	x	1.2	6
Vietri II	A D	x	C	x	C	N	N	C	N	x	0.0	4
												7

6. FACTORS AFFECTING OUTCOME
 War: World War II
 War: Italy, 1943-1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Roads	Leader-ship	Planning	Surprise	Maneuver,	Mass,	Front	Narrow	Logistics	Fortifi-cations	Depth	
Amphitheater	A D	x	N	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Port of Salerno	A D	x	N	N	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Sele-Calore Corridor	A D	x	N	N	x	N	x	N	N	N	N	N	N	N	N	N	N	N
Battipaglia I	A D	x	N	N	x	N	x	N	N	N	N	N	N	N	N	N	N	N
Vietri I	A D	x	N	N	x	N	x	N	N	N	N	N	N	N	N	N	N	N
Tobacco Factory	A D	x	x	N	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Battipaglia II	A D	x	x	N	x	N	x	N	N	N	N	N	N	N	N	N	N	N
Eboli	A D	x	N	x	N	x	N	x	N	x	N	N	N	N	N	N	N	N
Vietri II	A D	x	N	x	N	x	N	x	N	x	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War II
 Italy, 1943-1944

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
				Secondary Attack		
Amphitheater	A D	F D/O	--	--	X	P, S --
Port of Salerno	A D	F D/O	--	--	X	P, S --
Sele-Calore Corridor	A D	F D/O	--	--	X	P, S --
Battipaglia I	A D	F D	--	--	X	R, S --
Vietri I	A	F	--	--	X	R, S --
Tobacco Factory	D	D	--	--	X	R, S --
Battipaglia II	A D	F D	--	--	X	P WD
Eboli	A D	F D	--	--	X	P WD --
Vietri II	A D	F D	--	--	X	

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Amphibious, 9-11 September 1943

Following the successful invasion of Sicily, the US Fifth Army made an amphibious landing on 9 September 1943 near the city of Salerno on the Italian mainland. The British X Corps was on the left.

The British 56th Division, on the right flank of the X Corps landing area, was opposed by elements of the widely dispersed 16th Panzer Division, assigned to cover the Salerno area in anticipation of a possible Allied attack. Effective naval gunfire support covered the 56th Division's landing and greatly aided the British in beating back a series of German counterattacks on D-Day. But, by the end of the day a large gap still existed on the division's right flank, separating the X Corps from the US 36th Division of the VI Corps, and increasing the vulnerability of the entire Allied beachhead.

On 10 September German reinforcements moved to the beachhead to contain the Allied forces there. Small German counterattacks struck the 56th Division's right flank, preventing any gains in that sector, but on the left elements of the division advanced to the northeast.

On 11 September, the 56th Division took one of its primary objectives, the Montecorvino airfield, after heavy fighting. On the same day, the US 45th Division was committed to battle in between the Fifth Army's two corps. But the danger of German counterattacks did not pass, as was evidenced by a thrust against the town of Battipaglia, which surrounded a battalion of the 56th Division and led to the surrender of 450 of its troops.

With the beachhead expanded by 11 September, the 56th Division assumed a defensive posture in anticipation of further German counterattacks.

Significance: The landings were successful, and additional forces were safely landed before the Germans could assemble enough forces to dislodge them.

Sources: R.2; R.4; R.5; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Port of Salerno, 9-11 September 1943

Under cover of heavy naval bombardment, at 0330 on 9 September the first waves of the British 46th Infantry Division landed about five miles south of Salerno, as part of the US Fifth Army's invasion of Italy. The 46th Division was on the northern flank of the X Corps, and its mission was to seize the port of Salerno. Opposing it in that area was a reinforced combat team of the German 16th Panzer Division. A series of German tank attacks on 9 September kept the landing forces close to the shore, but continuing naval gunfire kept the Germans from pushing the Allies off the beach. By the end of the day most of the 46th Division was ashore and holding a long, narrow beachhead.

On 10 September the Germans rushed reinforcements to the area. Attempts to expand the beachhead on the 10th and 11th made little headway until late in the day, when the 16th Panzer Division had suffered considerable losses, and the 46th Division was able to push back tiring and depleted German units and take the port of Salerno.

Significance: The 46th Division accomplished its mission, and the port of Salerno was in Allied hands, although German artillery made it unusable for several more days.

Sources: R.2; R.5; R.8.1; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Sale-Salatore Corridor, 11 September 1943

On 11 September, German reinforcements arriving in the Salerno area made the Allied situation critical. The gap between the Fifth Army's two corps was still open, and a German concentration at this point might have split the beachhead, separating the VI and X Corps from each other.

The 45th Division's mission was to advance to the north and northeast between the two corps, on the left of the VI Corps, to the edge of the high ground surrounding the beachhead, and plug the gap in the Allied line. Despite the assistance of naval gunfire support (its strength somewhat diminished by German bomb hits on two cruisers) the division was stopped in heavy fighting by dug-in elements of the 16th Panzer Division. Two battalions of the 179th Infantry Regiment lost contact with supporting armored units when German antitank fire from the town of Persano halted the tanks and tank destroyers. By nightfall the division's troops had taken up defensive positions prepared for possible enemy counterattacks.

The gap in the Allied perimeter had not been completely sealed after the division's action on 11 September. Several more days of fighting (including a German counterattack) would be required before the Fifth Army's positions were entirely secure.

Significance: The gap between the two corps had been reduced, although not closed.

Sources: R.2; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Battipaglia I, 12-15 September 1943

As part of an offensive planned against the X Corps for 12 September, elements of the 16th Panzer Division, reinforced by units from two other divisions, attacked the British 56th Infantry Division from the town of Battipaglia. After breaking the British lines, the 16th Panzer Division was to link up with German forces coming from Salerno to the north and isolate, then destroy, the X Corps.

Heavy fighting broke out on 12 September, when the Germans launched the first of a series of tank and infantry assaults that continued for four days against the 56th Division's positions, which were on low ground in full view of enemy observers. The British committed every unit and fought tenaciously. They were driven back about one mile in the four-day battle but managed to prevent a complete breakthrough. Naval gunfire and tactical air provided valuable support.

Determined defense along the whole beachhead perimeter caused the German command to call off the attack on 15 September and begin to plan for a withdrawal.

Significance: The 56th Division had held in the face of a determined German attack and had prevented a German breakthrough that might have driven the invaders off the beach.

Sources: R.2; R.5; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Vietri I, 12-15 September 1943

Bringing up reinforcements to counter the Allied landings at Salerno, the German command planned an all-out offensive against the X Corps for 12 September. One regiment of the elite Hermann Goering Panzer Division, reinforced with corps artillery and troops from three other divisions, was to strike the British 46th Infantry Division and drive southwest along the coast to link up with German units on its left in a pincer movement designed to isolate and destroy the X Corps.

In four days of bitter fighting, the 46th Division held its lines and prevented the Germans from breaking through. Casualties were high on both sides. Naval gunfire support greatly aided the British. Also by this time Allied close air support was beginning to be effective.

After four days, the German counterattack ground to a halt. German plans to throw the Fifth Army back into the sea were ended and not long after that a withdrawal was ordered from the Salerno area.

Significance: The stubborn defense by the 46th Division prevented the Germans from breaking through and averted a disaster.

Sources: R.2; R.5; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Mlasses Factory, 13-14 September 1943

As part of the general counteroffensive launched by the Germans on 12 September, half of the 16th Panzer Division, reinforced by other units, was to attack along the Sele-Calore corridor in an effort to split and annihilate the Fifth Army defenders.

Defending around the Sele-Calore corridor area, the battered, understrength US 45th Infantry Division met the full weight of the attacking German forces on 13 September. Tank and infantry assaults drove the Americans back, with heavy personnel and equipment losses on both sides. The 2d Battalion, 143d Infantry, on the right of the divisional sector, suffered particularly heavy losses. On 14 September, renewed German assaults were beaten back by 45th Division troops who had reorganized their defenses and dug in during the night. Air and naval gunfire support greatly aided the division.

On the same day, the attacks stopped when minimal gains and high casualty and equipment losses convinced the German command that further efforts would be too costly.

Significance: A successful American defense, reflecting the Allied effort along the whole beachhead perimeter, had stopped the Germans and taken a heavy toll of their vital armored forces.

Sources: R.2; R.5; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Battipaglia II, 17-18 September 1943

Reinforced by elements of the British 7th Armored Division and the 23d Armored Brigade, fatigued troops of the 56th Infantry Division launched an attack against the town of Battipaglia on 17 September. The German strategic situation at this time necessitated a withdrawal from the Salerno area; so resistance in the town was light, and the British occupied it on 18 September.

Significance: With the Germans withdrawing, the Allies had at last secured the beachhead and could begin to build up their forces for the push inland and pursuit of the withdrawing enemy.

Sources: R.2; R.4; R.5; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Eboli, 17-18 September 1943

The US 45th Infantry Division, at full strength with the arrival of the 180th Infantry Regiment, was to strike German positions in the vicinity of the Sale-Calore corridor in accordance with the Allies' plans for a renewed offensive on 17 September. The Germans, withdrawing from the Salerno beachhead area, offered only minor resistance as they employed delaying tactics to get their units safely away. Defensive positions that had blocked the 45th Division's progress for over a week easily fell into American hands on 17 and 18 September. By all indications, the beachhead was secure and pursuit of the enemy became the Allies' next objective.

Significance: The 45th Division had expanded the bridgehead as the Germans withdrew.

Sources: R.2; R.8; R.10.

WORLD WAR II (ITALIAN CAMPAIGN, SALERNO)

Vietri II, 17-18 September 1943

By 16 September, high losses and increasing Allied air and ground support made it evident to the German command that any further efforts to eliminate the Salerno beachhead would not succeed. Nevertheless, one final attack was made against the British 46th Infantry Division, which was still pinned in the low hills around Vietri and Salerno, in the X Corps sector. Charged with the mission of keeping the escape route for units in southern Italy secure, and to break the British positions if possible, the reinforced Hermann Goering Panzer Division attacked on 17 September.

Once again naval gunfire and tactical air support broke up the German attack. Air sorties flown in increased numbers and elements of the newly arrived British 7th Armored Division helped out the fatigued 46th Division defenders.

On 18 September, the offensive was called off, and German units began a general withdrawal to defensive positions north of Naples.

Significance: Although the Germans had not broken up the British defense, they had secured their strategic flank for the rest of the forces to withdraw.

Sources: R.2; R.5; R.8; R.10.

1. IDENTIFICATION
War: World War II
Italy, 1943-1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Grazzanise, Italy	A 12-14 Oct 1943 D	Volturro	Br 7th Arm Div (-) Ger 15th Pz Gr Div (-)	MG Erskine MG Rodt	3	1.5
Caiazzo, Italy	A 13-14 Oct 1943 D	Volturro	US 34th Inf Div (+) Ger 3rd Pz Gr Div (+)	MG Ryder MG Baade	2	9.0
Capua, Italy	A 13 Oct 1943 D	Volturro	Br 56th Inf Div (+) Ger HG Pz Div (-)	Brig Lyne MG Schmalz	1	2.0
Castel Volturro Italy	A 13-15 Oct 1943 D	Volturro	Br 46th Inf Div (+) Ger 15th Pz Gr Div (X)	MG Hawkesworth MG Rodt	2	9.6
Monte Acero, Italy	A 13-14 Oct 1943 D	Volturro	US 45th Inf Div (+) Ger 3rd Pz Gr Div (-) (X+)	MG Middleton MG Luttwitz	2	8.0
Triflisco, Italy	A 13-14 Oct 1943 D	Volturro	US 3rd Inf Div Ger HG Pz Div (-)	MG Truscott MG Schmalz	2	9.0
Dragonio, Italy	A 15-17 Oct 1943 D	Volturro	US 34th Inf Div (+) Ger 3rd Pz Gr Div (-)	MG Ryder MG Baade	3	5.2
Canal I, Italy	A 17-18 Oct 1943 D	Volturro	Br 7th Arm Div Ger 15th Pz Gr Div (-)	MG Erskine MG Rodt	2	9.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1943-1944

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Grazzanise	A D	PD	RW	DST	N	--	--	X
Caiazzo	A D	De1	RW	DST	FT	N	--	X
Capua	A D	PD	RW	DST	FT	N	--	X
Castel Volturro	A D	PD	RW	DST	FT	N	--	X
Monte Acerro	A D	De1	RGM	DST	FT	Y	minor	X
Triflisco	A D	PD	RW	DST	FT	N	--	X
Dragonni	A D	De1	RW	WLT	FT	N	--	X
Canal I	A D	PD	RW	WLT	FT	N	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II: Italy, 1943-1944

Engagement	Strength				Battle Casualties				Aircraft Losses			
	Personnel Total	Total	Armor If.	MBT	Arty Pieces	Air Sorties	Total	\$/Day	Armor Losses	Total	\$/Day	Total Sorties/Day
Grazzanise	A 14,557 D 8,068	158 39	3 0	155 39	68 45	0 0	370 80	0.8 0.3	?	?	0	0
Caiazzo	A 18,210 D 6,435	106 42	17 0	89 42	104 51	8 27	140 52	0.4 0.4	?	?	?	?
Capua	A 16,857 D 8,000	73 22	1 0	72 22	160 59	14 0	420 94	2.5 1.2	?	?	0	0
Castel Volturro	A 17,765 D 8,158	51 39	0 0	51 39	199 45	55 0	500 40	1.4 0.3	?	?	0	0
Monte Acero	A 21,265 D 6,435	106 44	17 0	89 44	89 43	0 53	133 130	0.3 1.0	?	?	0	0
Serrifisco	A 18,476 D 7,250	106 22	17 0	89 22	113 59	33 10	267 76	0.7 0.5	?	?	?	?
Dragonì	A 17,034 D 5,152	106 55	17 0	89 51	101 116	54 103	65 0.7	0.1 0.7	?	?	0	0
Canal I	A 14,600 D 8,138	158 40	3 0	155 40	68 45	0 0	125 45	0.4 0.3	?	?	0	0

4. INTANGIBLE FACTORS

War: World War II
Italy, 1943-1944

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis- tics	Monen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Grazzanise	A	C	C	C	N	N	C	X	X	X	1.2	7
	D	C	C	C	N	N	C	X	X	X	4	
Caiazzo	A	C	C	C	N	N	C	X	X	X	1.6	6
	D	C	C	C	N	N	C	X	X	X	3	
Capua	A	C	C	C	N	N	C	X	X	X	0.0	2
	D	C	C	C	N	N	C	X	X	X	8	
Castel Volturno	A	C	C	C	N	N	C	X	X	X	0.8	6
	D	C	C	C	N	N	C	X	X	X	5	
Monte Acero	A	C	C	C	N	N	C	X	X	X	2.8	6
	D	C	C	C	N	N	C	X	X	X	5	
Triflisco	A	C	C	C	N	N	C	X	X	X	2.4	7
	D	C	C	C	N	N	C	X	X	X	3	
Dragonni	A	C	C	C	N	N	C	X	X	X	1.9	5
	D	C	C	C	N	N	C	X	X	X	5	
Canal I	A	C	C	C	N	N	C	X	X	X	0.5	5
	D	C	C	C	N	N	C	X	X	X	5	

6. FACTORS AFFECTING OUTCOME
 World War II
 War: 1943-1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Maneuver, Mass, Narrow Front	Logistics	Fortifi-cations	Depth	
Grazzanise	A D	N	N	N	N	N	X	N	N	N	N	N	X	N	N
Caiazzo	A D	X	N	N	N	N	X	N	N	N	N	N	X	N	N
Capua	A D	X	N	N	N	N	X	N	N	N	N	N	X	N	N
Castel Volturro	A D	N	N	N	N	N	X	N	N	N	N	N	N	N	N
Monte Acerro	A D	N	N	N	N	N	X	N	N	N	N	N	N	N	N
Triflisco	A D	N	N	N	N	N	X	N	N	N	N	N	X	N	N
Dragoni	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Canal I	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War II
Italy, 1943-1944

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Grazzanise	A D	RivC D	-- --	-- --	X X	P ND
Caiazzo	A D	RivC D	-- --	-- --	X X	P ND
Capua	A D	RivC D	-- --	-- E (RF) --	R X X	R P ND
Castel Volturro	A D	RivC D	-- --	-- F, EE --	X X	P ND
Monte Acero	A D	F, EE D	-- --	-- HE --	X X	P ND
Triflisco	A D	RivC D	-- --	-- --	X X	P ND
Dragonni	A D	F D	-- --	-- --	X X	P ND
Canal I	A D	RivC D	-- --	-- --	X X	P ND

1. IDENTIFICATION

War: World War II
Italy, 1943-1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Monte Grande (Volturno), Italy	A 16-17 Oct 1943	Volturno	Br 56th Inf Div (clss) Ger Hermann Goering Pz Div (½)	MG Templer MG Schmalz	2	9.0
Canal II, Italy	A 18-20 Oct 1943	Volturno	Br 46th Inf Div (+) Ger 15th Pz Gr Div (½)	MG Hawkesworth MG Rott	3	9.0
Francolise, Italy	A 20-22 Oct 1943	Volturno	Br 7th Armd Div Ger 15th Pz Gr Div (½)	MG Erskine MG Rott	3	6.4
Santa Maria Oliveto, Italy	A 4-5 Nov 1943	Volturno	US 34th Inf Div (+) Ger 3d Pz Gr Div (-)(+)	MG Ryder MG Baade	2	4.8
Monte Camino I, Italy	A 5-7 Nov 1943	Volturno	Br 56th Inf Div Ger 15th Pz Gr Div (½)	MG Templer MG Rott	3	5.0
Monte Lungo, Italy	A 6-7 Nov 1943	Volturno	US 3d Inf Div Ger 3d Pz Gr Div (½)	MG Truscott MG Baade	2	6.0
Pozzilli, Italy	A 6-7 Nov 1943	Volturno	US 45th Inf Div Ger 3d Pz Gr Div	MG Middleton MG Baade	2	8.0
Monte Camino II, Italy	A 8-10 Nov 1943	Volturno	Ger 15th Pz Gr Div (½) Br 56th Inf Div (1/3)	MG Rott MG Templer	2	0.5
Monte Rotondo, Italy	A 8-10 Nov 1943	Volturno	US 3d Inf Div (-) Ger 3d Pz Gr Div (½)	MG Truscott MG Baade	3	4.5
Calabritto, Italy	A 1-2 Dec 1943	Volturno	Br 46th Inf Div (+) Ger 15th Pz Gr Div (-)(+)	MG Hawkesworth MG Rott	2	2.0
Monte Camino III, Italy	A 2-6 Dec 1943	Volturno	Br 56th Inf Div Ger 15th Pz Gr Div (½)	MG Templer MG Rott	4	2.0
Monte Maggiore, Italy	A 2-3 Dec 1943	Volturno	US 36th Inf Div (-) Ger 15th Pz Gr Div (½)	MG Walker MG Rott	2	1.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1943-1944

Engagement	Posture	Terrain	Weather	Sunrise	Surprise	Level Surprise	Air Surprise
Monte Grande(Volturro) A D	PD	RW	MLT	PT	N	--	X
Canal II A D	PD	RW	MLT	PT	N	--	X
Francolise A D	PD	RW	MLT/MLT	PT	N	--	X
Santa Maria Oliveto A D	PD	RW	DST	PT	N	--	X
Monte Camino I A D	FD	Rgn	MLT	PT	N	--	X
Monte Lungo A D	FD	Rgn	DST/MLT	PT	N	--	X
Pozzilli A D	FD	Rgn	MLT	PT	N	--	X
Monte Camino II A D	H/PD	Rgn	MLT	PT	N	--	X
Monte Rotondo A D	FD	Rgn	MLT	PT	N	--	X
Calabritto A D	FD	Rgn	MLT	PT	N	--	X
Monte Camino III A D	FD	Rgn	MLT	PT	N	--	X
Monte Maggiore A D	FD	Rgn	MLT	PT	N	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II, Italy 1943-1944

Engagement	Strength				Arty Pieces				Air Sorties				Aircraft Losses			
	Personnel Total	Total Lif.	Armor Lif.	Artillery Total	Battle Casualties	Artillery Total	Artillery Losses	Artillery Lost	Total 1/Day	Total 1/Day	Total 1/Day	Total 1/Day	Total 1/Day	Total 1/Day	Total 1/Day	Total 1/Day
Monte Grande (Volturino)	A 16,400 D 7,239	73 22	1 0	72 22	112 49	48 0	200 66	0.6 0.5	?	--	?	--	?	--	?	--
Canal II	A 17,500 D 8,128	51 39	0 0	51 39	168 45	26 3	220 138	0.4 0.6	?	--	?	--	?	--	?	--
Francolise	A 14,000 D 8,088	158 39	3 0	155 39	68 45	0 0	75 44	0.2 0.2	?	--	?	--	?	--	?	--
Santa Maria Oliveto	A 16,870 D 6,321	106 30	17 0	89 30	92 41	85 48	416 185	1.2 1.5	?	--	?	--	?	--	?	--
Monte Camino I	A 19,513 D 6,750	45 38	1 0	44 38	160 41	90 14	240 33	0.4 0.2	?	--	?	--	?	--	?	--
Monte Lungo	A 16,600 D 6,566	106 54	17 0	89 54	110 50	238 48	361 142	1.1 1.1	?	--	?	--	?	--	?	--
Pozzilli	A 17,404 D 6,566	106 54	17 0	89 54	110 50	18 146	155 25	0.4 0.2	?	--	?	--	?	--	?	--
Monte Camino II	A 7,942 D 5,200	40 0	0 0	40 0	41 112	19 24	34 310	0.2 2.9	?	--	?	--	?	--	?	--
Monte Rotondo	A 16,350 D 7,942	106 52	17 0	89 42	106 53	132 53	165 119	0.3 0.5	?	--	?	--	?	--	?	--
Calabritto	A 17,765 D 7,588	51 12	0 0	51 12	130 37	26 0	250 20	0.7 0.1	?	--	?	--	?	--	?	--
Monte Camino III	A 20,744 D 3,288	0 12	0 0	0 12	0 34	0 12	156 0	0.7 1.1	?	--	?	--	?	--	?	--
Monte Maggiore	A 5,551 D 3,288	0 12	0 0	0 12	0 34	0 12	221 0	0.7 0.3	?	--	?	--	?	--	?	--

4. INTANGIBLE FACTORS
War: World War II
Italy, 1943-1944

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Momen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
Monte Grande (Volturino)	A	C	x	C	C	O	N	C	N	x	1.2	6
Canal II	A	D	x	C	C	N	N	C	N	x	1.1	5
Francolise	A	D	x	C	C	N	N	C	N	x	1.6	3
Santa Maria Oliveto	A	D	x	C	C	C	N	C	N	x	1.6	7
Monte Camino I	A	D	x	C	C	C	N	C	N	x	1.6	5
Monte Lungo	A	D	x	C	C	X	N	C	N	x	1.6	6
Pozzilli	A	D	x	C	C	O	N	C	N	x	0.4	3
Monte Camino II	A	D	x	C	C	X	N	C	N	x	0.3	7
Monte Rotondo	A	D	x	C	C	O	N	C	N	x	0.3	5
Calabritto	A	D	x	C	C	C	N	C	N	x	0.7	4
Monte Camino III	A	D	x	C	C	C	N	C	N	x	1.2	3
Monte Maggiore	A	D	x	C	C	C	N	C	N	x	2.4	7

6. FACTORS AFFECTING OUTCOME

World War II
War: Italy 1943-1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Preposition-derrence	Weather	Terrain Roads	Leader-ship	Planning Surprise	Netto Proport	Logistics	Portefeuille-Collections	Depth
Monte Grande (Volturno)	A D	N	N	N	N	N	N	N	N	N	N	N	N
Canal II	A D	A D	N	N	N	N	N	N	N	N	N	N	N
Francolise	A D	A D	X	X	X	X	X	X	X	X	X	X	X
Santa Maria Oliveto	A D	A D	N	N	N	N	N	N	N	N	N	N	N
Monte Camino I	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Monte Lungo	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Pozzilli	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Monte Camino II	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Monte Rotondo	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Calabritto	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Monte Camino III	A D	A D	X	X	N	N	N	N	N	N	N	N	N
Monte Maggiore	A D	A D	X	X	N	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War II
 Italy 1943-1944

Engagement	Main Attack and Scheme of Defense		Secondary Attack	Success	Penetration
	A	D			
Monte Grande (Volturno)	A D	F D	--	X	P ND
Canal II	A D	RivC D	--	X	P ND
Francolise	A D	F D	--	X	P, S
Santa Maria Oliveto	A D	F D/O	--	X	P ND
Monte Camino I	A D	F D	--	X	P, R
Monte Lungo	A D	F D	E (LF) --	X	P, S
Pozzilli	A D	F D	--	X	R
Monte Camino II	A D	F D	--	X	P ND
Monte Rotondo	A D	E, E (LF) D/O	F --	X	P, S
Calabritto	A D	F D	--	X	P, S
Monte Camino III	A D	F D/O	F --	X	P ND
Monte Maggiore	A D	F D	--	X	P ND

WORLD WAR II (ITALIAN CAMPAIGN, VOLTORE)

Grazzanise, 12-14 October 1943

In mid-October 1943, after the breakout from the Salerno beachhead and the pursuit of German forces northward, the Allied Fifth Army met the first organized enemy defensive line, which ran along the Volturno River. There the Germans hoped to delay the Allies as long as possible, so that more heavily fortified positions to the north could be completed. Located on the right flank of the German line was the well-equipped and highly trained 15th Panzer Grenadier Division, which took advantage of the high water in the Volturno to prepare defenses in its attempt to slow the advancing British X Corps on the Allied left.

