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

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Final Report

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

June 1983

VOLUME IV

Part Two: Wars of the 20th Century
Vol. IV: Wars from 1904-1940

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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
wars from 1904-1940

ENGAGEMENTS ANALYZED AND DESCRIBED IN VOLUME IV

The Russo-Japanese War, 1904-1905

The Yalu 30 Apr-1 May 1904

Telissu 14-15 Jun 1904

Liaoyang 25 Aug-3 Sep 1904

The Sha-Ho 5-18 Oct 1904

Sandepu 26-27 Jan 1905

Mukden 21 Feb-10 Mar 1905

The Balkan Wars, 1912-1913

Kumanovo 23-24 Oct 1912

Lüle' Burgas 28 Oct-1 Nov 1912

Prelip 1-2 Nov 1912

Monastir 5 Nov 1912

Adrianople 23-25 Mar 1913

The Russo-Polish War, 1920

Warsaw 14-25 Aug

The Nieman 23-28 Sep

The Spanish Civil War, 1937

Guadalajara-Brihuega 11-18 Mar

The Manchurian Incident, 1938-1939

Changkufeng/Shachaofeng 30/31 Jul 1938

The Manchurian Incident, 1938-1939 (Continued)

Hill 52/Shachaofeng 2-3 Aug 1938

Changkufeng/Hill 52 6-10 Aug 1938

Nomonhan: Opening Engagement 23-29 May 1939

Nomonhan: Soviet Counteroffensive 20-31 Aug 1939

The Russo-Finnish War, 1939-1940

Suomussalmi 11 Dec 1939-8 Jan 1940

World War I

Western Front, 1914

The Frontiers

Alsace-Lorraine I 15-19 Aug

Alsace-Lorraine II 20-21 Aug

The Ardennes 22-23 Aug

The Sambre 22-23 Aug

Mons 23 Aug

La Cateau 26 Aug

Guise 29 Aug

The Marne

The Heights of Nancy 3-8 Sep

The Ourcq I 5 Sep

The Ourcq II 6-9 Sep

The Petit Morin 6-9 Sep

The Two Morins 6-9 Sep

The Marshes of St. Gond 6-9 Sep

Vitry le Francois 6-9 Sep

The Gap of Revigny 6-9 Sep

Western Front, 1914

The Aisne 13-18 Sep

Eastern Front, 1914

Stalluponen 17 Aug

Gumbinnen 20 Aug

Tannenberg 26-29 Aug

Masurian Lakes 9-13 Sep

The Galician Battle (Lemberg)

Krasnik 23-25 Aug

Kamarov 26-30 Aug

The Gnila Lipa 26-30 Aug

Rava Russka 3-10 Sep

Lodz 12-24 Nov

Serbian Front, 1914

The Jadar 12-19 Aug

The Kolubra 3-9 Dec

Western Front, 1915

Eastern Champagne 15 Feb-16 Mar

Neuve Chapelle 10-13 Mar

Ypres II 22 Apr-24 May

Festubert 16-26 May

Loos 25 Sep-14 Oct

Eastern Front, 1915

The Winter Battle (Masuria) 7-21 Feb

Gorlice-Tarnow 2-4 May (Opening phase only)

Italian Front, 1915

First Isonzo 23 Jun-7 Jul

Second Isonzo 18 Jul-3 Aug

Third Isonzo 18 Oct-4 Nov

Fourth Isonzo 10 Nov-2 Dec

Turkish Fronts, 1915

First Dardanelles Landing 25 Apr

Suvla Bay 7-10 Aug

Kut-el-Amara 27-28 Sep

Ctesiphon 22-24 Nov

Western Front, 1916

First Somme 1 Jul-25 Nov

Somme, Fourth Army Attack 1 Jul

Somme, Ovillers 1 Jul

Somme, Bazentin Ridge 14 Jul

Somme, Flers-Courcelette 15 Sep

Turkish Fronts, 1916

Caucasus Winter Offensive 10-16 Jan

Eastern Front, 1916

Lake Narotch 18-26 Mar

1916 Brusilov Offensive 4 Jun-7 Jul

Italian Front, 1916

Fifth Isonzo 11-15 Mar

Asiago (Trentino Offensive) 15 May-10 Jun

Trentino Counteroffensive 16 Jun-9 Jul

Sixth Isonzo (Gorizia) 6-17 Aug

Western Front, 1917

Arras 9-24 Apr

Aisne II 16-30 Apr

Messines 7-14 Jun

Ypres III 31 Jul-7 Dec

Cambrai I 20-26 Nov

Cambrai II 30 Nov-3 Dec

Italian Front, 1917

Tenth Isonzo 12 May-5 Jun

Eleventh Isonzo (Bainsizza) 18 Aug-15 Sep

Twelfth Isonzo (Caporetto) 24 Oct-23 Nov

Turkish Fronts, 1917

Crossing of the Tigris 22-24 Feb

Gaza I 26-28 Mar

Turkish Fronts, 1917 (Continued)