As part of a six-division attack on 12 October, the British 7th Armored Division was ordered to cross the Volturno at the town of Grazzanise, establish a bridgehead, and draw as many German troops as possible away from the main British effort to the division's left. On the night of 12/13 September, a spearhead was pushed across the river. In the following two days the 7th Armored Division, despite counterattacks, secured a bridgehead a thousand yards deep. As a result, the rest of the division was able to cross the river safely in preparation for the continued drive north.

Significance: The crossing of the Volturno River provided a bridgehead from which to continue the Allied attack on the German defenses.

Sources: R.2; R.4; R.5; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Caiazzo, 13-14 October 1943

Entering the front line of the US VI Corps in time for the Volturno River crossing, the 34th Infantry Division had been called up to the front to add weight to the American offensive scheduled for 13 October. The division, on the right of the 3d Division, was ordered to cross near Caiazzo, a fortified village on the north bank of the Volturno, in and around which a reinforced regiment from the 3d Panzer Grenadier Division was dug in to meet the American attack. Only part of the German division had arrived at the positions around Caiazzo when the 34th Division attacked early on 13 October.

The leading elements of the US division's two attacking regiments met light German resistance in the crossing but had some difficulties with the Volturno's swift current. Once they were across, resistance stiffened, but the troops made significant advances, taking their first objectives. German artillery had harassed the division's engineers as they attempted to build bridges, but after some delay trucks were crossing the river on 14 October. By the end of 14 October the German guns around Caiazzo had been silenced, and German units along the division front were withdrawing.

Significance: The division had succeeded in crossing the Volturno River, establishing a firm bridgehead, and forcing the German defenders to withdraw..

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Capua, 13 October 1943

After the breakout from the Salerno beachhead and the pursuit of German forces northward, the Allied Fifth Army met the first organized enemy defensive line, which ran along the Volturno River. There the Germans hoped to delay the Allies as long as possible, so that more heavily fortified positions to the north could be completed. In position opposite the right sector of the British X Corps, occupied by the British 56th Infantry Division, were elements of the elite Hermann Goering Panzer Division. Dug in along high ground north of the Volturno, the Germans had excellent observation of the river all along the 56th Infantry Division's positions.

On 13 October, the 56th Division attempted to cross near the destroyed railroad bridge at Capua. German resistance and very intense artillery fire on the assault boats prevented the British from gaining more than a small bridgehead and made it impossible to hold that. With the only suitable crossing point in the division sector blocked, the boundary between the VI and X Corps was shifted, enabling the British to cross on a bridge installed by the US 3d Division on 14 October.

Significance: Although the Germans had successfully prevented the 56th Division from crossing at Capua, the success of the 3d Division enabled the division to cross and expand the corps's bridgehead so that the advance could continue on a broad front.

Sources: R.2; R.5; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Castel Volturno, 13-15 October, 1943

In early October 1943, after the breakout from the Salerno beachhead and the pursuit of German forces northward, the Allied Fifth Army confronted the first organized enemy defensive line, which ran along the Volturno River. There the Germans hoped to delay the Allies long enough to complete more heavily fortified positions to the north. In order to prevent this and in view of the bad weather of the oncoming winter and its accompanying toll on mobility, Allied leaders planned a swift crossing of the Volturno and breaking of the German line.

On the far left of the Fifth Army line, the British 46th Infantry Division was to make the main effort in the British X Corps sector. Naval gunfire and concentrated field artillery support was made available for the division.

On 13 October the attack started. A small bridgehead was made on the far bank, but resistance from units of the 15th Panzer Grenadier Division was fierce, with repeated counterattacks. An amphibious operation involving armored units sent around the river mouth to envelop the German right flank was stalled by boggy ground and German mines north of the river. Continued pressure from infantry, and especially fire from naval guns and British artillery, kept the German counterattacks at bay. By 14 October the bridgehead was expanded, and heavier units were ferried across the Volturno. On the next day, the Germans withdrew across the Regia Agnena Canal, some three miles north of the Volturno with the 46th Division pressing close behind.

Significance: The British 46th Division had secured a firm bridgehead across the Volturno River for the left flank of the Fifth Army line. The Germans had withdrawn, and the British were in position to continue the advance to the north.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Monte Acero, 13-14 October 1943

Located in the extreme right sector of the Fifth Army's line, the US 45th Infantry Division had moved north on 12 October, east of the Volturno River to protect the army's right flank. Early on 13 October, while other divisions to the left were crossing the Volturno, elements of the 45th Division launched attacks on and around Monte Acero, a dominating hill that was the key to German defenses east of the river. Defending in the mountain itself was a reconnaissance battalion from the 26th Panzer Division, and in the adjacent countryside troops from the 3d Panzer Grenadier Division resisted the American advance. The US troops encountered slight resistance. By the evening of 13 October, the southeastern slope of Monte Acero had been cleared and on the next day the rest of the southern slopes were taken and 45th Division units had advanced on both sides of the mountain.

Significance: On 15 October, after a day of tough fighting on the 14th, a battalion of the 180th Infantry Regiment linked up with 34th Division troops and thus secured the VI Corps's right flank. But the Germans, in delaying the Americans until 15 October, had also achieved success. The delay allowed the defenders along the Volturno time to withdraw in order and to continue delaying tactics further north.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Triflisco, 13-14 October 1943

In mid-October 1943, after the breakout from the Salerno beachhead and the pursuit of German forces northward, the Allied Fifth Army confronted the first organized enemy defensive line, which ran along the Volturno River. There the Germans hoped to delay the Allies long enough so that more heavily fortified positions to the north could be completed. To prevent this and to keep continued pressure on the withdrawing Germans, the Allied command decided that a swift crossing of the Volturno was required.

The US 3d Infantry Division, located on the VI Corps's left and adjacent to its boundary with the X Corps, was assigned to make the Americans' main effort to cross the river. High ground on the north bank afforded defending troops of the Hermann Goering Panzer Division's Kampfgruppe Maucke good observation of 3d Division units. Realizing this, General Truscott formulated a deceptive plan of attack.

At midnight on 12/13 October, the plan was executed. One infantry battalion and several heavy weapons companies made a vigorous demonstration on the division's left, in order to deceive the Germans into thinking that a major crossing was underway there. Two hours later, when the actual attack was made to the right of the diversion, one infantry regiment crossed the river and met relatively light resistance. Soon after, another regiment crossed and with artillery support dislodged the German defenders from strategic high ground north of the Volturno.

By the end of 14 October, the 3d Division had broken German resistance along a five-mile stretch of the river and commenced building bridges for equipment and vehicles needed to continue the advance.

Significance: Good planning, deception, surprise and an aggressive offensive spirit had greatly aided the division's troops in overcoming a potentially difficult obstacle.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Dragonni, 15-17 October 1943

After crossing the Volturno River on 13 October, the US 34th Infantry Division was ordered to keep up the pressure on the then withdrawing Germans and at the same time to shift its right boundary over to allow the fatigued 45th Infantry Division to go into reserve. In order to do this, the division had to secure two towns south of the Volturno (which ran northwest to southeast at this point) and then move northeast across the river into the 45th Division's zone.

On 15 October, the division was held up on the right by tough German resistance north of the town of Ruviano. The next morning, one regiment attacked on the division's left, and again the Germans put up a tough fight. Composed of elements of the 3d Panzer Grenadier Division, these troops fought to keep the Volturno bridges open for the German withdrawal. On early 17 October, the Americans occupied Alvignano, after the Germans had withdrawn, and on their right pressed on to occupy high ground due east of the town. But it would require the commitment of another infantry regiment and three more days of battle before the 34th Division was across the Volturno securely in the 45th Division's zone.

Significance: The Germans fought a delaying action that accomplished their purpose and delayed the advance of the US 34th Division.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Canal I, 17-18 October 1943

The British 7th Armored Division, in the center of the British X Corps sector, crossed the Volturno River at Grazzanise on 14 October and advanced northward across rough terrain to the Regia Agnana Nuova Canal. In accord with the Fifth Army's strategy to keep up pressure on the Germans, the division attempted to force a crossing of the canal on 17 October. Bad weather and muddy terrain, and natural defensive positions, that aided the defending 15th Panzer Grenadier Division, while hindering the movement of the British, prevented an immediate crossing. On 18 October, in spite of German artillery fire, a bridgehead was finally established and expanded to a depth of 1,000 yards by late evening.

Significance: Crossing the canal helped to eliminate another obstacle in front of the Allied advance. But delaying tactics bought the Germans more time for work on the defenses to the north.

Sources: R.2; R.5; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Monte Grande (Geliduno) 16-17 October 1943

Emplaced in high ground on Monte Grande, elements of the German Hermann Goering Panzer Division had excellent observation of Allied Fifth Army positions, particularly in the Triflisco Gap area. In order to open up the Gap and make it safe for passage of reinforcements to continue the Fifth Army's attack northward, the 201st Guards Brigade of the British 56th Infantry Division, with artillery and tank support, attacked on 16 October to clear the Germans from Monte Grande. Initial German resistance was stiff and intense artillery fire struck the attackers as they advanced approximately one mile to the ridges of Monte Grande. The terrain made the going difficult; supplies often had to be brought up by hand and fire support was frequently impossible. On 17 October, in heavy fighting, the British advanced. At last one battalion of the brigade reached the crest of Monte Grande, and the defenders began to withdraw.

Significance: With the capture of the Monte Grande heights, the vital Triflisco Gap was safe for the passage of Allied troops and equipment.

Sources: R.2; R.5; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Canal II, 18-20 October 1943

In October 1943, with the Volturno River crossings secured, Fifth Army strategy was to continue to advance along a wide front with the US VI Corps on the right and the British X Corps on the left. After crossing the Volturno, the British 46th Infantry Division advanced to the Regia Agnana Nuova Canal about 6.5 kilometers north of the Volturno. During three days of repeated attempts beginning on 15 October, the division was unable to force the 15th Panzer Grenadier Division's defenses at the canal.

On 18 October, a battalion finally crossed the canal. Despite continuing German fire, ferrying operations commenced. By 20 October the 46th Division had three ferries in operation, and a secure bridgehead about 1,200 yards deep.

Significance: The 15th Panzer Grenadier Division had successfully delayed the left wing of the British X Corps in accordance with the German strategy to gain time while stronger defenses to the north were completed. The British 46th Division too was successful. By persistent effort it had established a bridgehead across the Regia Agnana Nuova Canal.

Sources: R.2; R.5; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Francolise, 20-21 October, 1943

After crossing the Regia Agnena Nuova Canal and consolidating a bridgehead, the British 7th Armored Division, with a tank battalion leading, moved out on 20 October to continue attacks against the 15th Panzer Grenadier Division. Two key towns in the German defensive line, Francolise and Sparanise, were the division's immediate objectives. Rainy weather prevented Allied aircraft from providing tactical air support for the division, and rough, muddy terrain slowed the movement of the division's tanks. Despite three days of fighting through grain fields and olive groves, the British were still unable to take either of their primary objectives.

Significance: The German defense was successful in slowing the British advance and secured more time for preparing defenses farther north. The terrain had contributed significantly to slowing the tanks of the 7th Armored Division, and on 24 October the division would change sectors with the 46th Infantry Division in order to use the tanks more advantageously.

Sources: R.2; R.5; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTORE)

Santa Maria Oliveto, 4-5 November 1943

In early November 1943, the right wing of the US VI Corps approached the headwaters of the Volturno River and prepared to cross. In rugged mountainous terrain to the north, the German defenders planned to delay the VI Corps as long as possible in order to complete construction of their main defensive line.

At 2400 on 3 November, following an intensive artillery preparation, two regiments of the 34th Infantry Division, the 133d and the 168th, with two battalions each, and the attached 190th Infantry Battalion, forded the Volturno River, their objective Santa Maria Oliveto and Roccaravindola, two towns on the edge of the hills north of the Volturno River plain. German resistance from elements of the 3d Panzer Grenadier and 305th Infantry Divisions was stiff, with particularly intense artillery fire. The next day the 168th Infantry seized Roccaravindola and high ground southwest of the town. Heavy losses in the regiment's two committed battalions prompted the commitment of its reserve (1st) battalion. On 5 November, high ground northwest of Roccaravindola was taken with assistance from one battalion of the division's 135th Regiment.

The 133d Infantry advanced to take Santa Maria Oliveto on 4 November. A German counterattack on 5 November threw back one battalion from a hill southwest of the town, but US troops regained the lost ground later in the day. German infiltrators remained in Santa Maria Oliveto on 5 November, and possession of the town was still contested.

Significance: The 34th Division, in crossing the Volturno for the third time, had gained a foothold in the positions of the German Barbara Line, where the Germans planned to delay the Allies as long as possible while permanent fortifications were completed. With the north part of the river crossed, the VI Corps advance could be continued.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTORE)

Monte Camino I, 5-7 November 1943

The Bernhardt Line was the second of three German defensive lines which made up the Winter Line. More formidable than the Barbara Line to the south, it was meant to delay the Allied Fifth Army as long as possible and inflict casualties on the attackers while the Gustav Line positions along the Garigliano and Rapido Rivers were completed. One heavily fortified section of the Bernhardt Line was the Monte Camino hill mass, and in early November 1943, the British 56th Infantry Division was ordered to clear out the units of the 15th Panzer Grenadier Division which defended it. This would open up the approaches to the main German defenses along the Garigliano River for the entire British X Corps.

On 5 November the 168th and 201st Brigades advanced from the south and took low terrain below Monte Camino in a two-pronged attack. Advancing a mile and a half, they took the towns of Sippicchio and Cavalle. The town of Calabritto at the foot of the mountain was taken on 6 November, but an attempt to seize Cocuruzzo to the northwest was repulsed. On the afternoon of 6 November, the first of a series of attacks up the mountain slopes failed, in the face of heavy defensive fire and exceptionally rugged terrain. On the following day, the division was again repulsed in an attempt to move up onto higher ground.

Significance: The 15th Panzer Grenadier Division did not allow any gains on their positions on the mountain during three days of fighting. More time would be required for the 56th Division to make any progress against the German defenses.

Sources: R.2; R.5; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Monte Lungo, 6-7 November 1943

Southwest of Mignano in the Monte La Difesa massif, all three battalions of the US 7th Infantry Regiment, 3d Infantry Division, fought to clear German defenders from the high ground of the mountain, where a line of cliffs fifty feet high ran some 1500 yards along the top of the mountain. On 6 November an attack was stopped by the dug-in defenders of the 3d Panzer Grenadier Division, who employed small arms and artillery fire. On 7 November the 7th Infantry secured the lower slopes of Monte La Difesa.

The Division's 15th and 30th infantry regiments were assigned to take the high ground immediately adjacent to Highway No. 6 northwest of Mignano. One battalion of the 15th Infantry, after passing through Mignano, failed in an attempt to take the southeastern spur of Monte Lungo on 6 November. On the same day, one battalion of the 30th Infantry, which had swung around through the 45th Division's zone to attack from the northeast, failed to take Monte Rotondo. Attacks for both regiments on 7 November were postponed.

German artillery fire was heavy during the two days of attack and tactical air support was also provided for the defenders. US air attacks supported the 3d Division.

Significance: The Germans continued to hold the high ground covering Highway No. 6 north of Mignano, denying the Fifth Army immediate passage along the road.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTORE)

Pozzilli, 6-7 November 1943

Northwest of the upper Volturno River, the terrain in the 45th Infantry Division's sector was mountainous and covered by fortified positions of the German 3d Panzer Grenadier Division. The 45th Division's mission was to advance over the rugged terrain and keep the Germans off balance and under pressure so that their main defensive line to the north could not be completed.

The extremely rugged terrain and heavily fortified positions slowed the division's attack from the start. With intensive artillery support, units of the 180th Infantry Regiment attempted to push through the rugged terrain between Monte Santa Croce and Monte Corno and assault the German positions on these peaks on 6 and 7 November, but they met with little success. Elements of the 179th Infantry, near Pozzilli and to the right of the 180th Infantry, also met with little success during the first two days of the attack.

The terrain made resupply for the attacking units difficult and aided the German defense, which was also assisted by attacks of German fighter-bombers in large numbers.

Significance: The 45th Division failed to make a quick breakthrough in an area where natural defenses greatly increased the German's effectiveness.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Monte Camino II, 8-10 November 1943

Determined to deny the British X Corps access to the Garigliano River and the Liri Valley via the Monte Camino massif, the German command threw the 15th Panzer Grenadier Division against the 56th Division at Calabritto in two counterattacks on 8 November. Covered by mortar and machine gun fire from positions on Monte Camino's slopes, the Germans attacked the town of Calabritto at the foot of the mountain. These attacks failed to dislodge the British, and during the night of 8/9 November another attack was beaten back. Exhaustion and strain from continuous action over the last month and the bad weather began to show in the 56th Division's depleted ranks. A German attack on 10 November drove two battalions from the foot of the mountain. At the request of the 56th Division's commander, permission was granted on 12 November for the division to pull back. The completion of the withdrawal on 15 November marked the end of the 56th Division's initial attempt to clear the heights of Monte Camino.

Significance: The determined German defense, combined with bad weather and the effects of prolonged fighting in rugged terrain, made it impossible for the 56th Division to achieve its objectives.

Sources: R.2; R.5; R.12.

WORLD WAR II (ITALIAN CAMPAIGN. VOLTURNO)

Monte Rotondo, 8-10 November 1943

On 8 November, the 3d Infantry Division continued its efforts to take the heights north of Mignano overlooking Highway No. 6 and the Monte La Difesa defenses southwest of the town. One battalion of the 30th Infantry Regiment cleared the top of Monte Rotondo, while two battalions of the 15th Infantry made progress on two lower peaks west of Monte Rotondo. The 30th Infantry attack was supported by fire from eight artillery battalions. Around Monte La Difesa, the rugged terrain and fortified German positions stopped elements of the 7th Infantry from making substantial gains.

Units of the 3d Division north of Mignano consolidated their positions on 9 November, actively patrolling the mountain slopes and beating back German counterattacks. Another battalion of the 30th Infantry was committed, and it cleared the two peaks that the 15th Infantry had attacked on the previous day. The 7th Infantry continued to make little headway in an attack on the steep approaches to the crest of Monte La Difesa.

German counterattacks against the 15th and 30th Regiments continued on the following day, but the US troops held their ground. An afternoon attack by two battalions of the 7th Infantry failed in the difficult terrain.

Significance: Some progress had been achieved in the three days of attack by the 3d Division. But a safe route along Highway No. 6 to the Rapido River valley was still not cleared, allowing the Germans more time for further preparations of defensive positions to the north.

Sources: R.2; R.8; R.12.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Calabritto, 1-2 December 1943

As part of the US Fifth Army's all-out attack against Monte Camino in early December 1943, the British 46th Infantry Division was to attack the town of Calabritto at the southern base of the mountain. This was a diversionary attack, designed to draw German strength away from Monte Camino and, if successful, envelop the German defenses.

Minefields, barbed wire, and heavy defensive fire from the 15th Panzer Grenadier Division slowed the initial attack which began at dusk on 1 December. At dawn on the following day, the division broke the first German line, and British armored units moved up to support the attack. More progress was made. By the end of the day, the infantry was within 200 yards of Calabritto, but the town remained in German hands.

Significance: As a diversionary attack the 46th Division's move on Calabritto did not achieve its objective. Although it helped to maintain pressure on the German line, Monte Camino had to be secured before the division could take Calabritto.

Sources: R.2; R.5; R.8; R.9.

WORLD WAR II (ITALIAN CAMPAIGN, VOLTURNO)

Monte Camino III, 2-6 December 1943

As part of a coordinated attempt by the British X Corps and the newly organized US II Corps to capture the Camino-Defensa-Maggiore hill complex the British 56th Infantry Division, which had earlier failed to secure Monte Camino, was ordered to attack again and drive the German defenders (15th Panzer Grenadier Division) from the mountain's heights.

In a downpour on the night of 2/3 December, the 56th Division attacked with three brigades. Under cover of darkness the advance made good progress and on 3 December various hills were taken, including Monastery Hill, the easternmost and highest peak of the Monte Camino hill complex. German counterattacks prevented any further immediate gains. In the following days successful advances were made on Monte Camino proper and an adjacent peak. German counterattacks retook Monastery Hill twice between 3 and 5 December, but on both occasions the 56th Division regained the summit. By 6 December, the British had secured the mountaintop and had cracked the German line.

Significance: An important link in the German defenses was now in Allied hands, and other objectives related to it fell in the following days, as the Germans withdrew to defense positions farther north.

Sources: R.2; R.5; R.9.

WORLD WAR II (ITALIAN CAMPAIGN, VOLturno)

Monte Maggiore, 2-3 December 1943

In early December 1943, the US 36th Division, after more than two months in Fifth Army reserve, was ordered to take Monte Maggiore and Monte Lungo to the southwest of Highway No. 6. This was part of the opening phase of Fifth Army Commander Lieutenant General Mark W. Clark's plan to push into the German Gustav Line positions along the Garigliano and Rapido Rivers.

The division's 142d Infantry Regiment was assigned to the attack on Monte Maggiore. Following the 1st Special Service Force up the lower slopes of Monte La Difensa on 2 December, two battalions of the 142d Infantry quickly pushed ahead through surprisingly light opposition. Smoke laid down on Monte Lungo by Allied artillery masked the advance over the rugged terrain, and the swift thrust made the operation a success. Intense artillery fire covered the division's advance and facilitated its movement. By 3 December the last two peaks of Monte Maggiore had been taken.

Significance: The 36th Division's success on Monte Maggiore cleared another German obstacle on Highway No. 6 and permitted preparations for the assault on the final German positions astride the road at San Pietro and Monte Lungo.

Sources: R.2; R.8; R.9.

1. IDENTIFICATION

War: World War II
Italy, 1943-1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Aprilia I, Italy	A 25-26 Jan 1944 D	Anzio	Br 1st Inf Div Ger 3d Pz Gr Div (½)(+)	MG Penney, Lt Gen Gräser	2	7.0
The Factory, Italy	A 27 Jan 1944 D	Anzio	Ger 3d Pz Gr Div Br 1st Inf Div	Lt Gen Gräser MG Penney	1	7.0
Campoleone, Italy	A 29-31 Jan 1944 D	Anzio	Br 1st Inf Div Ger 3d Pz Gr Div	MG Penney, Lt Gen Gräser.	3	11.0
Campoleone Counterattack, Italy	A 3-5 Feb 1944 D	Anzio	Ger 3d Pz Gr Div (+) Br 1st Inf Div (1/3)(+)	Lt Gen Gräser MG Penney	2	11.0
Carroceto, Italy	A 7-8 Feb 1944 D	Anzio	Ger 3d Pz Gr Div (+) Br 1st Inf Div	" Lt Gen Gräser MG Penney	2	2.0
Moletta River Defense, Italy	A 7-9 Feb 1944 D	Anzio	Ger 65th Inf Div (2/3) (+) US 45th Inf Div (+)	Lt Gen Pfeiffer MG Eagles	2	3.2
Aprilia II, Italy	A 9 Feb 1944 D	Anzio	Ger 3d Pz Gr Div (+) Br 1st Inf Div (+)	Lt Gen Gräser MG Penney	1	2.0
Factory Counterattack, Italy	A 11-12 Feb 1944 D	Anzio	US 45th Inf Div (+) Ger 715th Lt Inf Div(+)	MG Eagles Lt Gen Hildebrandt	1	3.2
Bowling Alley, Italy	A 16-19 Feb 1944 D	Anzio	Ger LXXVI Pz Corps (-) (+) US 45th Inf Div (+)	Gen Mackensen MG Eagles	4	9.6
Moletta River II, Italy	A 16-19 Feb 1944 D	Anzio	Ger 65th Inf Div Q/3 (+) Br 56th Inf Div (-)	Gen Pfeiffer MG Templer	4	4.0
Fioccia, Italy	A 21-23 Feb 1944 D	Anzio	Ger 114th Lt Inf Div (+) US 45th Inf Div	Lt Gen Bourquin MG Eagles	3	8.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1943-1944

Engagement	Posture	Defender	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Aprilia I	A D	HD	FM	WT	N	x	minor	x	
The Factory	A D	HD	FM	DSC	WT	--	--	x	
Campoleone	A D	PD	FM	DSC	WT	N	--	x	
Campoleone Counterattack	A D	PD	FM	DST/WLT	WT	N	--		
Carroceto	A D	PD	FM	DSC	WT	N	--	x	
Moletta River Defense A	A D	PD	FM	DSC	WT	N	--	x	
Aprilia II	A D	PD	FM	DSC	WT	N	--	x	
Factory Counterattack A	A D	FD/PD	FM	WLT	WT	N	--	x	
Bowling Alley	A D	FD/PD	FM	DST	WT	Y	x	substantial	x
Moletta River II	A D	FD/PD	FM	DSC	WT	Y	x	substantial	x
Fioccia	A D	FD	FM	WLT/DST	WT	N	--	--	x

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II: Italy, 1943-1944

Engagement	Strength				Battle Casualties				Arty Pieces Lost		Aircraft Losses	
	Personnel Total	Total Lt.	Armor	NBR	Arty Pieces	Air Sorties	Armor Losses	\$/Day	Total	\$/Day	Total	Sorties/Day
Aprilia I	A 19,350 D 6,750	71 46	0 0	71 46	242 66	0 28	1,158 130	3.0 1.0	7 4	4.9 4.3	7 ?	--
The Factory	A 15,317 D 17,976	92 71	0 0	92 71	130 242	50 33	366 .62	2.4 0.3	? ?	-- --	? ?	--
Campoleone	A 17,766 D 15,098	71 92	0 0	71 92	242 123	16 30	742 221	1.4 0.5	? ?	-- --	? ?	--
Campoleone Counterattack	A 26,029 D 9,834	107 35	0 0	107 35	222 122	53 44	1,318 1,450	2.5 7.4	? ?	-- --	? ?	--
Carroceto	A 26,490 D 4,515	107 139	0 0	107 139	221 82	18 7	341 369	0.6 4.1	? ?	-- --	? ?	--
Moletta River	A 7,418 D 5,000	27 0	0 0	27 0	58 76	9 7	167 107	1.1 1.1	? ?	-- --	? ?	--
Aprilia II	A 27,518 D 17,730	113 100	0 0	113 100	223 226	0 121	270 311	1.0 1.8	? ?	-- --	0 ?	--
Factory Counterattack	A 13,400 D 7,077	70 28	0 0	70 28	155 102	7 0	101 206	0.8 2.9	? ?	-- --	0 ?	--
Bowling Alley	A 41,974 D 20,496	201 106	0 17	201 89	317 184	335 1,270	2,238 1,018	1.3 1.2	56 38	7.4 9.0	0 0	--
Moletta River II	A 21,478 D 9,761	24 59	0 0	24 59	167 185	45 58	1,451 1,693	1.7 4.3	?	-- --	? ?	--
Fioccia	A 15,637 D 19,613	45 106	0 17	45 89	164 187	170 178	265 403	0.6 0.7	?	-- --	? 0	--

4. INTANGIBLE FACTORS

War: World War II
Italy, 1943-1944

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logis- tics	Nonen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Aprilia I	A D	C x	C x	C C	C C	C N	C N	C C	x x	x x	2.4 0	.6 2
The Factory	A D	C C	C x	C x	C C	C N	C N	C x	x x	x x	0 2.3	.7 6
Campolone	A D	C x	C x	C x	C C	C N	C N	C x	x x	x x	2.3 2.0	.5 5
Campolone Counterattack	A D	x A	C C	x x	C C	N N	N N	C x	x x	x x	1.4 1.4	.6 5
Carroceto	A D	x C	C C	x x	C C	N N	N N	C x	x x	x x	0.6 1.4	.4 6
Moletta River Defense	A D	C C	C C	C C	C C	N N	N N	C x	x x	x x	0 0.5	.5 5
Aprilia II	A D	C C	C C	C x	C C	N N	N N	C x	x x	x x	0.6 0.7	.7 6
Factory Coun- terattack*	A D	x C	C C	x C	C C	N N	N N	C x	x x	x x	0 0.5	.3 5
Bowling Alley	A D	C x	C x	C x	C C	C N	C N	C x	x x	x x	0.7 0.5	.4 5
Moletta River II	A D	C O	C C	C C	C C	N N	N N	C C	x N	x N	0 0	.3 8
Fioccia	A D											

6. FACTORS AFFECTING OUTCOME

World War II
War: Italy, 1943-1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Lander-shipt	Surprise	Mess, Narrow Front	Logistics	Portefief-Cartelons	Depth	
Aprilia I	A D	N	N	N	N	N	N	N	X	X	X	X	X	X
The Factory	A D	N	N	N	N	N	N	N	X	X	X	X	X	X
Campoleone	A D	N	N	N	N	N	N	N	N	N	N	N	N	X
Carroceto	A D	X	N	N	N	N	N	N	N	N	N	N	N	N
Moletta River Defense	A D	N	N	N	N	N	N	N	N	N	N	O	N	N
Aprilia II	A D	N	N	N	N	N	N	N	X	N	N	N	N	X
Factory Counterattack	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Bowling Alley	A D	X	O	N	N	N	N	N	N	N	N	N	N	N
Moletta River II	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Fioccia	A	N	N	N	N	N	N	N	N	N	N	N	N	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: World War II
Italy, 1943-1944

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Aprilia I	A D	F D	--	X P MD
The Factory	A D	F D	--	X R, MD
Campoleone	A D	F D	--	X P, S S
Carrocelo	A D	EE D	--	X P, S MD
Moletta River Counter-attack	A D	F D/O	--	X P, S S
Moletta River Defense	A D	RivC D	--	X X R, S S
Aprilia II	A D	F D	--	X P MD
Factory Counterattack	A D	F D	--	X R
Bowling Alley	A D	F D/O	--	X X P, R, MD
Moletta River II	A D	RivC D	--	X P, MD S
Fioccia	A D	F D/O	--	X R, MD

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Aprilia I, 25-26 January 1944

After the successful landing of the Allied VI Corps at Anzio, the British 1st Infantry Division, at full strength, was ordered to advance to and take the town of Campoleone at a railroad junction on the southern edge of the Alban Hills. This attack was part of VI Corp's commander Major General John P. Lucas's plan for consolidation of the beachhead positions.

The division, with three brigades and supporting armor, moved out on 25 January under the cover of artillery and naval gunfire toward its first objective, the town of Aprilia and the "Factory", a complex of buildings which would later become a hotly-contested strongpoint. Elements of the 3d Panzer Grenadier Division, rushed to the Anzio area to contain the landing, offered substantial resistance. Aprilia and the Factory were taken on 26 January (in an advance of three miles from the beachhead.) Preparations were then made to continue the advance to Campoleone.

Significance: In this attack, the 1st Division succeeded in expanding the beachhead. However the decision to consolidate close to the shore allowed the German defenders to move up reinforcements for containment of the Allied beachhead.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

The Factory, 27 January 1944

The Factory complex at the town of Aprilia, some four miles south of Campoleone, was the target for a German counterattack on 27 January. The German 3d Panzer Grenadier Division was ordered to retake Aprilia from the British 1st Infantry Division, which had captured it on the previous day, and stem the Allied advance on Campoleone.

The main attack directed at the Factory came in the morning of 27 January. The British 5th Grenadier Guards of the 24th Guards Brigade, held the buildings in the complex and repulsed the attack. Later attempts around the British flanks also failed.

Significance: As a result, the Germans withdrew toward Campoleone and the British advance was able to continue slowly until 31 January.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Campoleone, 29-31 January 1944.

After beating back a German counterattack on 27 January, the British 1st Infantry Division continued its advance beyond Aprilia to Campoleone. The division's main objective was Campoleone Station, a highway and railroad junction about two kilometers south of the town itself. Here the division would consolidate its lines in preparation for a planned all-out attack north to Albano.

The attack commenced on 29 January and soon met defensive fire from positions manned by the 3d Panzer Grenadier Division. The Germans had taken advantage of the gullies that traversed the open terrain, and limited the choices of approaches for the British, by emplacing their weapons in and around clusters of farm buildings to cover the available attack routes. Each strongpoint had to be dealt with by infantry, armor, and antitank teams. Despite the formidable defenses and artillery fire from high ground north of the beachhead, the division advanced 2.5 kilometers and came close to Campoleone Station by 31 January.

Significance: A substantial wedge had been driven between the 3d Panzer Grenadier Division and the 65th Infantry Division on its right. This salient constituted a threat to the German line and would quickly become the target for German counterattacks.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Campoleone Counterattack, 3-5 February 1944

By early February 1944, the German Fourteenth Army had assembled strong forces in the Anzio area to counterattack the Allied VI Corps's beachhead. Since the German buildup was not yet adequate for a major counteroffensive to drive the Allies into the sea, the German command planned to attack the British 1st Division's Campoleone salient and use it as a jumping-off point for the major attack when the buildup of forces was completed.

The German plan of attack was to make holding attacks to the left and the right of the 1st Division salient, employing elements of the 65th and 71st infantry divisions, and attack in force against the 1st Division's 3d Brigade inside the bulge with the 3d Panzer Grenadier Division. The weight of the attack was expected to drive in the British positions.

Late in the afternoon of 3 February, the attack got underway with an intense artillery preparation on the apex of the salient followed by artillery fire delivered against the base of the salient and a diversionary attack on the apex. Early the next day, a full-scale attack was in progress against the 3d Brigade's flanks. Muddy ground and a staunch British defense hampered the German advance, but the 3d Brigade was soon almost entirely isolated. On the night of 4/5 February the brigade began an organized fighting withdrawal and by 5 February was back in position in the 1st Division's new line in the Aprilia area.

Casualties were heavy on both sides.

Significance: The Germans did not quite reach their planned objective, but they had eliminated the deepest penetration in the Anzio beachhead and improved their position to launch the all-out attack against the VI Corps.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Carroceto, 7-8 February 1944

In an attempt to improve German positions before his planned all-out counterattack against the Anzio beachhead, Fourteenth Army commander General Eberhard von Mackensen continued attacks on the British 1st Infantry Division near Aprilia. Possession of the Factory complex and the hamlet of Carroceto 500 yards from it would give the Germans a solid springboard for their decisive counterattack. The British 18th Brigade defended the Factory and its surrounding area. The German plan called for the concentration of Combat Command Grasser against the brigade's positions while other units pinned down adjacent British troops. The preponderance of German strength was expected to overwhelm the defending British.

On 7 February the attack commenced, with infiltration of the British flank positions. Fighting was intense, and during the late evening the British lost ground. On 8 February reserves arrived, including four US medium tank companies, and the British counterattacked and regained some of their former positions. Heavy artillery and naval gunfire support aided the 1st Division's efforts.

In the two days of battle, the British lost only one key position to the German attack, but both sides suffered heavy casualties. Only a brief respite followed however, with German attacks beginning again on the following day.

Significance: The stubborn British fighting had prevented the Germans from making much progress toward eliminating the Anzio beachhead.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Moletta River Defense, 7-9 February 1944

In early February 1944, in preparation for the planned all-out counter-attack against the Allied beachhead, the German 65th Infantry Division was ordered to attack the Allied left flank defenses along the Moletta River, to threaten the rear of the US VI Corps. The 157th Infantry Regiment of the US 45th Infantry Division was defending part of the line that the 65th Division was to attack. The objective of the preparatory attack was to seize the Moletta River line so that the rear areas of the VI Corps could be threatened when the planned counteroffensive began.

At 2100 hours on 7 February, after a day of German air raids on Nettuno and Anzio, Combat Command Pfeiffer of the 65th Division attacked across the Moletta River. Despite determined resistance the Germans advanced about a mile. However, they failed to establish a major threat to the Allied left flank. By late afternoon 9 February the attack slowed while the Germans consolidated their gains.

Significance: The situation at the beachhead and especially around Aprilia remained critical. Fourteenth Army commander General Eberhard von Mackensen, at a high cost to both opponents, was steadily improving his army's positions for an all-out German counteroffensive.

Sources: R.1; R.2; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Aprilia II, 9 February 1944

The British 1st Infantry Division at Aprilia was the target for another attack by Combat Command Graser " a collection of units from several German divisions, on 9 February 1944. The Germans still sought to take the Factory complex in order to improve their position for the planned all-out counter-attack to destroy the Allied beachhead at Anzio.

Under cover of an early morning artillery preparation, German troops infiltrated the 1st Division's lines. After the preparation lifted, they attacked the rear and flanks of the British elements that were resisting the German frontal attack. Heavy artillery and naval gunfire support was called upon to stop the German attack. A flight of 80 Allied medium bombers on its way to bomb German supply dumps near Valmontone was diverted to disrupt the German advance, and 41 fighter-bomber sorties also provided assistance. The British, having fought a stubborn defense, finally were driven from Aprilia, and by the next morning they had abandoned the Factory. The Germans then consolidated their newly won positions.

Both sides suffered heavy personnel casualties during the successful German attack.

Significance: After a week of repeated attempts, the German command had the staging point which they deemed necessary for their planned offensive.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Factory Counterattack, 11-12 February 1944

With the capture of Aprilia and the Factory complex on 9-10 February, both German Combat Command Graser and the British 1st Infantry Division were in poor fighting condition, having been continually committed over the past week. Combat Command Graser was relieved by the well-equipped but inexperienced 715th Light (Jaeger) Division in the newly won German positions at Aprilia. The US 45th Infantry Division (less one infantry regiment) took over part of the 1st Division's front and was ordered to retake Aprilia and the Factory, deemed essential for the security of the Allied beachhead.

One battalion of the 45th Division's 179th Infantry Regiment, supported by two tank companies, made the main effort on 11 February. The force proved to be inadequate for the task. In spite of an intense artillery and naval gunfire barrage, it was unable to dislodge the defenders, who had taken refuge from the artillery in deep collars in Aprilia. Heavy tactical air support had been planned, but bad weather limited the number of air sorties to only seven. Some infantrymen made their way into Aprilia under the cover of a smoke screen, but they could not press home the attack. On the afternoon of 12 February the attack was called off.

Significance: The 45th Division's efforts to retake Aprilia failed mainly because the Division attacked in insufficient numbers. The Germans would therefore be able to use the Factory as a jump-off point for their planned offensive against the VI Corps.

Sources: R.1; R.2; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Bowling Alley, 16-19 February 1944

In mid-February 1944, Fourteenth Army commander General Eberhard von Mackensen launched his counterattack to destroy the Allied beachhead at Anzio. Massing strong infantry and armored forces, he planned the attack's main effort along the Anzio-Albano road, the "Bowling Alley", where the US 45th Infantry Division held the front line.

At 0600 on 16 February, the attack commenced with a brief and intense artillery barrage, which lasted half an hour, followed by attacks by infantry and armor that achieved tactical surprise. The first infantry assault came directly down the Anzio-Albano road along the boundary of the 157th and 179th Infantry Regiments. The Germans advanced 1.6 kilometers by mid-morning. Intense naval gunfire and close air support slowed the attackers. The Infantry Lehr Regiment, a training unit with no combat experience ordered by Hitler to spearhead the attack, disintegrated under the intense Allied defensive fire.

On 17 February, von Mackensen sent his infantry and armor forward once again, and again the 45th Division was forced back. At the final beachhead defensive line, the division held, with support from reserve units, tactical air attacks, and naval gunfire.

On 18 February two fresh German divisions, the 26th Panzer and the 29th Panzer Grenadier, joined the battle and inflicted heavy losses on the 179th Infantry. The attack then shifted to the 180th Infantry's sector, where the troops had not received the brunt of the German main effort, and it was repulsed. That evening, von Mackensen admitted failure. On 19 February his exhausted soldiers were forced back by counterattacks.

Significance: The 45th Division's tenacious defense, backed by air, artillery, and naval gunfire support, had frustrated German plans to eliminate the Anzio beachhead. Since the initial landings, both sides had sustained heavy casualties and would be unable to mount major operations in the near future.

Sources: R.1; R.2; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Moletta River II, 16-19 February 1944

On 16 February 1944, the British 56th Infantry Division, with the 167th Infantry Brigade in the line, was the target for a diversionary German attack designed to draw Allied attention away from the main effort to break the Anzio beachhead, made against the US 45th Division. The 56th Division had come ashore in early February, and on 14 February it relieved the British 1st Infantry Division in defensive positions along the Moletta River on the left flank of the beachhead.

The German 4th Parachute and 65th Infantry divisions attacked at dawn on 16 February and, surprising the defenders, broke through the lines and advanced rapidly. The attackers' mission was simply to pin down the British, but their sudden success created a major threat to the Allied beachhead. However, having planned to make the main effort along the Anzio-Albano road, the German command did not have available reserves to exploit this success.

The attack was eventually stopped on the first day by reserve elements of the 56th Division. Three more days of hard fighting followed, and the British regained some lost ground before the German counterattack was finally called off.

Significance: The Germans achieved more than their objective of diverting Allied forces from the area of their main counteroffensive but did not have the resources to exploit their unexpected success. The British presented a firm enough defense to halt them and thus contributed to the failure of the German attempt to drive the Allies off the beach.

Sources: R.1; R.2; R.5; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ANZIO)

Pioccia, 21-23 February 1944

On 21 February, although the all-out offensive to destroy the Allied beachhead at Anzio had apparently failed, the Germans mounted small-scale attacks.

The US 45th Division, which had borne the brunt of the 16 February counterattack, was attacked by the 114th Light (Jaeger) Division supported by armored units. The attack started with dive bombing of the US positions and an extremely intense artillery barrage. Then German infantry struck the 45th Division. The 114th Division, its ranks depleted in the 16 February counterattack, was beaten back by accurate artillery and tank gunfire.

On 22 February the Germans tried again but were unable to make headway, particularly against the fire of the 180th Infantry Regiment. On the following day, the attack was called off and the Germans began to withdraw under pressure from Allied counterattacks.

Significance: This marked the end of the German attempt to destroy the beachhead.

Sources: R.1; R.2; R.7; R.8.

1. IDENTIFICATION
War: World War II
Italy, 1944

Engagement	Date(s)	Campaign	Forces	Comments	Duration (days)	Width of Front (km)
Santa Maria Infante, Italy	A 12-13 May 1944 D	Rome	US 88th Inf Div (+) Ger 94th Inf Div (-X+)	MG Sloan MG Coulter MG Steinmetz	2	7.5
San Martino, Italy	A 12-13 May 1944 D	Rome	US 85th Inf Div (+) Ger 94th Inf Div (-)	MG Coulter MG Steinmetz	2	5.5
Castellonorato, Italy	A 14-15 May 1944 D	Rome	US 85th Inf Div (+) Ger 94th Inf Div (-X+)	MG Coulter MG Steinmetz	2	5.0
Spigno, Italy	A 14-15 May 1944 D	Rome	US 86th Inf Div (+) Ger 94th Inf Div (-X+)	MG Sloan MG Coulter MG Steinmetz	2	5.5
Fornia, Italy	A 16-18 May 1944 D	Rome	US 85th Inf Div (+) Ger 94th Inf Div 2/3 (+)	MG Coulter MG Steinmetz	3	4.0
Monte Grande(Rome)	A 17-19 May 1944 D	Rome	US 86th Inf Div (-X+) Ger 94th Inf Div (-X+)	MG Sloan MG Coulter MG Steinmetz	2	9.0
Itri-Fondi, Italy	A 20-22 May 1944 D	Rome	US 88th Inf Div (+) Ger 94th Inf Div (-) (+)	MG Sloan MG Coulter MG Steinmetz	3	6.0
Terracina, Italy	A 22-24 May 1944 D	Rome	US 85th Inf Div (+) Ger 94th Inf Div (-) (+)	MG Coulter MG Steinmetz	3	15.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1944

Engagement	Defender	Terrain	Weather	Season	Surprise	Surpriser	Level	Air Superiority
Santa Maria Infante	A D	RgB FD	DST	Spt	X	X	minor	X
San Martino	A D	RgB FD	DST	Spt	Y	X	minor	X
Castellonorato	A D	RgB FD	DST	Spt	N	--	--	X
Spigno	A D	RgB Del	DST	Spt	N	--	--	X
Fornia	A D	RgB	DST	Spt	N	--	--	X
Monte Grande (Rome)	A D	HD	M	Spt	N	--	--	X
Itri-Fondi	A D	Del	Rgh	Spt	N	--	--	X
Terracina	A D	HD	Rgh	Spt	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II: Italy, 1943-1944

Engagement	Strength				Casualties				Arty Pieces Lost				Aircraft Losses			
	Personnel Total	Total	Armor Lt.	NBT	Arty Pieces	Air Sorties	Total	V/Day	1/Day	Total	t/Day	1/Day	Total	t/Day	1/Day	
Santa Maria Infante	A 18,702 D 9,250	249 34	51 0	198 34	160 123	109 0	531 1,035	1.4 5.6	9 ?	1.8 --	0 --	--	?	0 --	--	--
San Martino	A 17,970 D 8,141	107 21	17 0	90 21	160 76	54 0	1,974 1,720	5.5 4.4	?	--	0 --	?	0 --	--	--	--
Castellonorato	A 16,458 D 7,500	124 21	34 0	90 21	154 73	49 0	537 442	1.6 2.9	?	--	0 --	?	0 --	--	--	--
Spigno	A 18,308 D 8,215	249 40	52 0	198 40	166 128	51 0	343 730	0.9 4.4	?	--	0 --	?	0 --	--	--	--
Fornia	A 23,190 D 7,627	225 30	68 0	157 30	159 58	0 0	405 721	0.6 3.2	?	--	0 --	?	0 --	--	--	--
Monte Grande (Rome)	A 13,095 D 4,563	130 23	34 0	96 23	132 40	6 0	203 332	0.8 3.6	?	--	0 --	?	0 --	--	--	--
Itri-Fondi	A 17,912 D 6,653	104 26	28 0	76 26	126 40	8 32	257 380	0.5 1.9	?	--	0 --	?	0 --	--	--	--
Terracina	A 18,030 D 6,653	131 26	34 0	97 26	148 40	6 0	287 380	0.5 1.9	?	--	0 --	?	0 --	--	--	--

4. INTANGIBLE FACTORS

War: World War II
Italy, 1944

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis- tics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Santa Maria Infante	A C D	C C	C	C	N	N	C	C	X	X	1.6	7 4
San Martino	A C D	C C	C	C	N	N	C	X	X	X	0.6	5 5
Castellonorato	A C D	C C	C	C	X	N	C	X	X	X	2.0	8 3
Spigno	A C D	C C	C	C	X	N	C	X	X	X	2.4	6 4
Formia	A C D	C C	C	C	X	N	C	X	X	X	2.9	6 3
Monte Grande (Rome)	A C D	C C	C	C	N	X	C	X	X	X	1.2	7 4
Itri-Fondi	A D O	C	C	C	N	X	C	X	X	X	0.6	8 3
Terracina	A D O	C	C	C	N	X	C	X	X	X	1.6	6 3

6. FACTORS AFFECTING OUTCOME
War: World War II, Italy, 1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Preposition-deterrence	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Mass Measurer,	Logistics	Fortifi-cations	Depth
Santa Maria Infante	A D	N X	N X	N X	N N	X N	X X	N X	N N	N X	N N	N N	X X	N N
San Martino	A D	N X	N X	N X	N N	X N	X N	N N	N N	N N	N N	N N	X X	N N
Castellonorato	A D	N X	N X	N X	N N	X X	X N	N X	N N	N N	N N	N N	X X	N N
Spigno	A D	N N	N X	N X	N N	X X	N X	N N	N N	N N	N N	N N	X X	N N
Formia	A D	N N	N X	N X	N N	X N	N X	N X	N N	N N	N N	N N	X X	N N
Monte Grande (Rome)	A D	N X	N X	N X	N N	X N	N X	N X	N N	N N	N N	N N	X X	N N
Itri-Fondi	A D	N X	N X	N X	N N	X N	X N	N X	N N	N N	N N	N N	X X	N N
Terracina	A D	N X	N X	N X	N N	X N	X N	N X	N N	N N	N N	N N	X X	N N

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War II, Italy, 1944

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
				Secondary Attack		
Santa Maria Infante	A D	F D	F --		X	P W
San Martino	A D	F D	F --		X	P W
Castellonorato	A D	F D	F --		X	P W
Spigno	A D	F D	F --		X	P W
Formia	A D	F D	F --		X	P W
Monte Grande (Rome)	A D	F D	F --		X	P W
Itri-Fondi	A D	F, E (RF) D	F, E (RF) D		X	P W
Terracina	A D	F, E (LF) D/O	F --		X	P W