Gaza II 17-19 Apr

Gaza III 31 Oct-6 Nov

Junction Station 13-14 Nov

Western Front, 1918

Second Somme 21 Mar-9 Apr

Phase I (Somme-Peronne) 21-26 Mar

Phase II (Somme-Montdidier) 27 Mar-9 Apr

Lys 9-30 Apr

Yvonne and Odette Positions, Sector Toulon, Verdun 13/14 Apr

Chemin des Dames 27 May-3 Jun

Cantigny 28 May

Belleau Wood 6 Jun

Hill 142 6 Jun

West Wood I 6 Jun

Bouresches I 6 Jun

Hill 192 6/7 Jun

West Wood II 11 Jun

North Wood I, The Hunting Lodge 12 Jun

Bouresches II 13 Jun

North Wood II 21 Jun

North Wood III 23 Jun

North Wood IV (Final Assault) 25/26 Jun

Vaux 1/2 Jul

La Roche Wood East 1/2 Jul

La Roche Wood West 1/2 Jul

Western Front, 1918 (Continued)

Noyon-Montdidier 9-13 Jun
Champagne-Marne 15-17 Jul
Aisne-Marne I 18-19 Jul
 Aisne-Marne I, Missy aux Bois Ravine 18 Jul
 Aisne-Marne I, Breuil 18 Jul
 Aisne-Marne I, St. Amand Farm 18 Jul
 Aisne-Marne I, Beaurepaire Farm 18 Jul
 Aisne-Marne I, Cravancon Ferme-Chaudun 18 Jul
 Aisne-Marne I, Chaudun 18 Jul
Aisne-Marne II 20 Jul-1 Aug
 Aisne-Marne II, Berzy le Sec 21 Jul
 Aisne-Marne II, Buzancy Ridge 21 Jul
Reduction of the Amiens Salient 8 Aug-4 Sep
 Picardy, 1918, Phase I 8-11 Aug
 Picardy, 1918, Phase II 21 Aug-4 Sep
St. Mihiel 12-15 Sep
 Lahayville-Bois de Lamarche 12 Sep
Meuse-Argonne 26 Sep-11 Nov
 Meuse-Argonne Phase I 26 Sep-3 Oct
Blanc Mont I 3-6 Oct
 Medeah Farm 3 Oct
 Essen Hook 3 Oct
 Blanc Mont Ridge 3 Oct
 Sommeepy Wood 3 Oct
Blanc Mont II 3 Oct

Western Front, 1918 (Continued)

Meuse-Argonne Phase II 4-31 Oct

Exermont-Montrefagne 4 Oct

Mayache Ravine 4 Oct

La Neuville le Comte Ferme 4 Oct

Ferme des Granges-Fleville 4 Oct

Hill 212 5 Oct

Bois de Boyon-Montrefagne 5 Oct

Hill 272 9 Oct

Meuse-Argonne Phase III 1-11 Nov

Remilly-Aillicourt 6/7 Nov

Hill 252-Pont Maugis 7 Nov

Italian Front, 1918

Asiago (Piave III) 15-22 Jun

Turkish Fronts, 1918

Megiddo 19-20 Sep

1. IDENTIFICATION
War: Russo-Japanese War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
The Yalu, Korea	A 30 Apr-1 May D 1904	Yalu	Jap First Army Russ Army	Tanemoto Kuroki Zasulich	2	32.0
Telissu, Manchuria	A 14-15 Jun 1904 D	Manchurian	Jap Second Army Russ Army	Oku Stakelberg	2	55.0
Liaoyang, Manchuria	A 25 Aug-3 Sep D 1904	Manchurian	Jap Army Group Russ Army Group	Oyama Kuropatkin	10	42.0
The Sha-Ho, Man- churia	A 5-18 Oct 1904 D	Manchurian	Russ Army Group Jap Army Group	Kuropatkin Oyama	14	64.0
Sandepu, Man- churia	A 26-27 Jan 1905 D	Manchurian	Russ Army Group Jap Army Group	Grippenberg Oyama	2	24.0
Mukden, Man- churia	A 21 Feb-10 Mar D 1905	Manchurian	Jap Army Group Russ Army Group	Oyama Kuropatkin	18	64.0
					/	