1. IDENTIFICATION
War: World War II
Italy, 1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Us)
Moletta Offensive, Italy	A 23-24 May 1944 D	Rome	Br 5th Inf Div (+) Ger 4th Para Div	MG Gregson-Ellis Col Trettner	2	8.5
Anzio-Albano Road, Italy	A 23-24 May 1944 D	Rome	Br 1st Inf Div (+) Ger 65th Inf Div	MG Penney MG Ziehlberg	2	6.0
Anzio Breakout, Italy	A 23-25 May 1944 D	Rome	US 1st Armd Div (+) Ger 3d Pz Gr Div (+)	MG Harmon MG Baade	3	5.6
Cisterna, Italy	A 23-25 May 1944 D	Rome	US 3d Inf Div (+) Ger 362d Inf Div Q/9(+)	MG O'Daniel LG Greiner	3	7.75
Sezze, Italy	A 25-27 May 1944 D	Rome	US 85th Inf Div (+) Ger 29th Pz Gr Div (4)	MG Coulter MG Fries	3	14.0
Velletri, Italy	A 26 May 1944 D	Rome	US 1st Armd Div Ger 362d Inf Div, 3d Pz Gr Div (1/8) (+)	MG Harmon LG Greiner	1	14.0
Campoleone Station, Italy	A 26-28 May 1944 D	Rome	US 45th Inf Div (+) Ger 65th Inf Div	MG Engles MG Ziehlberg	3	6.5
Villa Crocetta, Italy	A 27-28 May 1944 D	Rome	US 34th Inf Div (+) Ger 3d Pz Gr Div Q/9(+)	MG Ryder MG Baade	2	5.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy, 1944

Engagement	Posture	Defender	Terrain	Weather	Sunrise	Sunset	Clouds	Air Superiority
Molietta Offensive	A D	FD	FM	WLT	Spt	N	--	-- x
Anzio-Albano Road	A D	FD	FM	WLT	Spt	N	--	-- x
Anzio Breakout	A D	FD	FM	WLT	Spt	Y	x substantial	x
Cisterna	A D	FD	FM	WLT	Spt	Y	x substantial	x
Sezze	A D	WD	RM	DST	Spt	N	--	x
Velletri	A D	FD	RM	DST	Spt	Y	x minor	x
Campoleone Station	A D	FD	RM	DST	Spt	N	--	x
Villa Crocetta	A D	FD	RM	DST	Spt	N	--	x

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II: Italy, 1944

Engagement	Strength			Battle Casualties			Arty Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	MBT	Arty Pieces	Air Sorties	Total \$/Day	Armo Losses Total	\$/Day	Total \$/Day	Total Sorties	Total Aircraft Losses	
Moletta Offensive	A 17,345 D 12,569	35 0	00 0	100 92	16 0	234 468	0.7 1.9	?	--	?	--	
Anzio-Albano Road	A 17,313 D 11,343	36 19	0 0	100 96	35 0	194 107	0.6 0.5	?	--	?	--	
Anzio Breakout	A 22,374 D 12,815	424 89	152 0	272 89	247 107	710 1,355	1.1 3.5	93 51	7.3 19.1	0 2	0.6 --	
Cisterna	A 19,971 D 11,928	106 49	17 0	89 49	201 85	150 0	1,524 1,617	2.5 4.5	15 ?	4.7 --	?	
Sezze	A 17,925 D 6,957	110 52	17 0	93 52	138 88	8 0	162 277	0.5 1.3	?	0 ?	?	
Velletri	A 20,683 D 12,327	462 65	158 0	304 65	92 64	8 0	767 1,319	3.7 10.7	18 ?	3.9 --	?	
Campoleone Station	A 19,047 D 10,593	102 19	13 0	89 19	97 106	0 0	517 580	0.9 1.8	?	--	0.3	
Villa Crocetta	A 18,000 D 13,715	102 71	13 0	89 71	93 117	0 0	263 598	0.7 2.2	?	--	0	

4. INTANGIBLE FACTORS

War: World War II
Italy, 1944

5. OUTCOME

Engagement	CE	Leader- ship	Training/ Experience	Morale	Logis- tics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Moletta Offensive	A D	C C	C C	C C	C C	N N	C N	C C	N X	X X	0.0 0.0	5 5
Anzio-Albano Road	A D	C C	C C	C C	C C	N N	C N	X X	X X	X X	0.0 0.0	5 5
Anzio Breakout	A D	C C	C C	C C	C C	N N	C N	X X	X X	X X	4.8 4.8	7 7
Cisterna	A D	C C	C C	C C	C C	N N	C N	X X	X X	X X	5.3 5.3	6 6
Sezze	A D	C C	C C	C C	C C	N O	C 0	X X	X X	X X	1.6 1.1	4 4
Velletri	A D	X X	X X	X X	X X	X X	X X	X X	X X	X X	0.5 0.5	3 3
Campoleone Station	A D	X X	X X	X X	X X	N N	C N	X X	X X	X X	4 4	6 6
Villa Crocetta	A D	X X	X X	X X	X X	C N	C N	X X	X X	X X	0.5 0.5	3 3

6. FACTORS AFFECTING OUTCOME

War: World War II, Italy, 1944

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepositioned	Weather	Terrain, Roads	Leader-ship	Planning Surprise	Mass Maneuver,	Logistics	Fortifi-cations	Depth
Moletta Offensive	A D	N	N	N	N	N	X	N	X	X	X	X	X
Anzio-Albano Road	A D	N	N	N	N	N	X	N	X	X	X	X	X
Anzio Breakout	A D	N	X	N	X	X	X	N	N	N	N	N	X
Cisterna	A D	N	N	N	N	N	X	N	X	N	N	N	N
Sezze	A D	N	X	N	X	X	N	N	N	N	N	N	N
Velletri	A D	X	N	N	N	N	X	N	N	N	N	N	N
Campoleone Station	A D	X	N	N	N	N	X	N	N	N	N	N	N
Villa Crocetta	A D	X	N	N	N	N	X	N	N	N	N	N	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: World War II, Italy, 1944

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	A	D	RivC D/O	Secondary Attack		
Moletta Offensive	A	D	RivC D/O	--	X	R, WD S
Anzio-Albano Road	A	D	F D/O	--	X	R, WD S
Anzio Breakout	A	D	F D	--	X	P WD
Cisterna	A	D	F D	--	X	P WD
Sezze	A	D	F D	--	X	P WD
Velletri	A	D	F D	F --	X	R, S
Campoleone Station	A	D	F D/O	--	X	R
Villa Crocetta	A	D	F D/O	--	X	R

I. IDENTIFICATION
War: World War II
Italy, 1944

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Ardea, Italy	A 28-30 May 1944 D	Rome	Br 5th Inf Div Ger 4th Para Div (2/3)	MG Gregson-Ellis Col Trettner	3	9.0
Fosso di Campo- leone, Italy	A 29-31 May 1944 D	Rome	US 1st Arm Div, 45th Inf Div (+) Ger 3d PG Div (1/2)(+)	MG Harrison MG Baade	3	11.0
Lanuvio, Italy	A 29 May-1 Jun D 1944	Rome	US 34th Inf Div (-) Ger 3d PG Div (1/2)	MG Ryder MG Baade	4	3.0
Lariano, Italy	A 1-2 Jun D 1944	Rome	US 85th Inf Div (+) Ger Hermann Goering Pz Div (1/3) (+)	MG Coulter MG Schmalz	2	5.0
Via Anziate, Italy	A 1-2 Jun 1944 D	Rome	US 45th Inf Div (+) Ger 65th Inf Div Q/3(+)	MG Eagles MG Ziehlberg	2	4.0
Valmontone, Italy	A 1-2 Jun 1944 D	Rome	US 3d Inf Div (+) Ger Hermann Goering Pz Div (2/3) (+)	MG O'Daniel MG Schmalz	2	5.5
Tarto-Tiber, Italy	A 3-4 Jun 1944 D	Rome	BR 1st Inf Div and 5th Inf Div (+) Ger 4th Para Div	MG Penney Col Trettner	2	7.0
Il Giogio Pass, Italy	A 13-17 Sep 1944 D	North Italian	US 85th Inf Div (+) Ger 12th Para Rgt	MG Coulter Gen Schleiss	5	4.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II
Italy,

Engagement	Posture	Terrain	Weather	Season	Surprise	Surprise	Surprise	Air Superiority
Ardea	A D	FD	RW	DST	Spt	N	--	x
Fosso di Campoleone	A	FD	RW	DST	Spt	N	--	x
Lanuvio	A D	FD	RW	DST	Spt	N	--	x
Lariano	A D	FD	RW	DST	ST	N	--	x
Via Anziate	A D	FD	RS	DST	ST	N	--	x
Valmontone	A D	H/PD	RW	DST	ST	N	--	x
Taranto-Tiber	A D	FD	RW	DST	ST	N	--	x
Il Giogio Pass	A D	FD	DST/MLT	PT	N	--	--	

3. STRENGTHS AND COMBAT OUTCOMES

Mar: World War II: Italy. 1944

Engagement	Strength				Battle Casualties				Arty. Pieces Lost		Aircraft Losses	
	Personnel Total	Armor Total	Lc.	MTR	Arty. Pieces	Air Sorties	Total	\$/Day	Total	\$/Day	Total	Sorties/Day
Ardea	A 15,557 D 7,659	35 0	0 0	35 64	104 0	0 0	245 374	0.5 1.6	? 0	-- --	0 0	-- --
Fosso di Campoleone	A 29,711 D 15,801	281 100	77 0	204 100	146 117	35 11	1,304 1,379	1.5 2.9	80 ?	9.5 --	1 ?	-- ?
Lanuvio	A 17,300 D 6,108	0 46	0 0	0 46	94 61	371 11	825 698	1.2 2.9	?	-- --	?	-- ?
Lariano	A 22,641 D 13,012	106 30	17 0	89 30	115 112	66 1	329 1,178	0.7 4.5	?	-- --	0 ?	-- --
Via Anziate	A 23,604 D 19,255	156 35	17 0	139 35	121 202	38 2	316 884	0.7 2.3	8 12	2.6 17.1	0 ?	-- ?
Valmontone	A 26,607 D 10,111	126 31	7 0	119 31	146 110	121 0	710 568	1.3 2.8	7 8	2.8 12.9	?	-- 0
Tarto-Tiber	A 38,011 D 10,855	71 0	9 0	71 0	200 125	3 0	572 850	0.8 3.9	?	-- ?	?	-- ?
Il Giogio Pass	A 15,721 D 3,700	70 0	7 0	53 0	145 29	100 0	560 560	0.7 3.0	?	-- --	?	-- ?

4. INTANGIBLE FACTORS

War: World War II
Italy, 1944

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Momen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accom-p.
Ardea	A	C	C	C	C	N	N	C	X	X	2.1	6
	D	C	C	C	C	N	N	C	X	X	0.9	4
Fosso di Campoleone	A	C	C	C	C	N	N	C	X	X	0.6	6
Lanuvio	A	C	C	x	C	N	N	C	X	X	2.2	7
Lariano	A	C	C	C	C	N	N	C	X	X	0.4	4
Via Anziate	A	D	x	C	C	C	N	C	X	X	2.6	8
Valmontone	A	C	C	x	C	C	X	C	N	N	0.4	7
Tarto-Tiber	A	D	x	C	C	C	N	C	X	X	2.4	5
II Giogo Pass	A	C	C	C	C	N	N	C	N	N	0.8	3

FACTORS AFFECTING OUTCOME

World War II, Italy, 1944

Engagement	Ardea	Fossi di Campoleone	Lanuvio	Lariano	Via Anziate	Valmontone	Tarto-Tiber	Il Cioglio Pass
Depth	A	D	A	D	A	D	A	D
Portfolio- positions	N	X	N	X	X	N	X	X
Logistics	N	N	N	N	N	N	N	N
Measures, Mass	N	N	X	N	N	N	N	X
Surprise	N	N	N	N	N	N	N	N
Planning	N	N	N	N	N	N	N	X
Leader- ship	N	N	N	N	N	N	N	N
Training,	X	X	X	X	X	X	X	X
Roads	N	X	X	X	X	X	N	X
Weather	N	N	N	N	N	N	N	N
Prep-on- derrace	N	X	N	N	N	X	X	X
Force Superiority	N	N	N	N	N	N	N	N
Air Superiority	N	N	X	X	X	X	N	X
Mobility Superiority	N	N	X	X	X	N	N	X
Reserves	N	X	N	X	N	X	X	X
Quality	N	N	X	N	N	N	N	X

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: World War II, Italy, 1944

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Ardea	A D	RivC, F D	--	x	x	P MD
Fosso di Campoleone	A D	F D/O	--	x	x	R
Lanuvio	A D	F D/O	--	x	x	S
Lariano	A D	F D	--	x	x	R
Via Anziate	A D	F D/O	--	x	x	P MD
Valmontone	A D	F D/O	--	x	x	P MD
Tarto-Tiber	A D	F D	--	x	x	P MD
Il Giogio Pass	A D	F D	--	x	x	P MD

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Santa Maria Infante, 12-13 May 1944

On the right flank of the US II Corps, with the French Expeditionary Corps on its right, the 88th Division attacked on the morning of 12 May, as part of Operation "Diadem," the Allied offensive against the Gustav Line. Opposing the division were three battalions of the German 94th Infantry Division, an infantry battalion of the 15th Panzer Grenadier Division, and some elements of the 71st Infantry Division. By noon the 350th Regiment had taken Hill 413, west of Castelforte, and reached Ventosa and Cracoli Hill. That afternoon, after the French had cleared the north side of the Castelforte Road, the regiment occupied Monte Rotondo.

The 351st Regiment attacked north toward Santa Maria Infante, and met such strong resistance that by noon on 12 May it was still over a thousand yards short of the town. Assisted by a regiment of the 85th Division on the left, the 351st Infantry finally overcame heavy German resistance and captured Santa Maria Infante by early morning of 14 May.

Significance: In this first combat experience, the 88th Infantry Division had given a good account of itself and taken its objectives around Santa Maria Infante.

Sources: R.3; R.6; R.8; R.11.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

San Martino, 12-13 May 1944

On 12 May the US 85th Division, on the left of the II Corps sector, attacked as part of Operation "Diadem," the offensive against the German Gustav Line. Opposing the 85th were all but three battalions of the German 94th Infantry Division. The 338th Infantry Regiment, adjacent to the 88th Division on the right, was to coordinate with that division and attack toward the high ground southwest of Santa Maria Infante known as the S Ridge. The 339th Infantry, and elements of the division's reserve regiment, the 337th, were to seize San Martino Hill and the Domenico Ridge, north of Highway No. 7 along the coast. Possession of this high ground would give the 85th Division command of the coastal highway and the road from Santa Croce northward past Santa Maria Infante.

The 339th Infantry, attacking with three battalions, immediately encountered minefields and automatic weapons fire from positions occupied by the German 94th Infantry Division and failed at first to make significant progress. On the afternoon of 13 May, however, it captured San Martino Hill. The 338th Infantry Regiment also met heavy opposition in its attack to the S Ridge. One battalion advanced to Sollaciano but had only a foothold in the town by the end of the 12th. At the end of 13 May most of the regiment was still held up at the S Ridge.

Significance: The 85th Division, in its first combat, made small gains against heavy opposition, but inflicted enough damage on the defenders so that they withdrew on the following day.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Castellonorato, 14-15 May 1944

The US 85th Infantry Division, on the left of the II Corps, was ordered to continue its attack through the Gustav Line and take the town of Castellonorato on the southern edge of the Monte Petrella hill complex. This move, if successful, would outflank the strong German fortifications blocking the coastal road (Highway No. 7) and force the German defenders in these positions to withdraw, without requiring a costly frontal assault. Defending against the 85th Division was most of the German 94th Infantry Division.

The 337th Infantry was assigned to make the division's main effort. On 14 May, the regiment, with the 349th Infantry of the 88th Division covering its right flank, moved out and took Hill 108 about two kilometers east of Castellonorato. Two platoons of tanks aided the advance and provided long range covering fire and close support once across Capo Acqua Creek. On the morning of 15 May, US aircraft bombed Castellonorato, and, after a day of street fighting, elements of the 337th Infantry cleared the town.

The 338th Infantry, on the left of the 337th Infantry's advance, took Monte Penitro, southeast of Castellonorato, and by 15 May had advanced to Santa Croce, the southern terminus of the road that served as the German forward lateral line of communications. With the defenses along the coast outflanked, the German units in these positions were forced to withdraw, and the 339th Infantry, holding the line in this area, would be able to follow up the advance without serious resistance.

Significance: The 85th Division's successful attack on Castellonorato breached the extreme western portion of the Gustav Line. Under heavy pressure, the 94th Division's commander, General Steinmetz, requested permission to withdraw to more tenable positions. The German defense was in a crisis and only immediate action could prevent an Allied breakthrough.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Spigno, 14-15 May 1944

On 14 May, the US 88th Infantry Division attacked northwest into defensive positions in the Gustav Line in order to widen the breach in the German defenses. The division's objective for the attack was the town of Spigno, located on a slope of the Aurunci Mountains northwest of the Ausonia Corridor. Forces opposing the Division were elements of the German 71st and 94th Infantry Divisions and the 15th Panzer Grenadier Division.

On the right of the division's sector, the 350th Infantry attacked along the Ausente Creek, past Monte Cerri, and then crossed the creek and turned west. Resistance was light, as the Germans had withdrawn the bulk of their forces under the cover of small rear guards. Widely dispersed, the 350th Infantry advanced cautiously across the Ausonia Corridor toward Spigno. Elements of the 349th Infantry moved up the west side of Ausente Creek, passed over Monte Bracchi, and continued across the Ausonia Corridor parallel to the 350th Regiment's attack, occupying the south peak of Monte la Civita. The 351st Infantry, after clearing German rearguards from Santa Maria Infante, headed for Spigno and reached the north peak of Monte la Civita. Early on 15 May the 351st Infantry seized the town. The 349th and 350th Regiments had taken high ground south of Spigno and controlled the south shoulder of the Spigno Gap.

Significance: The 88th Division's successful attack opened up the flat terrain of the lower Ausonia Corridor and facilitated further gains by the French Expeditionary Corps on the division's right. The Germans were thrown off balance by continued pressure along the entire front, and lacking strong reserves, were steadily forced out of their Gustav Line positions.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Formia, 16-18 May 1944

The US 85th Division was assigned the mission of attacking German positions opposite the extreme left of the Allied Fifth Army's line along the coast of the Gulf of Gaeta. With the 349th Infantry Regiment and the 706th Tank Battalion attached, the division advanced in two columns to the Acquatraversa Creek on 16 May on flat terrain along the coast and in mountainous terrain on the division's right. There resistance from elements of the German 94th Infantry Division, which had been slight, stiffened. Confronted by intense German artillery, machine gun, and rifle fire, the US units halted for the night. The next day the advance continued. By 18 May the division had captured Formia and an important road junction to the west. The attackers had encountered minor opposition. The Germans were withdrawing behind the Hitler Line defenses to the northwest and were fighting delaying actions.

Significance: The 85th Division continued to pursue and keep pressure on the retreating German units in this engagement.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Monte Grande (Rome), 17-19 May 1944

After breaking the Gustav Line, the US 88th Infantry Division was ordered to pursue the withdrawing Germans through the rugged terrain of the Aurunci Mountains where the German least expected a thrust by the US II Corps. The division's objective was Monte Grande, a barren height northwest of the town of Itri, which commanded the junction of Routes 7 and 82. The control of Itri would give the II Corps a chance to cut off German units retreating along the coast via Route 7. The division's 349th Infantry Regiment was attached to the 85th Division for operations to the left of the 88th Division's sector. Opposing the US advance were elements of the depleted German 94th Infantry and 15th Panzer Grenadier divisions.

On 16 May, the 351st Infantry led the attack from Spigno and quickly advanced against light resistance past the southern edge of Monte Sant'Angelo to Monte Ruazzo. The summit of Monte Ruazzo was taken early on 17 May, and after a brief pause the regiment continued west toward Monte Grande. Early on 18 May German tanks on Route 82 stopped the division's advance. This force had been assembled to keep Route 7 clear for retreating German units coming up from positions near the coast. Having outdistanced the artillery in the swift advance through the Aurunci Mountains, the 351st Infantry could only wait for its arrival before pushing ahead. On the evening of 18 May, the artillery and the regiment's reserve battalion moved up, and by early morning of 19 May Route 82 had been cut and the summit of Monte Grande to the west taken.

Significance: The 88th Division attacked through the rugged Aurunci Mountains where the Germans least expected it. Although threatened with encirclement, German units near the coast withdrew one step ahead of the II Corps. Nevertheless, the 88th Division had helped pierce the Gustav Line and in keeping up the pursuit, prevented the Germans from consolidating their units in new defensive positions.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Itri-Pondi, 20-22 May 1944

The US 88th Infantry Division continued to attack northwestward along Highway 7 on 20 May, in order to prevent German occupation of the Hitler Line and to pin down as many German units as possible so that the upcoming breakout from the Anzio beachhead would have a better chance of success. The German defenders opposing the 88th Division were the battered 94th Infantry Division and a regiment each of the 15th and 29th Panzer Grenadier Divisions.

On 20 May, units of the 349th Infantry swiftly advanced from Itri to Pondi, a strongpoint in the Hitler Line, and, in a flanking maneuver supported by armor, cleared Pondi late in the day. To the north of the 349th Regiment's axis of advance, the 350th Infantry moved out through rugged terrain in what was to become a deep thrust behind German lines. On 21 May the 350th Infantry advanced to Monte Calvo and then to Roccasecca on the following day. On 20 May, the 351st Infantry occupied Monte Valletona and on the following day continued to the northwest to protect the 350th Regiment's right flank.

Significance: The 88th Division's successful attack kept heavy pressure on the already shaken German defenders and, most importantly, prevented the consolidation of defensive positions in the Hitler Line.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Terracina, 22-24 May 1944

On 19 May, the US 85th Infantry Division, on the left of the II Corps, continued its advance northwestward to the Hitler Line. The II Corps was moving to link up with Allied forces from the Anzio beachhead and trying to prevent the Germans from consolidating positions in the Hitler Line. Opposed to the 85th Division were elements of the depleted 94th Infantry Division and the 15th and 29th Panzer Grenadier Divisions. With the initiative in favor of the 85th Division, the retreating Germans offered only moderate resistance and concentrated on trying to prevent units near the coast from being cut off and surrounded.

Early on 22 May, after a pursuit up the coast, elements of the 337th Infantry reached high ground about a mile north of Terracina, the southern terminus of the Hitler Line. Intense fire from elements of the 29th Panzer Grenadier Division and infiltration by German troops drove the Americans back to Monte Croce. Later in the afternoon, an attack by the 337th Infantry pushed closer to Terracina. In a renewed attack on 23 May US troops reached the outskirts by midnight. In the hills north of Terracina, elements of the 338th Infantry pushed ahead in a flanking movement over Monte San Stefano toward Highway No. 7 and the German escape route. The 339th Infantry in the right of the 85th Division's sector, advanced over rugged terrain toward Sonnino near the edge of the Pontine Marshes plain, which separated the II Corps from the Anzio beachhead.

Late on 23 May, with the 338th and 339th Infantry threatening to cut off their escape route, the Germans evacuated Terracina, and elements of the 337th Infantry entered it early on the next day. On the night of 23/24 May, Sonnino fell to the 339th Infantry.

Significance: The 85th Division had successfully kept up pursuit of German forces and helped prevent the defense of the Hitler Line. Due in part to the division's progress, the 91st Cavalry Reconnaissance Squadron, advancing along the coast, was able to link up with units from the VI Corps at Anzio on 25 May.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Moletta Offensive, 23-24 May 1944

On 23 May, the British 5th Infantry Division launched part of Operation Hippo, the diversionary attack designed to deceive the Germans defending Anzio as to where the Allied main breakout effort was to be. Deployed on the left flank of the beachhead, behind the Moletta River, the 5th Division was opposed by the German 4th Parachute Division.

With armor support, the attack got underway early on 23 May, preceded by an artillery barrage. German mortars and machine guns met the attack with heavy fire, but the 5th Division crossed the river and took L'Americano, a town on the left of the division's front near the coast. That night, a German counterattack struck the British and drove them back across the Moletta by late morning on 24 May.

Significance: Although the division's attack had failed to gain ground, it pinned down German units badly needed for defense against the main Allied effort in the American sector. Since the 4th Parachute Division lay astride the most direct route to Rome, the German command was unable to determine whether or not the aggressive attack of the 5th Division against it was the Allied main effort. By the time it became obvious where the main effort was, the 4th Parachute Division could not move from its positions.

Sources: R.3; R.5; R.7.

WORLD WAR II (ITALIAN CAMPAIGN, 1944)

Anzio-Albano Road, 23-24 May 1944

Operation Hippo, a diversionary holding attack by the British 1st and 5th Infantry Divisions designed to draw German attention and reinforcements away from the Allied main breakout effort at Anzio was launched on 23 May. The 1st Division, in position south of Aprilia, astride the Anzio-Albano Road, was opposed by the German 65th Infantry Division in fortified positions.

Early on 23 May, the Division attacked and quickly encountered heavy machine gun and mortar fire. Little progress was made by the division's 3d Brigade, and the attackers suffered heavy casualties. After another day of battle during which the 65th Division counterattacked, the 1st Division was back in its original positions.

Significance: Although the attack failed to gain ground, the 1st Division successfully pinned down German troops needed to stop the main effort of the VI Corps and prevented their employment against the US divisions making the attack.

Sources: R.3; R.5; R.7.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Anzio Breakout, 23-25 May 1944

In May 1944, on the left of the VI Corps, the US 1st Armored Division was to spearhead the initial effort to break out from the Anzio beachhead. Two combat commands with attached tank destroyers and supported by infantry from the 34th Division were positioned to make the attack. Seizing a line along the railroad running through Cisterna to Rome, the division was to proceed northward through the Velletri Gap and on toward Highway No. 6 at Valsantena. Defending were the 3d Panzer Grenadier Division and elements of the 362d Infantry Division.

On 23 May, following a heavy artillery barrage, the division moved out. On the left, Combat Command A blasted gaps through mine-fields, and with the aid of a smoke screen combined with a low haze, which hampered German artillery observation, by the end of the day, CCA had reached the Rome rail line in several places. Combat Command B bogged down in minefields laid earlier in the spring by US troops. Almost two dozen tanks were immobilized, and CCB did not reach the railroad until dark.

On 24 May, the division's tanks, with infantry and artillery support, moved forward through increasingly higher ground, crossed by gullies and ravines. CCB severed Highway No. 7 northwest of Cisterna, and elements pressed on to high ground along the Colle di Torrechia. CCA, meanwhile, advanced northwest along Highway No. 7 toward Velletri and higher ground.

On 25 May, elements of the 34th Division closed the gap that had opened between the diverging attacks of the 1st Armored Division's two combat commands. CCA attempted to advance on Velletri, but rugged terrain and a stiff German defense prevented major gains. A reserve task force moved northeast and reached Giulianello in the Velletri Gap before dark, while CCB prepared to support the 3d Division's advance to Cori near the Lepini Mountains.

Significance: In conjunction with the 3d Division, the 1st Armored Division had breached the German perimeter defenses around the Anzio beachhead. The German units defending in front of the attack sector were dispersed and lost heavily in equipment and personnel. The 1st Armored Division had also incurred high losses but, with substantial reserves, it could make up for its losses and continue to hold the initiative.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Cisterna, 23-25 May 1944

In May 1944, as part of the main effort of the VI Corps to break out from the Anzio beachhead, the US 3d Infantry Division was to break the German lines at the town of Cisterna, seize the town and sever Highway No. 7, and then proceed to Cori, southwest of the Lepini Mountains. The 7th Infantry Regiment in the center was to pin German forces in front of Cisterna while the 15th and 30th regiments enveloped the town from the right and the left. Defending from well prepared positions were elements of the German 362d Infantry Division and the 1028th Panzer Grenadier Regiment with attached armored units.

At 0630 on 23 May, after a heavy preparatory artillery barrage, the 3d Division attacked. The initial assault surprised the Germans, and an Allied smoke screen mixed with haze hampered German observation. Mortar and machinegun fire from German positions and thickly sown minefields soon slowed the division's progress, particularly in the sectors of the 7th and 30th Regiments. By the end of the day, the advance had been stopped halfway to Cisterna.

Early on 24 May, the division renewed its attack. Despite tough German resistance, the 15th and 30th Regiments made good progress around Cisterna and severed Highway No. 7 on both sides of the town. A night attack on Cisterna by two battalions of the 7th Infantry collapsed, due to delays among the forming US troops and a stiff German defense.

On 25 May, the 15th Infantry advanced against light resistance past Cisterna to the division's objective at Cori. The 7th Infantry fought its way into Cisterna and, after a tough fight eliminating German pockets of resistance, secured the town.

Significance: With the capture of Cisterna and the drive to Cori, the 3d Division achieved its main objectives for the initial Allied attack and in the process helped to crack the German defensive line around the Anzio beachhead. The division had progressed slowly but steadily, and, while suffering heavy casualties, it had inflicted severe losses on the Germans.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Sorbo, 25-27 May 1944

In late May 1944, following the breakout from the Anzio beachhead, the US 85th Infantry Division, at Terracina, on the left of the sector of the US II Corps, was ordered to continue its advance through high ground overlooking the Pontine Marshes and to take Sezze. The division was to clear out remaining German units in its path and to block the roads leading into the Lepini Mountains near where the VI Corps was then making its breakthrough at Anzio. Withdrawing in front of the 85th Division were elements of the very effective German 29th Panzer Grenadier Division.

Two regiments, the 336th and 338th, moved out on 25 May and made good progress against negligible resistance as the Germans withdrew. On the next day further gains were made by both regiments, and the 337th Regiment moved up behind the 338th. On 27 May the Division, with the 338th Infantry in the lead, took Sezze.

Significance: The steady advance of the 85th Division contributed not only to the collapse of the right wing of the German Tenth Army, but was now threatening the rear of the left wing of the German Fourteenth Army, already in serious trouble because of the VI Corps successful breakout from the Anzio beachhead.

Sources: R.3; R.6; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Velletri, 26 May 1944

On 26 May, Fifth Army Commander Lieutenant General Mark W. Clark shifted the axis of advance of the Anzio breakout attack from northeast to northwest through the Alban Hills to Rome. The US 1st Armored Division was to keep pressure on the German line by attacking Velletri, in order to facilitate the main effort of the US 34th and 45th Infantry Divisions near Campoleone.

Task Force Howze, on the right of the division, attacked northward past Velletri in the direction of Valmontone, the original objective of the Allied breakout. The task force almost reached Highway No. 6 northwest of Valmontone, where German antitank fire stopped the advance, and positions were consolidated for the night. The division's main attack toward Velletri met with heavy German defensive fire, the intensity of which surprised the US troops, who were expecting light resistance from the 362d Infantry Division, badly mauled in the previous days' fighting. Difficult terrain also slowed the advance, and the division soon withdrew to positions about 1.6 kilometers beyond its original line of departure. After dark, the 36th Infantry Division moved up to occupy these positions, and the 1st Armored Division went into reserve to prepare for the exploitation of any advances in the new attack to the northwest.

Significance: The setback suffered by the 1st Armored Division was due to several factors, not least of which was surprise resulting from the unexpected fighting ability of the 362d Infantry Division.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Campoleone Station, 26-28 May 1944

On 26 May 1944, the US 45th Infantry Division attacked northwest into the Alban Hills as part of Fifth Army commander Lieutenant General Mark W. Clark's plan to shift the axis of the Anzio breakout attack in that direction. Following an artillery barrage, the division moved out in the late morning on a two-regiment front and was soon held up by flanking machine gun fire from troops of the German 65th Infantry Division. A company of US tanks was brought up and silenced the guns. The division advanced about a mile and a half, capturing a number of prisoners by the end of the day. Early on 27 May, the attack continued and made some progress before German tanks slowed it down late in the day. US tanks forced the Germans to withdraw. On 28 May, German counterattacks halted the division's advance on Campoleone Station and positions short of the station were consolidated for the night.

Significance: The German 65th Infantry Division had thwarted the 45th Division's attempt to make a rapid breakthrough of the German line in the Alban Hills.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Villa Crocetta, 27-28 May 1944

On 25 May 1944, Lieutenant General Mark W. Clark, commander of the Allied Fifth Army, ordered Major General Lucian K. Truscott, Jr., commander of the VI Corps at Anzio, to shift the axis of his breakout attack to the northwest across the Alban Hills towards Rome. The US 34th and 45th Infantry Divisions were to make the main effort, striking against the fortified Caesar Line. Defending against the 34th Division was the German 3d Panzer Grenadier Division, reinforced by an infantry regiment.

On 26 May, the 34th Division, on the right of the 45th, attacked and made modest progress against light opposition. On the following day, the 34th Division moved out on a two-regiment front against initial light resistance and reached the covering defenses of the Caesar Line. German artillery fire from guns sited on a low ridge in front of the attackers stopped the advance at the village of Villa Crocetta. After beating back a counterattack, the division consolidated its positions for the night. Further efforts to break the Caesar Line met with failure on 28 May, as the defenders of the 3d Panzer Grenadier Division in the fortified strongpoint at Villa Crocetta held their ground.

Significance: The 34th Division inflicted and suffered heavy casualties in its advance to the strongly fortified German positions that barred the route to Rome to which General Clark had redirected the Allied attack.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Ardos, 28-30 May 1944

On 28 May 1944, as part of Fifth Army commander Lieutenant General Mark W. Clark's plan to shift the axis of the VI Corps breakout attack to the northwest, the British 5th Infantry Division, on the extreme left of the Allied positions, attacked across the Mofetta River, in support of the main US effort to the right. Defending against the 5th Division was most of the German 4th Parachute (Fallschirmjaeger) Division.

The British moved out on a two-brigade front and, after encountering initial difficulties, crossed the Mofetta and made gains north of the river. On 29 May, with the 4th Parachute Division withdrawing to the Caesar Line, the division gained more ground against light resistance. On 30 May, L'Americano, near the coast, and Ardoa, just south of the Caesar Line, fell to the British. Resistance increased, and the division stopped at the Tarto River.

Significance: The 5th Division had finally broken the defensive line along the Mofetta River, maintaining pressure on the Germans as the Allied breakout continued, and expanding the width of the Allied breakout. This success had been in part due to the general German withdrawal to the Caesar Line positions.

Sources: R.3; R.5; R.7.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Fosso di Campoleone, 29-31 May 1944

On 29 May 1944, the US 1st Armored and 45th Infantry divisions attacked southwest of the Alban Hills in a move intended to exploit an apparent weak point in the German Caesar Line defenses near Campoleone and permit a rapid advance along the shortest route to Rome. Defending from partially completed fortifications in the Caesar Line were the German 65th Infantry Division and part of the 3d Panzer Grenadier Division.

On 29 May, Combat Commands A and B, the latter on the left, attacked with artillery support including the guns of a French cruiser. CCB was supported by the 180th Infantry on the left, while CCA was supported on the right by the 179th Infantry and one battalion of the 6th Armored Infantry. The initial advance moved rapidly, with CCB taking the Campoleone railroad station by noon, and tanks of CCA driving north, bypassing enemy strongpoints. The 1st Armored Division tanks soon outdistanced the infantry, which encountered heavy resistance, following in the wake of the armor. When the leading tank elements of CCA encountered outpost positions of the Caesar Line, the advance on the right slowed but continued forward. However, the supporting 6th Armored Infantry units could not break the defenses and were forced back by a counterattack to positions about 1.6 kilometers north of Campoleone Station. By the end of the day, the combined operation had made moderate gains at the cost of heavy losses of men and tanks.

On 30 May, more infantry units, including a battalion of the 135th Infantry Regiment, 34th Division, were committed to the attack. Operations in the morning produced negligible gains, and in the afternoon, CCB and the 180th Infantry progressed north only to the Fosso di Campoleone. German reinforcements, including antitank weapons, were continually moved up to stop the attack and used to good effect on 31 May, limiting the attackers on that day to minor gains.

Significance: Strong German defenses of the Caesar Line and a quick reaction thwarted General Truscott's plan to break the German line, using the 1st Armored Division as an armored wedge. Although some progress had been made, losses were heavy.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Lanuvio, 29 May-1 June 1944

On 29 May 1944, the US 34th Infantry Division attacked northwest into the Caesar Line defenses in front of Lanuvio and centered around Villa Crocetta and the San Gennaro Ridge. German positions in this sector of the line were heavily fortified and occupied by units of the 3d Panzer Grenadier Division.

Following a 30-minute artillery preparation, the 34th Division moved out early on 29 May. On the right of the attack sector, German armor slowed the advance. Taking the crest of the San Gennaro Ridge during the day, the attackers were driven off by mortar fire to their original positions. On the left, the initial attack on Villa Crocetta was stopped by German machine gun and mortar fire. An afternoon attempt to seize the town in an enveloping maneuver succeeded, but a German counterattack forced the US units to withdraw to their original positions.

On 30 May, following an artillery preparation, the division resumed its efforts, but once again heavy defensive fire prevented the consolidation of ground gained. On 31 May, despite numerous Allied air sorties, machine gun and mortar fire from Caesar Line positions still prevented the division from advancing. On 1 June, part of the San Gennaro Ridge was taken, but the Germans continued to hold positions on the high ground. Troops of the 34th Division advanced to Villa Crocetta, where heavy German fire halted them and drove them back to their original line.

Significance: The division was attacking up against some of the most strongly prepared positions facing the VI Corps in the Caesar Line. Repeated attempts by the 34th Division had gained little ground by 1 June, and the division was still short of Lanuvio and seemingly far from making a breakthrough.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, REVIS)

Larino, 1-2 June 1944

The US 85th Division was ordered to attack the German lines in the region between Velletri and Valsontone. On the 30th the division was opposite Larino, facing part of the crack German Hermann Goering Panzer Parachute Division and elements of the 65th, 94th, and 334th Infantry Divisions. The Germans were well dug in, their defensive posture assisted by the difficult terrain and a railroad embankment north of the town. A pre-offensive operation by the division on 31 May secured a line of departure for the main II Corps attack the next day, and the division prepared to move on the high ground in conjunction with the 3d Division on its right.

At 0500 on 1 June, the 85th Division and II Corps began the final drive on Rome. The 338th Infantry on the right swung into action north of Larino and fought much of the day against determined opposition. Late in the afternoon, however, German resistance let up, and the enemy began to withdraw. The 338th, reinforced by the 351st Infantry of the 88th Division, followed and began the pursuit. On the left the 339th Infantry advanced against sporadic resistance and seized Castel d'Ariano, the highest point in the Maschio d'Ariano hill mass.

On 2 June the 85th's advance began to gather steam. The division, having regrouped during the night, attacked with all three of its regiments abreast. The Germans withdrawal accelerated and resistance was not heavy, except in front of the 337th Infantry. On this day the division pulled two miles ahead of the rest of the Fifth Army. On 4 June the division entered Rome.

Significance: Maintaining pressure, the 85th Division had achieved a major objective, Rome.

Sources: R.3; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Via Anziate, 1-2 June 1944

After the Anzio breakout and since 26 May the VI Corps's advance had been stalled at the German "C" (or Caesar) Line west of the Alban Hills. The corps had sustained heavy casualties and gained little ground in return. When the attack was renewed all along the front on 1 June the 45th Division, straddling the Via Anziate or Albano Road, faced the German 65th Infantry Division, much of the 3d Panzer Grenadier Division, and various smaller units, patched together to defend a network of formidable strongpoints.

Although the outcome of the battle as a whole had already been decided largely by the 36th Division's unopposed seizure of Monte Artemisio (30 May-1 June), the Germans were determined to resist bitterly for a few days more east and west of the penetration, in order to gain time for the Tenth Army to withdraw north of the Tiber.

Thus, when the 45th Division resumed the advance, with air support, at 0530 the battle rapidly assumed desperate proportions. The 179th Infantry, leading the advance on the right, made little progress against stiff resistance. Severe casualties forced its second battalion to halt and reorganize. The regiment did repel a counterattack by the German Infantry Lehr Regiment at 1900.

The 180th Infantry, attacking to the left of the Via Anziate at 0600, advanced almost a kilometer but was prevented from going farther by an exposed right flank. At 2350 this regiment, too, repelled a German counterattack.

On the morning of 2 June the Germans were still in position and full of fight. Again, progress was slow. The defenders resisted from strongpoints with heavy mortar, artillery, and automatic weapons fire. Day and night German counterattacks were repelled by the 2d Battalion, 135th Infantry (attached), and the 179th Infantry. Five tanks supporting the advance were knocked out.

By 2240 of 2 June all enemy activity in the 45th's front had ceased, and on the morning of 3 June the Germans were in full retreat toward Rome and the Tiber bridges.

Significance: The Germans had gained a little time for their withdrawing forces.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, 1944)

VALMONTONE, 1-2 JUNE 1944

As part of the US II Corps drive through the Valmontone Gap and north of the Alban Hills to Rome, the 3d Infantry Division was to attack to take Valmontone and then proceed northwest to cover the right flank of the rest of the corps for the move up Highway No. 6 to Rome. Armored units of Task Force Howze would advance on the division's left and the 1st Special Service Force on the right. Defending from hastily prepared positions south of Valmontone were part of the German Hermann Goering Panzer Parachute Division and remnants of the 94th, 334th, and 715th Infantry, and 3d Panzer Grenadier divisions.

At 0500 on 1 June, the 3d Division and its attached units attacked. Resistance was heavy. On the left the 30th Infantry Regiment and Task Force Howze made some gains, but they were still short of Highway 6 by dark. The 15th Infantry, after repulsing German armored counterattacks, reached the highway southeast of Valmontone and, during the night of 1/2 June, harassed retreating German forces on the road. Southeast of Valmontone, the 1st Special Service Force seized the road junction at Colle Ferro, severing Highway 6 at this point and opening the road for advancing units of the French Expeditionary Corps.

During the morning of 2 June, after German resistance south of Valmontone was mopped up, troops from the 30th Infantry entered the town, while the 7th Infantry and Task Force Howze crossed Highway 6 at Labico, northwest of Valmontone. Elements of both regiments and Task Force Howze proceeded northwest later in the day to high ground around Palestrina, in accordance with the plan to cover the right flank of the II Corps. The 15th Infantry advanced north of Highway 6 and set up positions to cover the division's right flank.

Significance: The attack up the Valmontone Gap had succeeded in severing Highway 6 and allowed the advance of the rest of the II Corps to Rome.

Sources: R.3; R.7; R.8.

WORLD WAR II (ITALIAN CAMPAIGN, ROME)

Tarto-Tiber, 3-4 June 1944

In early June 1944, the British 1st and 5th infantry divisions were to continue to advance northwest to the Tiber River as part of the Allied drive on Rome. The divisions occupied the extreme left of the Allied line with the 5th Division's left flank anchored on the Tyrrhenian Sea. Defending against the British was the German 4th Parachute (Fallschirmjaeger) Division.

Driving through the Caesar Line positions north of Ardea on 3 June, the 1st and 5th divisions encountered serious resistance but managed to make some gains. A German withdrawal had been in effect from points all along the line, but since the British divisions had not made any efforts to attack during the days preceding the 3 June attack, the 4th Parachute Division was still in defensive positions.

Significance: Although the 1st and 5th divisions had not broken through to the Tiber River they had kept pressure on the right of the German line facilitating advance of the remainder of the VI Corps, and the II Corps, toward Rome.

Sources: R.3; R.5.

WORLD WAR II (ITALIAN CAMPAIGN, NORTH ITALY)

Il Giogo Pass, 13-17 September 1944

In September 1944, the US 85th Division, and the US 91st Infantry Division on its left, on the extreme right of the US XX Corps sector, were assigned the mission of attacking the strategic Il Giogo Pass in the central region of the German Gothic Line fortifications.

On 13 September, elements of two regiments of the 85th Division approached defenses around Il Giogo Pass occupied by the 12th Parachute Regiment of the German 4th Parachute Division. Heavy fire from small arms, machine guns, and mortars met the attackers. Firing from fortified positions on commanding terrain, the defenders held up the 85th Division's attack directly to the east of Il Giogo Pass for five days despite intense American tactical air and artillery support and the commitment of elements of the division's third regiment. Eventually, overwhelming American strength cracked the defenses, and the 85th Division seized three commanding heights on Monte Verruca, Monte Altuzzo, and Monte Pratone by 18 September.

Significance: The breaching of the Gothic Line at Il Giogo Pass, together with the major offensive of the British Eighth Army against the line to the east, put Allied forces in a position to approach the main German defenses to the north. The rugged terrain, inclement weather, and strength of the German defenses slowed the Allied advance until the following spring.

Sources: P.4; R.3; R.8.

1. IDENTIFICATION

War: World War II
European Theater of Operations

Engagement	Date(.,.)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
St. Lo, France	A 11-18 Jul 1944 D	Normandy	US 29th Inf Div (+) Ger 352d Inf Div (eling) 3d Para Div (eling)	MG Gerhardt Gen Meindl	8	12.0
Operation "Good- wood," France	A 18-20 Jul 1944 D	Normandy	Br Second Army GER LXIXI Corps (+)	LG Dempsey Gen Eberbach	3	21.0
Operation "Cobra," France	A 24-26 Jul 1944 D	Normandy	US VII Corps Ger LXIXI Corps (-) II Para Corps (-)	MG Collins Lt Gen Choltz	2	11.0
Mortain, France	A 6-12 Aug 1944 D	Normandy Breakout	Ger XIVII Pz Corps US 30th Inf Div (+)	Gen Punck MG Hobbs	6	9.0
Chartres, France	A 16 Aug 1944 D	Le Mans to Metz	US 7th Armd Div Ger First Army (-)	MG Sylvester Gen Chevalierie	1	25.0
Meulan, France	A 23-25 Aug 1944 D	Le Mans to Metz	US 7th Armd Div Ger 48th Inf Div (-)	MG Sylvester Gen Macholz	3	10.0
Seine River, France	A 23-25 Aug 1944 D	Le Mans to Metz	US XX Corps Ger First Army (-)	MG Walker Gen Chevalierie	3	45.0
Moselle-Metz, France	A 6-11 Sep 1944 D	Le Mans to Metz	US XX Corps Ger First Army (-)	MG Walker Gen Knobelsdorf	6	65.0
Metz, France	A 13 Sep 1944 D	Le Mans to Metz	US XX Corps Ger First Army (-)	MG Walker Gen Knobelsdorf	1	50.0
Arracourt, France	A 19-22 Sep 1944 D	Northwest Europe, 1944	Ger 111th and 113th Pz Bdes (+)	Gen Krueger	4	10.4
Westwall, Germany	A 2-7 Oct 1944 D	Aachen	US COA 4th Armd Div (+) US XXX Corps GER LXIXI Corps	MG Wood MG Corlett Gen Koestling	6	12.5

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

Mar: World War II European Theater of Operations

Engagement	Weather	Terrain	Weather	Season	Surprise	Surprise	Surprise	Air Superiority
St. Lô	A D	FD	FM	DOR	ST	N	--	X
Operation "Goodwood"	A D	FD	FM	DST	ST	Y	X	X
Operation "Cobra"	A D	FD	FM	DST	ST	N	--	X
Mortain	A D	HD	FM	DST	ST	Y	X	X
Chartres	A D	HD	FM	DST/nor	ST	N	--	X
Melun	A D	PD	FM	MLT	ST	N	--	X
Seine River	A D	PD	FM	MLT	PT	N	--	X
Moselle-Metz	A D	Delay	FM	MLT	PT	N	--	X
Metz	A D	FD	FM	MLT	PT	N	--	X
Arracourt	A D	HD	FM	MLT/nor	PT	N	--	X
Neustadt	A D	FD	FM	MLT/nor	PT	N	--	X

3. STRENGTHS AND COMBAT OUTCOMES

Mar: World War II, European Theater of Operations

Engagement	Strength				Battle Casualties				Arty Pieces Lost			Aircraft Losses	
	Personnel Total	Total AF.	Armor	Arty Pieces	Air Sorties	Total	1/Day	Total	1/Day	Total	1/Day	Total	Sorties/Day
St. Lo	A 18,228 D 7,500	107 23	17 0	90 23	120 84	33 3	2,777 2,350	1.9 3.9	?	--	?	--	0
Operation "Goodwood"	A 76,213 D 57,500	877 528	132 0	745 528	720 292	4,000 ?	4,011 5,000	1.8 2.9	?	693 200	18.7 12.6	?	--
Operation "Cobra"	A 126,000 D 30,700	650 62	176 0	474 62	792 318	800 0	1,510 5,000	0.6 0.1	?	--	?	--	?
Mortain	A 25,497 D 26,691	120 340	0 112	120 222	218 192	?	?	1.7	?	--	?	--	?
Chartres	A 15,646 D 8,325	317 15	78 0	239 15	146 76	0	113 579	0.7 7.0	?	--	?	--	0
Melun	A 17,232 D 6,000	318 16	79 4	239 12	146 32	46 0	99 362	0.2 2.0	?	21	2.2	?	--
Seine River	A 40,619 D 15,000	472 38	132 0	335 36	296 80	73 0	234 906	0.2 2.0	?	21	1.5	?	--
Moselle-Metz	A 59,631 D 41,500	585 160	154 0	431 160	520 248	338 0	1,647 1,700	0.5 0.7	?	19	0.5	?	--
Metz	A 60,794 D 39,580	472 86	137 0	335 81	296 248	30 0	359 210	0.6 0.5	?	?	3.1	?	--
Arracourt	A 10,000 D 3,894	126 124	0 35	126 87	12 48	0	779 130	2.0 0.8	87	17.1	?	?	--
Westwall	A 32,283 D 19,091	312 63	1 0	234 62	116 79	?	1,477 3,616	0.8 3.2	79	4.1	0	4.1	--