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Russo-Japanese War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
The Yalu	A D PD	RgM RM	DST ST	Spt ST	N N	-- --	-- --
Telissu	A D H/PD	RgM RM	DST ST	ST FT	N N	-- --	-- --
Liaoyang	A D P/FD	RgM RM	DST WLC	ST WT	N N	-- --	-- --
The Sha-Ho	A D H/PD	FM FM	WT DST	WT N	-- --	-- --	-- --
Sandepu	A D PD	FM FM	WT DST	WT N	-- --	-- --	-- --
Mukden	A D P/FD						

3. STRENGTHS AND COMBAT OUTCOMES
War: Russo-Japanese War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
The Yalu	A 56,000 D 18,000	1,800 2,000	132 48	1,100 2,500	1.0 6.9	0 21	-- 21.9	X	3.2 --
Telissu	A 36,000 D 38,000	2,000 3,000	108 94	1,200 3,800	1.7 5.0	0 16	-- 8.5	X	4.8 --
Liaoyang	A 135,000 D 150,000	5,000 15,000	552 542	17,500 16,500	1.3 1.1	0 ?	-- ?	X	2.5 --
The Sha-Ho	A 210,000 D 145,000	18,000 7,000	928 612	46,000 17,000	1.6 0.8	45 14	0.3 0.2	X	1.7 --
Sandepu	A 58,000 D 40,000	? ?	? ?	13,000 9,400	11.2 11.8	? ?	? ?	X	N --
Mukden	A 314,000 D 310,000	9,000 15,000	892 1,192	41,000 96,500	0.7 1.73	0 58	-- 0.3	X	2.7 --

4. INTANGIBLE FACTORS
War: Russo-Japanese War

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 Acco.4.
The Yalu	A D	C 0	x	C	C	N	N	C	x	x	3.2 --	8 2
Telissu	A D	C 0	x	C	C	N	x	C	x	x	4.8 --	9 2
Liaoyang	A D	C 0	x	C	C	N	N	C	x	x	2.5 --	9 4
The Sha-Ho	A D	C 0	x	C	C	N	N	C	N	x	1.7 --	5 4
Sandepu	A D	C 0	x	C	C	N	N	C	x	x	N --	5 6
Mukden	A D	C 0	x	C	C	N	N	C	x	x	2.7 --	9 7

6. FACTORS AFFECTING OUTCOME
War: Russo-Japanese War

Engagement	Force Quality	Reserves	Mobility Superiority	Force Prepon-derance	Weather	Terrain, Roads	Cascade-ship	Planning	Surprise	Maneuver, Mass	Logistics	Fortifi-cations	Depth	
The Yalu	A D	N	N	N	N	N	X	N	N	N	N	X	X	N
Telissu	A D	N	N	N	N	N	X	X	X	N	N	X	X	N
Liaoyang	A D	N	N	N	N	N	X	X	X	N	N	X	X	N
The Sha-Ho	A D	N	N	N	N	N	X	X	X	N	N	X	X	N
Sandepu	A D	N	N	N	N	N	X	X	X	N	N	X	X	N
Mukden	A D	N	N	N	N	N	X	X	X	N	N	X	X	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: Russo-Japanese War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack	Plan and Maneuver	Success		
The Yalu	A D	F D	-- --	x --	B, Ps MD	
Telissu	A D	F D	E(RF) --	x --	B, Ps MD	
Liaoyang	A D	F D/O	EE --	x --	P, Ps MD	
The Sha-Ho	A D	F D/O	-- --	x x	S	
Sandepu	A D	F D/O	E(LP) --	x --	R, S --	
Mukden	A D	F D	E(RF) --	x --	P, Ps MD	

THE RUSSO-JAPANESE WAR

The Yalu, 30 April-1 May 1904

The Japanese First Army, commanded by General Tamemoto Kuroki, landed at Chemulpo, Korea (mid-February 1904), and advanced north toward the Yalu River and Manchuria to cover projected Japanese land operations against the Russian fortress of Port Arthur. The Russian General Zasulich, with the advanced guard of the main Russian field force in Manchuria, held the line of the Yalu from the mouth of the river to a point about 30 kilometers inland.