4. INTANGIBLE FACTORS

War: World War II
European Theater of Operations

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logis- tics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
St. Lo	A D	N N	C	C C	O O	N N	N O	C C	X X	X X	1.0 3.2	7 5
Operation "Goodwood"	A D	N N	C	C C	O X	N N	N N	C C	X X	X X	5.6 1.7	8 3
Operation "Cobra"	A D	N N	C	C C	X X	N N	N N	C C	X X	X X	7.3 6.0	7 5
Mortain	A D	N N	C	C C	X X	X X	N N	C C	X X	X X	4 12.7	8 2
Chartres	A D	N N	C	C X	O X	O X	N N	C C	X X	X X	5.3 5.3	5 5
Melun	A D	N N	C	X X	X X	X X	N N	C C	C C	N N	0.0 0.0	3 3
Seine River	A D	N N	C	O O	O X	O X	N N	C C	C C	N N	0.0 0.0	6 3
Moselle-Metz	A D	N N	C	C C	N N	N N	N N	C C	C C	N N	1.3 1.3	5 4
Metz	A D	N N	O	C	C C	C C	N N	C C	C C	N N	0.0 0.0	6 3
Arracourt	A D	N N	C	C C	C C	C C	N N	C C	C C	N N	1.3 1.3	5 4
Westwall	A D	N N	C	C C	C C	C C	N N	C C	C C	N N	0.0 0.0	6 3

6. FACTORS AFFECTING OUTCOME

World War II

War: European Theater of Operations

Engagement	St. Lo	Operation "Goodwood"	Operation "Cobra"	Mortain	Chartres	Melun	Seine River	Moselle-Metz	Metz	Arracourt	Westwall
Force Quality	A N	D A	N D	N A	N D	N A	N D	N A	N D	N A	D A
Reserves	N	X	X	X	N	N	N	N	N	N	X
Mobility	N	X	X	X	N	N	N	N	N	N	X
Air Superiority	X	X	X	X	N	N	N	N	N	N	N
Force Preparations	X	N	X	N	N	N	N	N	N	N	N
Weather	N	N	N	N	N	N	N	N	N	N	N
Train, Roads	X	N	N	N	X	X	X	X	X	X	X
Leader-ship	N	N	N	N	N	N	N	N	N	X	N
Planning	N	N	N	X	N	N	N	N	N	N	N
Surprise	N	N	X	N	N	N	N	N	N	N	N
Mass	N	N	X	X	X	N	N	N	N	N	X
Menpower,	N	N	X	X	X	N	N	N	N	N	N
Portfolios	X	X	X	X	N	N	X	X	X	X	X
Logistics	X	X	X	X	N	N	N	N	N	N	N
Depth	X	X	X	X	N	N	N	N	X	X	X

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War II
 European Theater of Operations

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	Secondary Attack					
St. Lo	A D	F D/O	-- --	-- --	X	P MD
Operation "Goodwood"	A D	F D	-- --	X	P, S	
Operation "Cobra"	A D	F D	-- --	X	B MD	
Mortain	A D	F D/O	-- --	X	P, R	
Chartres	A D	EE D	-- --	X	P, S	
Meulan	A D	RivC D	-- --	X	P MD	
Seine River	A D	RivC D	-- --	X	P MD	
Moselle-Metz	A D	RivC D	-- --	X	R	
Arracourt	A D	F D/O	-- --	X	R	
Westwall	A D	RivC, F D/O	-- --	X	P MD	

1. IDENTIFICATION

World War II
European Theatre of Operations

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Schmidt, Germany.	A 2-13 Nov 1944 D	Northwest Europe, 1944	US 28th Inf Div (+) Ger LXIV Corps (-)	MG Cota Gen Straube	12	9.5
Seille-Nied, France	A 8-12 Nov 1944 D	Saar (Lorraine)	US XII Corps Ger LXXX Corps (-+)	MG Eddy Gen Balck	5	26.0
Foret de Chateau-A Salins, France	A 10-11 Nov 1944 D	Saar (Lorraine)	US 4th Armd Div (+) Ger XIII SS Pz Corps @	MG Mood Lt Gen Priess	2	16.6
Morthange, France	A 13-15 Nov 1944 D	Saar (Lorraine)	US QCB 4th Armd Div @ Ger 11th Pz Div @ @	BG Dager Lt Gen Wietersheim	3	10.3
Morthange-Faulque- mont, France	A 13-16 Nov 1944 D	Saar (Lorraine)	US XII Corps Ger XIII SS Pz Corps @ @	MG Eddy Lt Gen Priess	4	10.3
Bourgaltroff,	A 14-15 Nov 1944 D	Saar (Lorraine)	US QCA, 4th Armd Div (+) Ger 11th Pz Div (-)(+)	Lt Col Abrams Lt Gen Wietersheim	2	11.3
Sarre-St. Avold, France	A 20-27 Nov 1944 D	Saar (Lorraine)	US XII Corps Ger XIII SS Pz Corps @ @	MG Eddy Lt Gen Simon	8	64.0
Baerendorf I, France	A 24-25 Nov 1944 D	Saar (Lorraine)	US QCB, 4th Armd Div (-) Ger Pz Lehr Div (-)(+)	BG Dager Lt Gen Beyerlein	2	3.5
Baerendorf II, France	A 26 Nov 1944 D	Saar (Lorraine)	US 4th Armd Div Ger Pz Lehr Div (-)	MG Mood Lt Gen Beyerlein	1	11.3
Burbach-Durstel, France	A 27-29 Nov 1944 D	Saar (Lorraine)	US 4th Armd Div (+) Ger Pz Lehr Div (+)	MG Mood Lt Gen Beyerlein	3	11.3
Durstel-Faerbers-A viller, France	A 28-29 Nov 1944 D	Saar (Lorraine)	US XII Corps Ger XIII SS Pz Corps @ @	MG Eddy Lt Gen Simon	2	51.2
Sarre-Union, France	A 1-2 Dec 1944 D	Saar (Lorraine)	US 4th Armd Div (+) Ger 25th Pz Gr Div @ @	MG Mood Col Barneister	2	4.5

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War II, European Theater of Operations

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Schmidt	A D FD	RM/Rgm	WLT	FT	N	--	--	X
Seille-Nied	A D FD/Delay	RM	WHC	FT	Y	X	Minor	X
Forêt de Château-Salins	A D FD	RM	WHC	FT	N	--	--	X
Morhange	A D PD/Delay	RM	WLC	FT	N	--	--	X
Morhange-Paulquemont	A D PD/Delay	RM	WLC	FT	N	--	--	X
Bourgaltroff	A D PD/Delay	RM	WLC	FT	N	--	--	X
Sarre-St. Avold	A D PD/Delay	RM	DOC	FT	N	--	--	X
Baerendorf I	A D HD	RM	DOC	FT	N	--	--	X
Baerendorf II	A D PD	RM	DOC	FT	N	--	--	X
Burbach-Durstel	A D PD/Delay	RM	WLC	FT	N	--	--	X
Durstel-Faerbersviller	A D PD/Delay	RM	WLC	FT	N	--	--	X
Sarre-Union	A D PD	RM	DOT	WT	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II, European Theater of Operations

Engagement	Personnel Strength				Arty Pieces				Battle Casualties				Aircraft Losses			
	Total	Total	Armor	Inf.	Air Sorties	Total	1/Day	Total	Armor Losses	Total	1/Day	Total	Arty Pieces Lost	Total	Sorties/Day	
Schmidt	A 20,493 D 20,250	74 66	17 66	91 107	162 107	?	?	3,683 --	1.5 ?	47 --	4.5 ?	?	--	?	--	
Seille-Nied	A 99,583 D 23,588	764 71	199 71	565 99	543 0	52 4,880	0.9 4.1	89 14	2.4 3.9	?	?	?	?	?	--	
Forêt de Château-Salins	A 45,587 D 11,185	326 20	78 0	248 20	239 152	13 0	720 446	0.8 2.0	8 3	1.2 7.5	?	?	?	?	--	
Morhange	A 25,881 D 7,555	202 16	49 0	153 106	142 106	0 0	1,006 1,197	1.3 0.9	?	?	?	?	?	0	--	
Morhange-Faulquemont	A 92,393 D 28,382	524 63	161 0	363 63	515 169	0 0	3,223 2,665	0.9 2.3	38 63	1.9 25.0	?	?	?	0	--	
Bourgaltroff	A 10,348 D 6,519	115 16	29 0	86 16	158 81	0 0	185 141	0.9 1.1	8 8	25.0 25.0	?	?	?	0	--	
Sarre-St. Avold	A 88,941 D 32,396	642 66	160 0	482 66	519 207	20 0	2,379 4,942	0.3 1.9	67 54	1.3 10.6	?	?	?	0	--	
Baerendorf I	A 7,935 D 5,366	106 30	30 0	76 64	51 0	0 0	58 224	0.4 2.1	4 4	1.9 6.7	?	?	0	--		
Baerendorf II	A 15,871 D 6,999	211 36	59 0	152 36	194 87	0 0	56 233	0.4 3.3	4 ?	1.9 ?	?	?	0	--		
Burbach-Durstel	A 16,232 D 6,713	211 43	59 0	152 43	104 81	0 0	110 216	0.2 1.1	10 ?	1.6 ?	?	?	?	--		
Durstel-Faerbersviller	A 90,078 D 30,712	624 75	176 0	448 75	543 456	0 0	482 811	0.3 1.3	20 ?	1.5 ?	?	?	?	--		
Sarre-Union	A 19,773 D 6,044	237 23	65 0	172 156	156 156	0 0	234 129	0.6 1.1	3 2	0.6 4.3	?	?	?	--		

4. INTANGIBLE FACTORS

War: World War II, European Theater of Operations

5. OUTCOME

Engagement	OE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Schmidt	A C D	C	C	C	O	N	N	C	N	x	0.4	3 8
Seille-Nied	A C D	C	C	x	O	x	N	C	x	x	2.8	8 5
Forêt de Château-Saints	A C D	C	C	C	O	x	N	C	N	x	2.1	5 5
Morhange- Faulquemont	A C D	C	C	C	O	N	N	C	x	x	2.2	6 4
Bourgaltroff	A C D	C	C	C	x	x	N	C	x	x	1.7	8 6
Sarre-St.Avold	A C D	C	C	C	N	x	N	C	x	x	1.0	7 6
Baerendorf I	A C D	C	C	C	N	x	N	C	x	x	2.7	5 5
Baerendorf II	A C D	C	C	C	N	N	N	C	x	x	0.5	6 4
Burbach-Durstel A	A C D	C	C	C	N	N	N	C	x	x	5.0	5 5
Durstel- Faerbersviller	A C D	C	C	C	N	N	N	C	x	x	1.3	6 5
Sarre-Union	A C D	C	C	C	N	x	N	C	x	x	1.3	7 5

6. FACTORS AFFECTING OUTCOME

War: World War II, European Theater of Operations

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Neverver, Mass	Logistics	Fortifi-cations	Depth
Schmidt	A D	x N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Seille-Nied	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Forêt de Chateau-Salins	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Morhange	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Morhange-Faulquemont	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Bourgaltroff	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Sarre-St. Avold	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Baerendorf I	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Baerendorf II	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Burbach-Durstel	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Durstel-Faerbersviller	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N
Sarre-Union	A D	N N	N N	N N	x x	x x	x x	N N	N N	N N	N N	N N	x x	N N

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War II **European Theater of Operations**

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	A	D	A	D		
Schmidt	A	RivC, F D/O	--	--	x	P,R WD
Seille-Nied	A	RivC, F D/O	--	--	x	P,S
Foret de Chateau Salins	A	F D/O	--	--	x	P WD
Morhange	A	F D	--	--	x	P WD
Morhange-Paulquemont	A	F D/O, R	--	--	x	P WD
Bourgaltroff	A	F D/O	--	--	x	P WD
Sarre-St. Avold	A	F D/O	--	--	x	P WD
Baerendorf I	A	RivC, F D/O	--	--	x	P,S
Baerendorf II	A	F D	--	--	x	P WD
Burbach-Durstel	A	F D	--	--	x	P,S
Durstel-Faerbersviller	A	F D/O	--	--	x	P
Sarre-Union	A	F, E(LF) D/O	--	--	x	P

1. IDENTIFICATION
 War: World War II
 European Theatre of Operations

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Sarre-Singling France	A 6-7 Dec 1944 D	Sarre (Lorraine)	US XII Corps Ger XIII SS Pz Corps (+)	MG Eddy Lt Gen Simon	2	32.0
Singling-Bining, France	A 6 Dec 1944 D	Sarre (Lorraine)	US 4th Arm Div (-) (+) Ger 25th Pz Gr Div (-) (+)	MG Gaffey Col Burmeister	1	3.6

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

Engagement	Operations			Weather	Terrain	Posture	Engagement	Environment			Air Supporting	
	Recon	Attack	Support					Clouds	Wind	Humidity	Altitude	
Serre-Singling	A	Recon	Attack	NOR	MT	N	Support	--	--	--	--	X
Singling-Bining	D	Attack	Support	MIC	MT	N	Clouds	--	--	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War II, European Theater of Operations

Engagement	Strength			Battle Casualties			Army Losses			Army Losses			Aircraft Losses	
	Personnel Total	Armor Total	Artillery Pieces	Air Sorties	Total	W/D	W/D Total	W/D	W/D Total	W/D	W/D Total	W/D	W/D Total	
Sarre-Singling	A 89,977 D 31,501	624 42	176 0	448 193	565	19 0	835 1,774	0.5 2.6	42 7	5.4 --	9 --	6 --	--	
Singling-Bininc	A 15,224 D 5,044	211 18	59 0	152 18	104 99	0 0	155 121	1.0 2.4	13 3	6.2 3	7 1	0 --	--	

4. INTANGIBLE FACTORS

War: World War II
European Theater of Operations

S. OUTLINE

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Manu- facturing	Intelli- gence	Tech- nology	Initia- tive	Wise- ness	Success Attained (Out of 5)	Success Predicted (Out of 5)
Sarre-Singling	A	C	C	C	N	X	N	C	X	X	2.8	3
Singling-Bining	A	C	C	C	N	X	N	C	N	X	1.4	5

6. FACTORS AFFECTING OUTCOME
World War II
War: European Theater of Operations

Engagement	Sarre-Singling	Singling-Bining	A D	A D
Force Quality	N	N		
Mobility Superiority	N	N		
Art Superiority	N	N		
Force Resources	N	N		
Techno-Preparation	X	X		
Weather	X	X		
Shipboard Leadership	X	X		
Planning	X	X		
Communication	X	X		
Means Targets	X	X		
Leadership	X	X		
Technological Superiority	X	X		
Geopolitics	X	X		
Political Will	X	X		
Decisions	X	X		
Leadership	X	X		

7. COMBAT FEUDS AND RESOLUTION OF COMBAT

War: World War II
European Theater of Operations

Engagement	Main Attack and Scheme of Defense		Success	Resolution
	Plan and Maneuver	Secondary Attack		
Sarre-Singling	A D	F D	--	P D R
Singling-Bining	A D	F D	--	P --

1. IDENTIFICATION
War: World War II
European Theater of Operations

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Sauer River, Luxembourg	A 16-17 Dec 1944 D	Ardennes	Ger 212th VG Div US 12th Inf Regt, 4th Inf Div (+)	MG Seiffen MG Barton	2	14.5
St. Vith, Belgium	A 17-23 Dec 1944 P	Ardennes	Ger LXVI Corps (-) US COB, 7th Arm Div (+)	Gen Lucht BG Hassbrotz	6	12.0
Bastogne, Belgium	A 18-20 Dec 1944 D	Ardennes	Ger XLVII Pz Corps (1) US 10th Arm Div (-) (C)	Gen von Littwitz Col Roberts	3	16.0

OBSTETRICAL AND ENVIRONMENTAL VARIANCES

War: World War II **Primary Theater of Operations**

Engagement		Weather	Surprise	Avg. Severity						
Attacker	Posture	Terrain	W/C	W/T	Y	X	Y	X	X	Sensitivity
Sauer River	A D	R/H/RD	W/C	W/T	N	--	--	--	--	Medium
St. Vith	A D	H/PD	W/C	W/T	N	--	--	--	--	Medium
Bastogne	A D	H/D/DeJ	W/C	W/T	N	--	--	--	--	Medium

3. STRENGTHS AND COMBAT OUTCOMES

World War II

War: European Theater of Operations

Engagement	Strength			Air			Battle Casualties			Army Pieces Lost			Aircraft Losses		
	Personnel Total	Personnel Lost	Armor Total	Arty Pieces	Air Sorties	Total	1/Day	Total	1/Day	Total	1/Day	Total	1/Day	Total	1/Day
Sauer River	A 10,000	4	0	4	68	0	268	1.3	2	25.0	?	--	0	--	--
	D 8,634	40	20	20	60	0	134	0.8	3	3.8	?	--	0	--	--
St. Vith	A 23,800	251	0	251	94	0	?	?	?	66	4.4	?	--	0	--
	D 10,375	152	40	112	108	0	?	?	?	56	6.1	?	--	0	--
Bastogne	A 36,678	359	0	359	313	0	?	?	?	50	4.6	?	--	0	--
	D 4,110	152	47	105	18	0	?	?	?	103	22.6	?	--	0	--

4. INTANGIBLE FACTORS

War:

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Sauer River	A C D	C	C	C	N	N	C	C	X	X	3.2	5
St. Vith	A C D	C	C	C	N	N	N	C	X	X	5.0	4
Bastogne	A C D	C	C	C	N	N	N	C	X	X	5.0	5

6. FACTORS AFFECTING OUTCOME

War: World War II

European Theater of Operations		Comparison of Strategic Factors									
		Sauer River					St. Vith				
Engagement	Depth	N	N	N	N	N	N	N	N	N	N
	Portfolios	N	N	N	N	N	N	N	N	N	N
	Logistics	N	N	x	N	N	N	N	N	N	N
	Maneuver, Mass.	N	x	N	N	N	N	N	N	N	N
	Surprise	x	N	N	N	N	N	N	N	N	N
	Planning	N	N	N	N	N	N	N	N	N	N
	Leader-ship	N	N	N	N	N	N	N	N	N	N
	Roads	x	x	x	x	x	x	x	x	x	x
	Weather	N	N	N	N	N	N	N	N	N	N
	Force Prepon-derance	N	N	N	x	x	N	N	N	N	N
Air Superiority		N	N	N	N	N	N	N	N	N	N
Mobility Superiority		x	x	N	N	N	N	N	N	N	N
Reserves		x	N	x	N	N	N	N	N	N	N
Force Quality		N	D	N	A	N	D	N	D	N	D

7. COMBAT FORCES AND RESOLUTION OF CONFLICT

War: World War II
European Theater of Operations

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Sauer River	A D	RivC, F, E (LF) D	-- --	X S
St. Vith	A D	F D	-- --	P NUL.
Bastogne	A D	F, E (LF) D	-- --	P NUL.

WORLD WAR II (EUROPEAN THEATER, 1944)

St. Lo, 11-18 July 1944

In early July 1944 the First United States Army, holding the right flank and right-center of the Allied Normandy bridgehead, mounted a series of operations designed to secure favorable terrain and a line of departure for breakout operations to the southeast. A major objective of these operations was the market town of St. Lo, a road center second in importance only to Caen and the point of origin of two major roads leading to the south. The capture of St. Lo and the high ground in the vicinity of the town were the assigned objectives of the US 29th Infantry Division, commanded by Major General Charles H. Gerhardt. To capture the town the division would have to advance generally uphill against German prepared and fortified positions in difficult hedgerow country.

On 11 July, at the beginning of the operation, the division was deployed northeast of St. Lo with its right flank near Villiers Fossard and its left flank northeast of St. Andre de l'Epine. The Germans defending St. Lo consisted of elements of two divisions: in the west was a kampfgruppe of the 352d Division, while in the east the ground was defended by a regiment of the 3d Parachute Division. The German forces were commanded by General Eugen Meindl and were organized for defense in depth. Key positions were Hill 122 north of St. Lo and the Martinville Ridge northeast of the town.

The 29th Division offensive was launched on 11 July and made slow, steady progress until 18 July, when St. Lo was captured. The Germans made frequent counterattacks but were handicapped by their lack of reserves. The Germans withdrew to the hills south of St. Lo, where they organized a new defensive line. The 29th Division, much fatigued by the hedgerow fighting, was replaced in the line by the 35th Division on the 19th.

Significance: The 29th Division achieved its objectives after a difficult fight. The First Army, as a result of similar successes all along the line, gained ground suitable as a line of departure for Operation "Cobra," the breakout from the Normandy bridgehead.

Sources: S.1.

WORLD WAR II (EUROPEAN THEATER, 1944)

Operation "Goodwood," 18-20 July 1944

In mid-July 1944 the British Second Army, commanded by General Sir Miles C. Dempsey, held the left ("British") sector of the Allied Normandy bridgehead. The left wing of this army, composed of three corps -- the II Canadian Corps and the British VIII and I Corps -- held the city of Caen on the west bank of the Orne River and a small bridgehead on the east bank of the river. German forces opposed to the British in the Caen sector consisted of two powerful corps -- the LXVI Corps on the right and the I SS Panzer Corps on the left. These corps belonged to Panzer Group West under the overall command of General Heinrich Eberbach.

British General Sir Bernard L. Montgomery, the overall commander of Allied ground forces in Normandy, planned a breakout attempt to be launched from the Second Army's Orne bridgehead along the Caen-Falaise axis on 18 July. The attack was to be preceded by a massive aerial bombardment -- the greatest ever attempted to that time -- by US and British bombers. The main effort was to be made due south from the bridgehead by the armor of the VIII Corps. The I Corps on the left and the II Canadian Corps on the right would advance simultaneously, protecting the flanks of the armored corps. Montgomery hoped at the least to prevent the Germans transferring their armored reserves to the west to oppose the planned breakout by US troops (Operation "Cobra") and at the most to achieve a breakthrough of the German front north of Falaise.

The British, however, had seriously underestimated the depth and strength of the German defensive zone southeast of Caen, and, despite the achievement of surprise and the effects of the air bombardment and artillery preparation, the advance on the first day was only eight kilometers. During the next two days, the 19th and 20th, gains were even more limited. During the afternoon of the 20th a violent thunderstorm occurred and made the ground unsuitable for the use of armor. At that point "Goodwood" was called off.

Significance: The British failed to break through the German defensive zone on the Caen Plain. Disappointment in the limited results obtained by the Goodwood operation was keen at Allied headquarters. The focus of Allied breakout attempts now shifted to the west where, shortly, "Cobra" would be mounted.

Sources: S.1.

WORLD WAR II (EUROPEAN THEATER , 1944)

Cobra, 25-26 July 1944

In order to break out through the German defenses holding Allied forces in Normandy, Operation Cobra was initiated on 25 July. After a false start because of a rain delay on 24 July, a massive bombing attack carpeted the German defense areas in the early morning, followed by a concentrated ground attack. The 9th and 30th Infantry divisions of the US VII Corps, commanded by Major General J. Lawton Collins, struck the defenses of the German LXXXIV Corps. Although the Panzer Lehr Division, which was deployed directly in front of the VII Corps, was badly hit by the aerial bombardment, survivors of the attack rallied to resist the attack of the US infantry. By the end of the day, the German lines had been penetrated, but no major breakthrough had been achieved.

On 26 July General Collins committed units from corps reserve, including elements of the 2d and 3d Armored divisions, to exploit the breach in the German lines. Although this move was a gamble, since the gains made the day before were not considered sufficient for the tanks to maneuver, the gamble worked. Combat Command A of the 2d Armored Division drove deep through weak German defenses on the left of the VII Corps attack, and by nightfall it was evident that a breakthrough had been achieved.

Significance: The massive attack in the VII Corps area resulted in a breakthrough of German defenses west of St. Lo and ended the stalemate on the right of the Allied line in Normandy.

Sources: S.1.

WORLD WAR II (EUROPEAN THEATER , 1944)

Mortain, 6-12 August 1944

At 2400 hours on 6 August 1944 three panzer division of the German XLVII Panzer Corps attacked front line positions of the US VII Corps near Mortain. The objectives of what was to be later known as the Mortain Counterattack were to divide the US First Army from the US Third Army, and to restore the static warfare conditions that had characterized the fighting in the Normandy beachhead during June and July of 1944.

Without an artillery preparation, the German attack struck the US 30th Division, achieving deep initial penetrations on the division's right and left flanks. The 2d Battalion, 120th Infantry Regiment, managed to take up defenses on Hill 317 east of Mortain. These US troops had excellent observation of German troop movements, and thus called down artillery fire that hindered the advance of the left wing division of the XLVII Panzer Corps. During daylight hours on 7 August US artillery and Allied tactical air support pounded the German armor stacked up in crowded penetration corridors. By 8 August the German attack had lost all momentum, while US units advancing southeast of the counterattack sector threatened to sever the complex of German withdrawal routes from Normandy. On 8 August the US 35th Division was committed to eliminate the German left wing penetration, while other units of the 3d Armored and 30th Infantry Division's counterattacked to the north. By 12 August the 2d Battalion, 120th Infantry, on Hill 317 was relieved, after holding out for nearly a week, and the front lines around Mortain were restored to their 6 August positions.

Significance: The Mortain Counterattack failed largely because of the 30th Division's staunch defense. With the advance to the east of the Third Army, German units in Normandy, rather than throwing the Allies into the sea, were soon threatened with encirclement.

Sources: S1.; S.6; S.9.

WORLD WAR II (EUROPEAN THEATER, 1944)

Chartres, 16 August 1944

On 15 August Combat Command B, 7th Armored Division, US XX Corps, approached Chartres late in the day, but encountered stiff resistance from infantry and artillery fire. The next day two columns of CCB attacked, one from the northwest and one from the southwest, and two battalions of CCR also struck from the north. The city was a headquarters where the German First Army reorganized shattered divisions, and parts of the 17th SS Panzer Grenadier Division and the 352d Infantry Division were there when the US tanks attacked. With tanks and artillery they resisted, and prevented the US forces from capturing the entire city. Much of it remained in German hands until other US units arrived to secure it.

Significance: Although part of Chartres had been captured, it would take two more days of fighting before the rest of it was taken by US troops.

Sources: S.1.

WORLD WAR II (EUROPEAN THEATER, 1944)

Melun, 23-25 August 1944

Participating in the Third Army's drive to the upper Seine River, the US 7th Armored Division advanced on the left wing of the XX Corps. On 21 September, Combat Commands A and Reserve made rapid advances toward the Seine, and on the next day CCR reached Melun, finding the bridges that linked the two banks with the island portion of the city still intact. Two assaults on 22 August failed to take the first bridge. Before CCR was able to attack on the morning of 23 August, the Germans -- a reinforced regiment of the 48th Infantry Division -- blew up the bridges.

CCA reached the Seine north of Melun near Ponthierry late on 23 August and armored infantrymen crossed in assault boats at Tilly, north of Ponthierry. A brief but heavy rainstorm late in the night turned the ground into a quagmire that German tanks could not cross and precluded effective counterattacks against the bridgehead. Upstream at Melun, the XX Corps commanding officer, Major General Walton H. Walker, ordered one company to cross over part of the demolished bridge span to the island in the middle of the river. Heavy German defensive fire, inflicting numerous casualties on CCR troops, prevented any further advance.

Early on 24 August, engineers completed a treadway bridge, near Tilly and armor of CCA and CCB, just arriving from Dreux, crossed the river. CCB drove south toward Melun. Delayed briefly by roadblocks and mines, CCB reached the east bank portion of Melun early on 25 August and dispersed the defenders.

Significance: The 7th Armored Division had established a solid bridgehead across the Seine near Melun. With similar successes by other Allied units north and south of Melun, the chances for a German defensive stand on the river were eliminated.

Sources: S.1.

WORLD WAR II (GERMAN THEATER, 1944)

Seine River, 22-25 August 1944

On 21 August the 5th Infantry and 7th Armored divisions of the US XX Corps, in coordination with the XII Corps to the south, attacked from Chartres toward the upper Seine River, southeast of Paris, in order to clear the Paris-Orléans gap, the Third Army's primary objective. Defending along an 80-kilometer front between Corbeil and Montereau was the German 48th Infantry Division, most of its units on the east side of the Seine.

After advancing rapidly, Combat Command A of the 7th Armored Division crossed the Seine in assault boats at Tilly and established a small bridgehead on 23 August. CCR was unable to seize the bridges at Melun on 22 August, and on 23 August a reinforced regiment of the German 48th Infantry Regiment destroyed them. Major General Walton Walker, commander of the XX Corps, arrived and sent a company of armored infantry across to the island on which part of Melun is built, but German fire prevented them from reaching the rest of the city on the east bank. Engineers constructed a treadway bridge at Tilly by 24 August, and CCB, just arriving, crossed and headed south, entered the east bank of Melun early on 25 August, and drove out the Germans.

On the right of the 7th Armored Division the 11th Infantry Regiment of the 5th Infantry Division took Pontainebleau on 23 August. Using river boats one battalion crossed the river and secured a bridgehead and drove off two German counterattacks. The rest of the regiment crossed the next day on a treadway bridge. The 10th Infantry, meanwhile, forded the Loing River near where it joins the Seine, and its vehicles crossed on a bridge at Nemours. They then advanced to Montereau, crossed the Seine, and on the 25th established a bridgehead on the east bank, in spite of a German counterattack. The 2d Infantry secured Étampes, pushed east to the Yonne River, and crossed it between Montereau and Sens.

Significance: Three bridgeheads had been established across the upper Seine in the XX Corps sector alone. The XII Corps had seized one farther south. The rapid advance of the Third Army, following heavy losses in the Falaise Pocket, crushed German hopes for containing the Allied armies west of the Seine River.

Sources: S.1.

WORLD WAR II (EUROPEAN THEATER, 1944)

Moselle-Metz, 6-11 September 1944

By 5 September the Third Army had received enough gasoline to resume its drive to the Rhine River and the German border. The first major obstacle for the XX Corps was the Moselle River, where units of the LXXXII Corps of the German First Army held a line between Thionville and Metz. The XX Corps was to cross the Sarre River, 50 kilometers east of the Moselle and take Thionville and Metz.

On 6 September the 7th Armored Division, leading the attack, moved out toward the Moselle, with Combat Commands A and B leading, in two columns each. German resistance slowed the advance, and it was early on 7 September when the 23d Armored Infantry Battalion of CCB reached the Moselle south of Metz, at Dornot. About 70 men crossed the river in boats, but were forced to withdraw. Later in the day units of CCA reached the Moselle north of Metz at Mondelange and found a potential crossing site at Hauconcourt. At midday the 11th Infantry Regiment, 5th Infantry Division, advanced to Dornot, and prepared to cross the river.

The 2d Battalion, 11th Infantry, established a toehold on the east bank of the Moselle on the 8th, but German resistance made it impossible to expand it. On 10 September it was abandoned, and a new bridgehead was established by the 10th Infantry, farther south. Engineers constructed a treadway bridge, there, but in the face of a series of German counterattacks only limited reinforcements could be moved across the river.

Meanwhile the 2d Infantry Regiment, 5th Infantry Division was engaged against German defenses northwest of Metz. On 8 September Verneville was taken. CCA and CCR joined the attack in that area, encountering a stiff German defense, and making slow progress, unable to advance to crack the German line near Amanvillers.

On the extreme left of the XX Corps, the 90th Infantry Division moved out early on 7 September, advancing slowly, and facing German counterattacks. On 9 September division units were within sight of the Moselle, about 13 kilometers west of Thionville. For the next two days they continued to move slowly forward, some elements reaching the Moselle south of Thionville by the end of the day on 11 October.

Significance: A small bridgehead had been established across the Moselle River, but determined German resistance had kept the corps from making any major penetrations in the German line that might lead to the breakthrough of the US Third Army.

Sources: S.3.

WORLD WAR II (EUROPEAN THEATER, 1944)

Metz, 13 September 1944

On 12 September, US engineers completed a treadway bridge over the Moselle River into the 5th Infantry Division's bridgehead opposite Arnaville. The 31st Tank Battalion of Combat Command B, 7th Armored Division, and a tank destroyer company soon crossed. On 13 September, German artillery fire partly destroyed the bridge across the Moselle and harassed the crossing site. After attempts by the infantry units to expand the bridgehead failed, CCB mounted an attack along the southern part of the bridgehead in an attempt to expand the perimeter for further operations against Metz. German artillery and antitank fire around the town of Arvy broke up the attack. Elsewhere along the XX Corps front little activity took place on 13 September. At Thionville, north of Metz, the Germans had evacuated to the east bank of the Moselle, and the 90th Infantry Division drew up plans for a river crossing. Northwest of Metz, the 2d Infantry Regiment, 5th Division, continued to attack to regain ground lost in a German counterattack on 11 September.

Significance: German defenses around Metz had for the most part held up until 13 September. The 5th Division's bridgehead offered the best chance for exploitation, and XX Corps units began to shift positions to prepare for operations east of the Moselle.

Sources: S.3.

WORLD WAR II (EUROPEAN THEATER, 1944)

Arracourt, 19-22 September 1944

In mid-September 1944, while Combat Command A of the US 4th Armored Division was at the apex of the Nancy bridgehead some 40 kilometers east of the Moselle River awaiting orders to resume the offensive to the Saar River, elements of the German LVIII Panzer Corps, on the right wing of the Fifth Panzer Army, were preparing to counterattack and destroy the 4th Armored Division's bridgehead position. Hasty preparations were made for the German attack, as the 113th Panzer Brigade assembled north of the Marne-Rhine Canal, and the 111th Panzer Brigade moved toward the area.

On 19 September, under the cover of morning fog, the 113th Panzer Brigade attacked CCA's positions from the southeast. Poor weather conditions prevented US aircraft from flying, but they also allowed US armor to close to short range of German tanks where US tank guns could penetrate their armor plate. For the next three days the Germans made a series of probes, cautious and with small numbers of tanks. On 20 and 21 September CCA executed a sweeping operation to end the German armored threat. As on the first day of the attack, German losses were far greater than CCA's losses. On 22 September the 111th Panzer Brigade had finally arrived and, attacking from the northeast, penetrated CCA's cavalry squadron in outpost positions. But, with clearing weather in the afternoon, US tactical air support aided medium tanks of CCA in stopping the 111th Panzer Brigade's advance.

Significance: Despite the lack of effective US air cover for most of battle, the Germans failed to employ their tanks in mass against CCA of the 4th Armored Division. Thus, instead of a German breakthrough, the less powerfully armed US tanks, closing to short ranges with the German tanks, were able to inflict high losses on the attackers and prevent any penetration to the Moselle River.

Sources: P.6; S.3; S.10; S.17.

WORLD WAR II (GERMAN WESTWALL, 1944)

Westwall, 2-7 October 1944

In late September 1944, the US XIX Corps of the First US Army was ordered to attack German Siegfried Line positions north of the city of Aachen, penetrate the German fortifications belt east of the Murm River, and drive southeast to link up with the US VII Corps and surround Aachen. Two regiments of the 30th Infantry Division were to make the Corps's initial attack, and the entire US 2d Armored Division was available for commitment once the infantry established a bridgehead across the river.

The 30th Division attacked on 2 October. A largely ineffective air strike preceded the ground attack. The defenders of the German LXXXI Corps offered stubborn resistance, and the river's marshy banks hindered movement over the narrow stream. But the 30th Division was able to establish a small bridgehead, and on the night of 2/3 October, three temporary bridges were installed, enabling tanks of CCB of the 2d Armored Division to cross. For the next three days the battle east of the Murm was characterized by intense German artillery fire, several determined counterattacks, and the eventual commitment of the entire 2d Armored Division. In the expanding bridgehead the 2d Armored Division attacked to the north and northeast, while the 30th Division, clearing pillboxes and other fortifications, drove slowly southeastward for a linkup with the VII Corps. On 6 October, despite the defensive efforts of German reserves, the attack broke through the first band of the Westwall, and on the following day made sweeping gains.

Significance: The first band of the Westwall was breached, and the corps could proceed. On 16 October, after more hard fighting punctuated by German counterattacks, the encirclement of Aachen was completed when the XIX Corps joined the VII Corps east of the city.

Sources: S.9; S.13.

WORLD WAR II (EUROPEAN THEATER, 1944)

Schmidt, 2-13 November 1944

In early November 1944, the US 28th Infantry Division attacked southeast of the city of Aachen in what was planned to be a diversionary operation designed to draw German reserves away from a major attack by the US VII Corps to the north. The town of Schmidt, on high ground northwest of the strategic upper Roer River dams, was the 28th Division's objective.

Supported by V Corps artillery and reinforced with additional combat units, the division attacked on 2 November. From the start, the rugged terrain of the Huertgen Forest and inclement weather aided the defense of the German 275th Infantry Division. Only the 112th Infantry Regiment, making the 28th Division's main effort, achieved any substantial gains in the attack. On 3 November, elements of the regiment reached Schmidt, after negotiating a narrow forest track called the Kall Trail and crossing the Kall River. This trail would prove to be the only supply and evacuation route for US units east of the River during the fighting on the following days, and it proved inadequate for supply and particularly the advance of US armor reinforcements. German counterattacks were mounted in increasing strength on 4-7 November, driving most US units from positions east of the Kall River. The US VII Corp's attack was postponed and German reserves were liberally committed to the Schmidt area. Bad weather hampered US air operations, and tactical air support did not affect the flow of German reinforcements to Schmidt nor provide adequate support for ground operations.

By 14 November other units started relieving the 28th Division.

Significance: Only small gains had been achieved west of the Kall River and the division's objective, the town of Schmidt, remained in German hands.

Sources: P.4; S.12; S.13.

WORLD WAR II (EUROPEAN THEATER, 1944)

Seille-Nied, 8-12 November 1944

On 8 November Major General Manton Eddy's US XII Corps resumed the offensive, attacking German forces in the Seille-Nied Valley. Its first objective was the German communications center at Falquemont. An artillery preparation neutralised most of the German guns and destroyed front line positions and communications. Moving out in heavy rain, the XII Corps, having achieved tactical surprise, at first made good progress. On the left the 80th Division penetrated the German 48th Division's front and trapped and destroyed a German regiment. In the center and on the right the 35th and 26th divisions also made good initial progress. Then the 35th Division was halted by stiff resistance in the Chateau-Salins Forest, and on the right, the drive of the 26th Division was halted after taking a bridge and the town of Moyenvic. Snow and rain slowed the advance of the XII Corps on 9 November, but the 26th Division took the village of Chateau-Salins. In the 35th Division's sector US troops continued to battle against determined German resistance, but the division was able to take the village of Delme with the aid of an armored task force. The fall of Delme enabled the 80th Division to reduce German positions on Delme Ridge on the XII Corps's left wing. On 10 November fierce German resistance, bad weather, and mud continued to slow the advance of the XII Corps. The next day the 6th Armored Division and elements of the 80th Division established bridgeheads on the Nied, one of them 13 kilometers from Falquemont. In the center the 35th Division, with support from CCB of the 4th Armored Division, repulsed a German counterattack, while the remainder of the 35th Division cleared the Forest of Chateau-Salins of German resistance. On the corps's right wing the 26th Division won control of Hill 310 after a three day struggle and gained a foothold on Koecking Ridge.

Significance: The XII Corps gained important footholds in the Seille-Nied Valley. These facilitated future offensive operations.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER , 1944)

Forêt de Châtonne-Salins, 9-11 November 1944

On the right of the US XII Corps's attack through the Lorraine Gateway and to the Rhine the 35th and 26th Infantry divisions attacked on 8 November. On the morning of 9 November, Combat Command B, 4th Armored Division, was committed through the 35th Division in two parallel columns, Major Thomas G. Churchill on the left and Lieutenant Colonel Alfred A. Mayback on the right. Churchill's force, passing close to Delme Ridge, reached Hannucourt, while Mayback's took Oriocourt and Lansauveville but failed to reach Fontenay. During the night of 9/10 November elements of the German 11th Panzer Division retook the village of Viviers, behind Churchill, cutting the road between him and Mayback. An attempt by Churchill to take Viviers on 10 November failed, but the 137th Infantry Regiment, 35th Division, finally cleared the town from the west by nightfall. Mayback made no progress on 10 November.

CCA, 4th Armored Division, moved out through the 26th Infantry Division on 10 November, in two parallel columns, with Major William L. Hunter on the left, and Lieutenant Colonel Dale M. Oden on the right. Although held back by mud and traffic, Hunter reached Hampont before dark on 10 November. Oden was unable to move until 11 November, when his column advanced to Hampont. Hunter's column, leaving Hampont on the 11th, was stopped by the 361st Volks Grenadier Division and the 111th Flak Battalion as it tried to pass through a narrow defile south of Haboudange. Turning back to reach a side road, Hunter proceeded to Conthil and part way to Rodalbe.

Meanwhile, on 11 November, Churchill's column drove off a counterattack with armored artillery fire and proceeded toward Oron. Mayback reached and tried without success to take Fontenay. The 1st Battalion, 137th Infantry, with a tank company, eventually occupied the town.

Significance: Stiff German resistance and mud had prevented the anticipated breakthrough. Progress had been made, but at the cost of substantial casualties and equipment losses.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER , 1944)

Morhange, 13-15 November 1944

On 13 November, Combat Command B of the US 4th Armored Division attacked toward Morhange in conjunction with the 134th and 137th Regiments of the 35th Infantry Division, opposed by elements of the German 11th Panzer and 361st and 559th Volks Grenadier divisions.

CCB proceeded in parallel columns, Major Thomas G. Churchill's on the left, Major Harry R. Van Arnam's (formerly Lt. Colonel Alfred A. Mayback's) on the right, with the 137th Infantry close behind the armor, and the 134th Infantry to the right along the Chateau Salins-Baronville Road. Churchill's column, north of the Nied Francaise River, advanced from Oron to Villers sur Nied, where German minefields forced the tanks off the road. A successful outflanking maneuver by Company A of the 8th Tank Battalion knocked out seven 88mm and eleven 75mm guns. Churchill's column advanced and bivouacked north of Marthillie for the night. Van Arnam's column, slowed by blown bridges and minefields advanced northeast to within 4.8 kilometers of Morhange. The 134th Infantry moved out toward high ground in order to clear the road leading to Morhange via Baronville. The 3d Battalion, fighting against a stiff German defense, cleared the Rougemont Ridge, along which the Baronville Road ran, while the 2d Battalion, to the east, cleared the village of Achain after a tough fight.

On 14 November, CCB, with a battalion of the 137th Infantry, took Destry and Baronville, just west of Morhange, from the reinforced 559th Volks Grenadier Division. On 15 November, armor of CCB and the 134th Infantry advanced through Morhange, abandoned in the morning by troops of the German 1127th Regiment after a night of heavy shelling from US artillery, to a line along the Metz-Sarrebourg railway northeast of the town. To the left, the 137th Infantry also consolidated positions near the rail line.

Significance: Despite poor weather which precluded close air support, and muddy terrain which hampered vehicular crosscountry movement, CCB and the infantry of the 35th Division took Morhange, and the advance toward the Sarre River continued.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Morhange-Paulquemont, 13-16 November 1944

On 13 November the US XII Corps continued its drive toward Paulquemont and Morhange. On the corps's left infantrymen from the 80th Division and CCA of the 6th Armored Division repulsed a German counterattack and then battled fiercely for the remainder of the day in an effort to destroy a German force at Arraincourt, 9.5 kilometers south of Paulquemont. In the XII Corps's center, in the sector of the 35th Infantry Division, CCB of the 4th Armored Division drove to within five kilometers of Morhange. On the Corps's right wing the 26th Infantry Division began a determined and costly attack through the forest of Koecking Ridge. The next day, CCA of the 6th Armored Division attacked strong German positions at Cote de Suisse and Landruff, six kilometers south of Paulquemont. Landruff fell by late afternoon, but it was necessary to repulse four German counterattacks on the night of 14/15 November in order to assure control of the town. Success there enabled a combined arms task force of infantry from the 80th Division and armored infantry and tanks from the 6th Armored Division to reduce the German positions on Cote de Suisse. Infantry of the 35th Division, with armored support from the 4th Armored Division closed in on Morhange on 14 November, forcing a German withdrawal from the town. Meanwhile, on the right, elements of the 26th Division continued a slow advance against fierce resistance on Koecking Ridge, suffering heavy casualties in the process. On 15-16 November these infantrymen were able to win control of the ridge easily, because on the previous day Task Force Oden of CCA, 4th Armored Division, menaced the flank of the German positions on the ridge, forcing the bulk of the German force to withdraw on the night of 14/15 November. Meanwhile, on the left on 16 November, another combined arms assault, by 80th Division infantry units and CCA of the 6th Armored Division, reduced German positions on the high ground overlooking Faulquemont.

Significance: The XII Corps won control of the Seille-Nied Basin and the major arteries of the "Lorraine Gateway." In addition, the corps could use its gains to disrupt the German logistical network.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (GERMAN THEATER , 1944)

Bourgaltroff, 14-15 November 1944

In early November the XII Corps was engaged with elements of German Army Group G in a struggle for control of the Seille-Nied Valley. The 26th Infantry Division had won control of Hill 310 and had gained a foothold on the Koecking Ridge. CCA of the 4th Armored Division was divided into two task forces. One task force under Colonel Delk Oden moved across country to capture Hill 337, overlooking the right flank of the formidable German positions on Koecking Ridge. West of Oden, near the boundary between the 35th and 26th Division sectors Major William Hunter's armored task force had been forced to withdraw because of heavy losses from German shelling. On 13 November the 328th and 101st infantry regiments of the 26th Division and the 2d Cavalry Group launched an offensive against the German positions in Koecking Woods. Because of accurate German artillery fire and small arms fire from pillboxes they were able to make only a slow advance. By nightfall they had gained a highway that cuts through the heavily wooded Koecking Ridge. Meanwhile, part of Oden's task force had returned east and recaptured Centhil, which had fallen to a German counterattack. This success assured that the main supply route would remain open. On 14 November, with Hunter's reinforced task force covering his flank and rear, Oden struck at the German flank and rear with two armored columns. Although heavy mud forced one column to turn back, his other column advanced to the village of Guebling and, after heavy fighting, took Guebling that night. Realizing the precariousness of their positions, the German forces defending Koecking Ridge withdrew. The next morning Oden tried to advance toward Bourgaltroff but was forced to withdraw because intense German artillery fire inflicted heavy casualties.

Significance: Although Oden was forced to withdraw on 15 November, his attempt at exploitation threatened the German right flank and rear, enabling the 26th Division to gain control of Koecking Ridge on the night of 15/16 November.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Sarre-St. Avold, 20-27 November 1944

On 18 November 1944, the US XII Corps renewed its attack on the extreme right of the Twelfth Army Group sector. The XII and XX Corps had advanced up to 32 kilometers since 8 November, but inclement weather, muddy terrain, and German defenses had prevented the US units from making a decisive breakthrough. After a brief reorganization, the XII Corps, with the 80th Division on the left, the 35th Division in the center, and the 26th Division on the right, continued its attack. XII Corps commander Major General Manton S. Eddy's plan was to break through German defenses, using his infantry, with armor to be committed to exploit any penetrations, and establish a bridgehead across the Sarre River for a possible future advance to the Rhine River. Gains made all along the XII Corps's front on 18 and 19 November prompted him to commit elements of the 4th and 6th Armored divisions late on 19 November.

On 20 November, the XII Corps attacked through muddy terrain and against German resistance that varied from delaying actions to determined defenses and counterattacks. These ground conditions and German tactics were characteristic of the battle during the following week. The 80th Division, on the XII Corps's left wing, made steady gains and on 22 November was ordered to pinch out the 35th and 26th Divisions to the south. On 23 November, 4th Armored Division elements crossed the Sarre River on the XII Corps's southern boundary at Fenetrage and were ordered to attack northward in the zone of the XV Corps, where the road net favored armor operations. In the XII Corps center, the 6th Armored and 35th Infantry divisions met determined resistance through 23 November. On 22 November, 6th Armored Division elements were dispatched to assist the 80th Division. On 24 November a counterattack by the German Panzer Lehr Division aimed at the left flank of the US XV Corps collided with the 4th Armored Division, but by 26 November the German counterattack was called off, largely because of the 4th Armored Division. On 27 November, the 80th Division's advance to the Maderbach Creek, a tributary of the Sarre, led to the withdrawal of the north wing of the XIII SS Corps across the creek. The 26th and 35th infantry divisions and the 6th Armored Division, after a week of heavy fighting,

WORLD WAR II (EUROPEAN THEATER, 1944)

Serre-St. Awoil, 20-27 November 1944

reached the creek at various points by 27 November. On the same day the 4th Armored Division, its entire strength east of the Serre, continued its attack northward along the east bank of the river.