Zasulich, whose force was weak in comparison to Kuroki's army, attempted to contest the Japanese crossing of the Yalu and was easily beaten and routed by Kuroki. Kuroki continued his advance into Manchuria.

Significance: Zasulich foolishly underestimated his enemy and inflated the fighting qualities of his own troops. The Yalu was the first major land engagement of the war, and the Japanese, by winning an overwhelming victory, demonstrated their fighting prowess.

Sources: A.1; F.1; F.2

THE RUSSO-JAPANESE WAR

Telissu (Wafangkou), 14-15 June 1904

As a result of a direct order from the Imperial Court at St. Petersburg, the Russian General Stakelberg advanced south from Manchuria with a small force in an attempt to relieve besieged Port Arthur. The Japanese barring the way to Port Arthur were much superior to Stakelberg's force, and when he encountered them just south of the town of Telissu he stopped and entrenched. The Japanese attacked immediately, probing Stakelberg's front and attempting to envelop his right flank. Stakelberg's scouts failed him, and he was, for a critical period, unaware of the Japanese envelopment. The Russians were almost trapped, but Stakelberg avoided annihilation by utilizing rail transport to facilitate a hasty withdrawal.

Significance: The ill-conceived Russian attempt to relieve Port Arthur failed. The Japanese pursued but were beaten off by a Russian covering force under General Zarubayev.

Sources: A.1; F.1; F.2.

THE RUSSO-JAPANESE WAR

Liaoyang, 25 August-3 September 1904

Japanese Field Marshal Iwao Oyama, commanding three armies, drove northward into Central Manchuria toward the Russian-held fortress city of Liaoyang, an important post on the rail line connecting the Russian Manchurian base of Mukden and the besieged fortress of Port Arthur on the Yellow Sea. The Russian armies defending Liaoyang, commanded by General Alexei Kuropatkin, were entrenched along a 42-kilometer front.

The Japanese made powerful assaults all across the Russian front and, at the same time, attempted to drive in the Russian flanks, particularly the Russian right. The Russians successfully resisted the numerous Japanese assaults, but Kuropatkin twice ordered withdrawals to rear positions and finally, on 3 September, ordered a general retreat toward Mukden.

Significance: The Japanese, despite numerical inferiority, succeeded in dislodging the Russians from a powerful position. The aggressiveness of the Japanese and Kuropatkin's pusillanimous conduct of the battle combined to deliver victory to the Japanese.

Sources: A.1; F.1; F.2.

THE RUSSO-JAPANESE WAR

The Sha-Ho, 5-18 October 1904

The Russian army in Central Manchuria, commanded by General Alexei Kuropatkin, was reinforced until it was superior in strength to the Japanese army group of Field Marshal Iwao Oyama, which it faced along the line of the Sha-Ho River. Driven to action by the increasingly desperate situation of the Port Arthur garrison, Kuropatkin decided to attack Oyama on a very wide front (64 kilometers) while the balance of strength was in his favor. The main Russian attack, however, was concentrated against Kuroki's First Army on the Japanese right. Kuroki's army dug in to resist the Russian attack and, by hard fighting, held. Oyama, in the meantime, counterattacked in force against the weakened Russian center. The Japanese attack was so serious that Kuropatkin had to call off his attack on Kuroki in order to reestablish his center (13 October). The battle then lessened in intensity for a period, but during 16-17 October both sides renewed their efforts -- unsuccessfully. Finally, deadlocked and exhausted, both armies dug in for the winter.

Significance: Kuropatkin's attempt to crush Oyama had been thwarted by Oyama's skillful conduct of the defensive-offensive battle.

Sources: A.1; F.1; F.2.

THE RUSSO-JAPANESE WAR

Sandepu, 26-27 January 1905

In late January 1905, Kuropatkin took the offensive in an effort to crush Oyama's army group before General Maresuke Nogi's Third Army, which had been besieging the Russian fortress of Port Arthur (Port Arthur surrendered to the Japanese on 2 January), arrived in Central Manchuria to reinforce Oyama. The main Russian attack was made by General Gripenberg's Second Manchurian Army against the Japanese left, which rested on the fortified village of Sandepu. The Russians attacked in a snowstorm and won some slight success, but they were unable to budge the Japanese from their main defensive line. Oyama countered by extending his left and threatening to outflank the Russians. Finally, after two days of heavy fighting, the Russians were driven back.