Significance: The XII Corps's attacks between 20 and 27 November had kept pressure on the German defenders and proved instrumental in foiling a counterattack against the US XV Corps's left wing. But mud, poor weather, and successful German delaying tactics prevented the desired breakthrough to the Rhine.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (GERMAN DEFENSE, 1944)

SUMMARY I. 24-25 November 1944

On 24 November, two task forces of CCB, US 4th Armored Division, under Major Thomas G. Churchill and Lieutenant Colonel G.L. Jaques crossed the Sarre River south of Fénétrange into the zone of the XV Corps of the US Seventh Army in attack toward Bitburg. Task Force Jaques crossed about 5.5 kilometers south at Gosselming. The German 361st Volks Grenadier Division, screening the Panzer Lehr Division's right flank, offered little opposition to the crossing. Task Force Churchill drove northeast to high ground west of Postroff, while Task Force Jaques, in a parallel advance, fought its way through Kirberg and on to Baerendorf and directly into the right flank of the Panzer Lehr Division's western attack column. After a house-to-house fight, Baerendorf fell to an attack by the 53d Armored Infantry Battalion supported by artillery fire and tanks.

Early on 25 November, under cover of darkness, elements of the Panzer Lehr Division counterattacked at Baerendorf. The 53d Armored Infantry Battalion and tanks of the 8th Tank Battalion outpost east of the town checked the attack with heavy losses on both sides. CCB resumed its attack later in the morning with the 53d Armored Infantry Battalion attacking northeast of Baerendorf, and the 8th Tank Battalion joining the 51st Armored Infantry Battalion, just committed from the 4th Armored Division's Combat Command Reserve, in an attack on Postroff, supported by the division's artillery.

Significance: CCB's successful stand around Baerendorf was instrumental in stopping the Panzer Lehr Division's counterattack. The threat to the XV Corps's left wing had been contained, and, weakened from the losses incurred in the Panzer Lehr Division's attack, the Germans were forced to resume the defensive.

Sources: S.3; S.4; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Baerendorf II, 26 November 1944

The bulk of the 4th Armored Division renewed the attack east of the Sarre River on 26 November. The Panzer Lehr Division, badly battered in its attack during the previous two days, had withdrawn to positions along the road linking Wolfskirchen, Bywiller, and Durstel. The 4th Armored Division's immediate objective was to penetrate this line to open the way for further advances to the northeast.

CCB, reinforced by the 51st Armored Infantry Battalion and all of the 4th Armored Division artillery, attacked in two columns. The left column, a task force led by Major Thomas G. Churchill, advanced toward Wolfskirchen during the morning but was stopped in woods just south of the town by German small arms, mortar and artillery fire. To the right, a task force under Lieutenant Colonel G.L. Jaques advanced toward Bywiller. A blown bridge north of Baerendorf, flooded streams, and muddy ground considerably slowed the task force's advance. Artillery from the 401st Volks Artillery Corps reinforced the Panzer Lehr Division's batteries and kept up a heavy fire on CCB's attacking units. Meanwhile Combat Command A moved across the Sarre River and, passing behind CCB, moved north in two columns to the right of CCB. On the extreme right, a task force under Lieutenant Colonel Delk M. Olden passed through Schalbach and on to Otwiller. The other column, a task force led by Major West, turned north at Schalbach and advanced to Drulingen by nightfall.

Significance: The first day of the 4th Armored Division's renewed attack east of the Sarre River had seen only slight gains against the German main line of resistance. Another day of battle would be required to break the German defenses.

Sources: S.3; S.4; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Burbach-Durstel, 27-29 November 1944

On 27 November, the US 51st Armored Infantry Battalion, part of Task Force Churchill of the 4th Armored Division, cleared the western anchor of the Panzer Lehr's line at Wolfskirchen with support from a company of light tanks. To the east, the German defenders around Ewyiller, with a detachment of PzKpfw V (Panther) tanks in the village, held up the 53d Armored Infantry Battalion of Task Force Jaques until late in the afternoon. By then, a task force of Combat Command A, under Major West, had taken Gangwiller northeast of Ewyiller, outflanking the defenders in front of the 53d Armored Infantry Battalion and forcing them to withdraw. At the eastern anchor of the German line around Durstel, antitank guns and minefields limited the maneuvering room for the tanks of Lieutenant Colonel Delk M. Oden's task force from CCA. German infantry, with armor support, repulsed Oden's attempts to take Durstel, and under the cover of darkness the attackers withdrew to Adamswiller.

On 28 November, Task Force Jaques and the 71st Regimental Combat Team, 44th Infantry Division (XV Corps), captured Berg, on high ground overlooking the main road between Durstel and Sarre-Union. Churchill's task force drove north from Wolfskirchen under heavy defensive fire and through roadblocks and took Burbach, about 3.2 kilometers west of Berg. Task Force West took Betwiller, but Task Force Oden, under German artillery fire and slowed by blown bridges, did not take Durstel until 29 November. Then it continued moving north and took Adamswiller. On the same day, Task Force West drove to Rezingen, 1.6 kilometers west of Adamswiller, and Churchill and Jaques pushed forward to high ground southeast of Sarre-Union and east of Mackwiller.

Significance: During three days of offensive action, the 4th Armored Division and supporting infantry elements had cracked the German line southeast of Sarre-Union, opening the way for continued advances on that town and beyond to the northeast.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER , 1944)

Durstal-Pareberviller, 28-29 November 1944

The US XII Corps offensive was still moving, with the 80th Infantry, 6th Armored, 26th Infantry and 4th Armored divisions in line from northwest to southeast. The 317th Infantry, 80th Division, fought elements of the German 17th SS Panzer Grenadier Division outside Pareberviller. Efforts to bypass the town were unsuccessful. After hard fighting all day, the Germans still held all but the western portion of the town. The 328th Infantry, 26th Division, was engaged in mopping up operations west of Sarre-Union on the Sarre River. To the east of the Sarre, task forces of the 4th Armored Division advanced north toward Sarre-Union, taking Burbach, Berg, and Betwiller.

On 29 November, the 4th Armored Division slowly advanced on Sarre-Union, taking Durstal and Adamswiller and high ground southeast of Sarre-Union. The 317th Infantry, at Pareberviller, renewed its attempts to take the town, but German defenses, and two counterattacks against the 2d Battalion to the north, led eventually to the withdrawal of 317th Infantry troops to a line about one kilometer west of the town. That night, the 318th Infantry moved up to relieve the 317th.

Significance: With high casualties on both sides, the defenders held in places and gave up ground elsewhere, but, aided by muddy terrain unfavorable for armored movement, the Germans prevented a breakthrough by the XII Corps.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Sarre-Union, 1-2 December 1944

Coordinating its attacks with the 26th Division, the 4th Armored Division attacked from the east toward Sarre-Union, an important communications center for the Germans, and anchor for the western wing of the LXXXIX Corps. The area was mainly defended by the 25th Panzer Grenadier Division north and east of the town. The 11th Panzer Division was to the west. Using the 8th Tank Battalion and 51st Armored Infantry Battalion, CCB attacked in two columns, the right toward Hill 318, north of Mackwiller, and the left east of Rimsdorf. On the left the 1st Battalion, 101st Infantry, advanced through the Bennholtz Woods, while the 3d attacked Sarre-Union. Advancing slowly on muddy roads, against stubborn resistance, the 8th Tank Battalion finally wrested Hill 318 from some tanks of the Panzer Lehr Division. Units of the 3d Battalion, 101st Infantry, entered Sarre-Union, but German gunners on hills beyond the town halted the advance and the occupying units withdrew. During the night 1/2 December the Germans reoccupied Sarre-Union, but the 101st Infantry, with a platoon of tank destroyers, and assisted late in the day by a company of the 104th Infantry, fought its way back in. CCB, 4th Armored Division, meanwhile, under heavy artillery fire, cut two roads into the town from the east, leaving only one open to the Germans. Counterattacks by units of the 11th Panzer Division and the Panzer Lehr Division, which had been in corps reserve, were driven off with help from fighter-bombers, which destroyed several tanks near Domfessel.

Significance: The 4th Armored Division and the 101st Infantry Regiment took the important communications center of Sarre-Union and thereby gained an important foothold east of the Sarre River and on the western wing of the German LXXXIX Corps.

Sources: S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Sarre-Singling, 6-7 December 1944

With Sarre-Union in American hands, the 4th Armored Division prepared to attack the concentrated defenses of the Maginot Line. The 35th Tank Battalion and 53d Armored Infantry Battalion of CCA crossed the Eichel River, and the 37th Tank Battalion passed through along the highway toward Dahlingen on the way to Bining. Encountering the massed artillery of the 11th Panzer and 25th Panzer Grenadier Divisions, the column turned off toward the town of Singling, west of Bining, but withdrew out of range of German artillery. CCB had advanced to Schmittviller, where it too was within striking distance of Singling.

With little opposition, units of CCA, 6th Armored Division, reached the river north of Sarreguemines, within artillery range of Grosbliederstroff. On the north the 2d Cavalry Group crossed the Rosselle River near Rosbruck. Units of all battalions of the 134th and 320th Infantry Regiments, 35th Division, were approaching the west bank of the Sarre River, and the 2d Battalion, 134th Infantry, was in the southeastern outskirts of Sarreguemines.

Two medium tank companies of the 37th Tank Battalion, 4th Armored Division, reinforced by the 51st Armored Infantry Battalion, a field artillery battalion and some tank destroyers, on 6 December attacked toward Singling, defended by the 1st Battalion, 111th Panzer Grenadier Regiment, supported by tanks, assault guns, artillery, and the permanent emplacements of the Maginot Line. Although one US tank and a company of armored infantry managed to enter the village, they could not hold it and withdrew.

The 6th Armored and 35th Infantry Divisions held the west bank of the Sarre River in strength from Grosbliederstroff to Wittring. CCA and the 2d Battalion, 134th Infantry, occupied the western portions of Sarreguemines.

On 7 December the only advance on the corps front was at Bining, which elements of CCA took, the last operation before the 12th Armored Division took over the sector. Probes against Singling were repulsed.

Significance: The US XII Corps advanced and secured the west bank of the Sarre River around the town of Sarreguemines. On the corps's right wing, the capture of Bining gave the US forces access to the southern approaches to the key rail and communications center at Rohrbach-les-Bitche.

Sources: R.11; S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER, 1944)

Singling-Bining, 6-7 December 1944

On the morning of 6 December, two medium tank companies of the 37th Tank Battalion, the understrength 51st Armored Infantry Battalion, a field artillery battalion, and some tank destroyers of Lieutenant Colonel Creighton Abrams's TF Abrams of CCA, US 4th Armored Division, attacked near Singling, while CCB moved toward the area. Defending in Singling was the 1st Battalion of the German 111th Panzer Grenadier Regiment, 11th Panzer Division, with Panther tanks and assault guns in the village and on the high ground to the north. Some of the fortifications of the Maginot Line also provided strongpoints for the defenders. Advancing over muddy terrain, the tanks and armored infantry encountered defensive fire from the area around Singling, and the armored infantry, originally under orders to take Bining, was ordered up to attack Singling. CCA elements, including one tank company and one company of armored infantry entered the town, but were forced to withdraw after dark. However, the fight at Singling had allowed other CCA units, a company of light tanks, some cavalry and a battalion of the 328th Infantry, 26th Infantry Division, to slip past Singling and take Bining. On the following day, the 4th Armored Division held in place and awaited relief by the 12th Armored Division.

Significance: The 4th Armored Division's action at Singling, although not decisive, had opened the way for later advances by the 12th Armored Division. Singling and Rohrbach were taken by 10 December in conjunction with other advances along the XII Corps's front.

Sources: R.11; S.3; S.5; S.10; S.11.

WORLD WAR II (EUROPEAN THEATER , 1944)

Sauer River, 16-17 December 1944

On 16 December 1944 the German 212th Volks Grenadier Division, on the extreme left of the German Ardennes counteroffensive sector, launched an attack across the Sauer River against the 12th Infantry Regiment of the US 4th Infantry Division. With other units of the German Seventh Army, the division's mission was to cover the southern flank of the main attacks of the German Fifth and Sixth Panzer armies.

Following a heavy artillery preparation, troops of the 423d and 320th Infantry Regiments, on the 212th Division's right and left respectively, crossed the Sauer River before dawn on 16 December, taking the defenders of the 12th Infantry by surprise. After suffering heavy losses in combat during November, the 12th Infantry was thinly spread out along what was believed to be a quiet sector of the front. Nevertheless, a disorganized but determined defense by the regiment slowed the German attack. On the 12th Regiment's left, the 423d Regiment made the deepest penetrations, but these did not break the line. On the night of 16/17 December US artillery fire prevented German engineers from completing a bridge across the Sauer River. German armor and heavy weapons were therefore not available for the continued attack on the west side of the River on 17 December. American reinforcements, including tanks of the 9th Armored Division, arrived to strengthen the 12th Regiment's defense. A German flanking attack along the Schwarz Ernzt gorge between the 12th Infantry and the 9th Armored Division on its left failed to break through on 17 December, and the 212th Division units along the rest of the front were stopped or slowed by increasingly heavy fire from US armor, artillery, and infantry reinforcements.

Significance: Even with the situation precarious in the 12th Regiment's center, the chances of a German success in establishing a line to protect the southern flank of the Fifth and Sixth Panzer Armies were greatly lessened by the stubborn defense of the 12th Infantry.

Sources: S.2.

WORLD WAR II (EUROPEAN THEATER, 1944)

St. Vith, 17-23 December 1944

In December 1944, the town of St. Vith, Belgium, was an important objective for the German LXVI Corps, the northernmost unit of the Fifth Panzer Army, which was deployed in the center of the Ardennes counteroffensive's attack zone. On 16 December, the US 7th Armored Division was sent to support the 106th Infantry Division, which had been hit by the LXVI Corps in the opening attack. By the time elements of the 7th Armored Division began to arrive near the front on 17 December, the 106th Division had been destroyed, and the mission of Combat Command B, 7th Armored Division, became the defense of the important road center at St. Vith.

Bad logistics and crowded roads prevented the LXVI Corps from mounting a major attack against St. Vith until 21 December. Between 17 and 20 December, piecemeal attacks were directed against CCB's lines but failed to break through. Poor coordination among the German units, including tanks of the 1st SS Panzer Division, and an effective US defense with artillery support contributed to this successful defense. Finally, on 21 December, the LXVI Corps units, reinforced by more armor, penetrated the St. Vith defenses. On 22 December, pressure was maintained. The 7th Armored Division suffered heavy losses and, with no reinforcements, early on 23 December US units withdrew from St. Vith, having denied the town to the Germans for nearly one week.

Significance: The 7th Armored Division's defense of St. Vith was unquestionably one of the main reasons for the failure of the German Ardennes counteroffensive. Forced to use secondary attack routes unsuitable for carrying heavy traffic, the Germans were never able to acquire the initial momentum necessary for the success of their attack.

Sources: P.5; P.6; S.2; S.18.

WORLD WAR II (EUROPEAN THEATER , 1944)

Bastogne, 18-20 December 1944

By the second day of the German counteroffensive in the Ardennes, it was evident to US commanders that the crossroads town of Bastogne was the immediate objective of the German XLVII Panzer Korps on the offensive's left wing. Elements of Combat Command R, 9th Armored Division, and Combat Command B, 10th Armored Division, were dispatched to delay the German advance as long as possible to allow American reinforcements to assemble to defend Bastogne. On 18 December, CCR, 9th Armored Division, made initial contact with the German 2d Panzer Division at Lullange along the main northeast road leading into Bastogne. The Germans pushed through this roadblock and another hastily assembled force at Allerborn by the night of 19 December, but the delay, caused partly by the Germans' failure to commit armor in force, allowed other US units to move up to Bastogne. On the evening of 18 December CCB, 10th Armored Division, began to deploy in three positions east of Bastogne. The northern team (Desorby) at Noville was practically destroyed by the night of 20 December, as was the center team (Task Force Cherry) at Longwilly, but not before more time was gained for preparation of defenses at Bastogne. To the southeast near Wardin, the southern team (Team O'Hara) successfully blocked the main southeastern road into Bastogne and prevented the German 130th Panzer Lehr Division from gaining access to the town via the road.

Significance: Although the defending US armored units east of Bastogne were practically destroyed they had carried out their mission and delayed the German attack long enough for US units to arrive and reinforce the defenses of the vital crossroads town.

Sources: . S.2; S.14; S.15; S.16.

BIBLIOGRAPHY

WORLD WAR II--GENERAL

Secondary Sources:

- P.1 Esposito, Col. Vincent J. (ed.). The West Point Atlas of American Wars. Vol. II, 1900-1950. New York, 1959.
- P.2 Howe, George F. The Battle History of the First Armored Division. Washington, DC, 1954.
- P.3 Liddell Hart, Capt. B.N. The Tanks: The History of the Royal Tank Regiment. Vol. II, 1939-1945. New York, 1959.
- P.4 MacDonald, Charles B., and Mathews, Sidney T. Three Battles: Arnaville, Altuzzo, and Schmidt. The United States Army in World War II. Washington, DC, 1952.
- P.5 Manstein, Field Marshal Erich von. Lost Victories. Ed. and Trans. by Anthony G. Powell. Chicago, 1958.
- P.6 Mellenthin, Maj. Gen. F.W. von. Panzer Battles: A Study of the Employment of Armor in the Second World War. Norman, OK, 1956.
- P.7 Ogorkiewicz, R.M. Armor: A History of Mechanized Force. New York, 1959.
- P.8 Pemberton, Brig. A.I. The Development of Artillery Tactics and Equipment. London, 1950.
- P.9 Schramm, Percy Ernst, et al. Kriegstagebuch des Oberkommandos der Wehrmacht (Wehrmachtführungsstab), 1940-1945. 4 vols. Frankfurt am Main, 1961.
- P.10 Senger und Etterlin, Ferdinand Maria von. Die Deutschen Panzer 1926-1945. Munich, 1959.

BIBLIOGRAPHY

NORTH AFRICAN CAMPAIGN, 1942-1943

Secondary Sources:

- Q.1 Bedeschi, Giulio. Fronte d'Africa: c'ero anch'io. Milan, 1979.
- Q.2 Blumenson, Martin. Kasserine Pass. Boston, 1966.
- Q.3 Daubin, Lt. Freeland A., Jr. The Battle of "Happy Valley". Fort Knox, KY, 1948.
- Q.4 Dorward, Maj. J.C., RA. "The Effects of Bombardment: The Present State of Knowledge." MORU Report No. 3. 1 March 1946.
- Q.5 Great Britain, War Office, General Staff. Short Notes: Italian Army. London, 1943.
- Q.6 Howe, George F. Northwest Africa: Seizing the Initiative in the West. United States Army in World War II. The Mediterranean Theater of Operations. Washington, DC 1957.
- Q.7 Italy, Exercito, Corpo di stato maggiore, Ufficio storico. Operazioni italo-tedesche in Tunisia, 11 novembre 1942-13 maggio 1943. 2 vols. Rome, 1950-52.
- Q.8 _____. Seconda controffensiva italo-tedesca: da El Agheila a El Alamein, gennaio-settembre 1942. Rome, 1951.
- Q.9 _____. Terza offensiva britannica in Africa settentrionale. Rome, 1961.
- Q.10 Liddell Hart, Capt. B.H. (ed.). The Rommel Papers. New York, 1953.
- Q.11 Lucas Phillips, C.E. Alamein. London, 1972.
- Q.12 Messe, Field Marshall Giovanni. Come finì la guerra in Africa: la "Primata Armata" Italiana in Tunisia. Milan, 1946.
- Q.13 Mittelman, Joseph B. Eight Stars to Victory. Washington, DC, 1948.
- Q.14 Page, Col. Douglas J. "Sedjenane-Bizerte, April 18-May 7, 1943". Field Artillery Journal, XXXIII:10 (October 1943).
- Q.15 _____. "El Guettar". Field Artillery Journal, XXXIII:9.
- Q.16 Playfair, I.S.O., et al. British Fortunes Reach Their Lowest Ebb, Vol. III of The Mediterranean and Middle East. History of the Second World War. London, 1960.

- Q.17 _____ . The Destruction of the Axis Forces in Africa, Vol. IV of The Mediterranean and Middle East. History of the Second World War. London, 1966.
- Q.18 Rance, David [Arthur D. Divine]. Road to Tunis. New York, 1944.
- Q.19 Rance, Brig. Gen. "Corps Artillery: How It Was Employed." Field Artillery Journal, XXXIII:12 (December, 1943).
- Q.20 Robinett, Brig. Gen. Paul McDonald. Armor Command. Washington, DC, 1958.
- Q.21 Sillavegno, Paolo Caccia-Dominioni di. Alamein, 1933-1962. London, 1966.
- Q.22 US, War Department. TM-44: Lessons Learned from the Tunisian Campaign. Washington, DC, 1943.

ITALIAN CAMPAIGN, 1943-1944

Secondary Sources:

- R.1 Blumenson, Martin. Anzio: The Gamble That Failed. New York, 1963.
- R.2 _____ . Salerno to Cassino. United States Army in World War II: The Mediterranean Theater of Operations. Washington, DC, 1969.
- R.3 Fisher, Ernest F., Jr. Cassino to the Alps. United States Army in World War II: Mediterranean Theater of Operations. Washington, DC, 1977.
- R.4 Jackson, W.G.F. The Battle for Italy. New York, 1967.
- R.5 Molony, Brig. C.J.C., et al. The Campaign in Sicily, 1943, and the Campaign in Italy, 3d September 1943 to 31st March 1944, Vol. V of The Mediterranean and Middle East. History of the Second World War. London, 1973.
- R.6 Muhm, Col. Gerhard. "Verluste der HG SÜD während der 4. CASSINO-Schlacht und der Schlacht um ROM (11.5 - 2.6.1944)". Unpublished study (1983).
- R.7 US, Department of the Army, Historical Division. Anzio Beachhead. Washington, DC, 1945.
- R.8 US, HQ, Fifth Army, Historical Section. Fifth Army History. 9 vols. N.p., n.d.
- R.9 US, War Department, Historical Division. Fifth Army at the Winter Line. Washington, DC, 1945.

R.10 . Salerno: American Operations from the Beaches to the Volturno. Washington, DC, 1944.

R.11 . Small Unit Actions. Washington, DC, 1946.

R.12 US, War Department, Military Intelligence Division. From the Volturno to the Winter Line. Washington, DC, 1944.

EUROPEAN CAMPAIGN, 1944-1945

Secondary Sources:

S.1 Blumenson, Martin. Breakout and Pursuit. United States Army in World War II: The European Theater of Operations. Washington, DC, 1961.

S.2 Cole, Hugh M. The Ardennes: Battle of the Bulge. United States Army in World War II: The European Theater of Operations. Washington, DC, 1965.

S.3 . The Lorraine Campaign. United States Army in World War II: The European Theater of Operations. Washington, DC, 1950.

S.4 Crosby, Henry Ashton. The Operations of a Task Force: CCB, 4th Armored Division at Baerendorf, Saar Valley, France, 23-24 November 1944. Fort Benning, GA, n.d.

S.5 Dyer, Lt. Col. George. XII Corps, Spearhead of Patton's Third Army. 1947.

S.6 First United States Army. Report of Operations: 1 August 1944-22 February 1945. 9 vols. N.p., n.d.

S.7 Guderian, General Heinz. Panzer Leader. Trans Constantine Fitzgibbon, New York, 1952.

S.8 Hale, Capt. Alfred B., et al. United States Armor Actions in World War II Which Resulted in Excessive Losses or Defeat. Fort Knox, KY, 1955.

S.9 Hewitt, Robert L. Workhorse of the Western Front: The Story of the 30th Infantry Division. Washington, DC, 1946.

S.10 Jackson, Maj. William F., et al. The Employment of Four Tank Destroyer Battalions in the ETO. Fort Knox, KY, 1950.

S.11 Koyen, Capt. Kenneth. The Fourth Armored Division. Munich, 1946.

- S.12 MacDonald, Charles B. The Battle of the Huertgen Forest. New York, 1963.
- S.13 _____ . The Siegfried Line Campaign. United States Army in World War II: The European Theater of Operations. Washington, DC, 1963.
- S.14 Marshall, S.L.A. Bastogne. Washington, DC, 1946.
- S.15 Merriam, Robert E. Dark December. New York, 1947.
- S.16 Nichols, Lester M. Impact. New York, 1948.
- S.17 Thackeray, Donald W., et al. Armored Action in World War II: Use of Armor in Defense. Fort Knox, KY, 1949-50.
- S.18 Toole, Henry D. Lest We Forget: The Defense of St. Vith. Fort Knox, KY, 1964.