Significance: The Russians, enjoying a temporary numerical superiority, had failed to crush Oyama; indeed, Kuropatkin had been fought to a standstill, and the dispositions of the armies on the Central Manchurian front were hardly affected by the result of the battle. The failure had a depressing effect on the morale of the Russian troops.

Sources: A.1; F.1; F.2.

THE RUSSO-JAPANESE WAR

Mukden, 21 February-10 March 1905

With springtime imminent, both armies on the extensive Mukden front in central Manchuria made preparations to assume the offensive. The Japanese army, however, struck first, opening the climactic Battle of Mukden with a series of frontal attacks on the Russian lines while at the same time attempting to envelop the Russian right flank. At the end of the first day's fighting the Russian right wing had been bent back so far that it faced west, instead of south. Kuropatkin subsequently shifted reserves to his threatened right, and attack and counterattack followed in quick succession. The Japanese envelopment was stopped in two weeks of violent fighting.

Oyama, on 6 March, renewed his attempt at enveloping the Russian right, reinforcing the enveloping force. More violent combat followed, and the Russians were once again forced to give ground (6-8 March). Kuropatkin, sensitive to the threat to his line of communications, ordered a withdrawal to Tieling and Harbin. This movement was skillfully executed, although the Russians had to abandon much material.

Significance: The Russian defeat ended major land operations in the Manchurian theater. Mukden was, historically, the greatest battle fought in modern times, until dwarfed by the Battle of the Marne (1914).

Sources: A.1; A.7 F.1; F.2.

1. IDENTIFICATION
War: The Balkan Wars

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Kumanovo, Bur. Turkey	A 23-24 Oct 1912 D	Macedonia, 1912	Serb First Army Tk Army of Macedonia	Gen Putnik Zehki Pasha	2	30.0
Isle' Burgas, Bur. Turkey	A 28 Oct-1 Nov 1912 D	Thrace, 1912	Bul Army Group Tk Army of the East	Gen Dimitriev Abdalla Pasha	5	32.0
Prelip, Bur. Turkey	A 1-2 Nov 1912 D	Macedonia, 1912	Serb First Army Tk Army of Macedonia	Gen Putnik ?	2	22.0
Monastir, Bur. Turkey	A 5 Nov 1912 D	Macedonia, 1912	Serb Army Group Tk Army of Macedonia	Gen Putnik Kara Said Pasha	1	37.0
Adrianople, Bur. Turkey	A 23-25 Mar 1913 D	Thrace, 1913	Bul Second Army (+) Tk Adrianople Garrison.	Gen Ivarhoff Shukri Pasha	3	80.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: The Balkan Wars

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Kumanovo	A D	H/D	RgM	WHT	FT	N	--	N
Lille' Burgas	A D	H/PD	RM	DST	FT	N	--	N
Prelip	A D	P/FD	RgM	WHT	FT	N	--	N
Monastir	A D	H/PD	RgM/RM	WHT	FT	N	--	N
Adrianople	A D	FD	RgM	WHT	Spt	Y	X	Substantial

3. STRENGTHS AND COMBAT OUTCOMES

War: The Balkan Wars		Strength				Air				Arty				Aircraft			
Engagement		Personnel Total	Total	Armor Inf.	ABT	Arty pieces	Air Sorties	Battle Casualties	Armor Losses	Loss	Pieces	Total	\$/Day	Total	\$/Day	Total	Sorties/Day
Kumanovo	A	103,000	0	--	--	180	0	5,000?	2.4	0	--	?	120	--?	0	0	--
	D	110,000	0	--	--	?	0	20,000	2.9	0	--	?	--	0	0	0	--
Silistra	A	140,000	0	--	--	?	0	30,000	5.5	0	--	?	--	0	0	0	--
	D	110,000	0	--	--	?	0	3,000	3.8	0	--	?	--	0	0	0	--
Prelip	A	40,000	0	--	--	72	0	3,000	3.0	0	--	60	?--	0	0	0	--
	D	50,000	0	--	--	?	0	5,000	4.2	0	--	0	--	0	0	0	--
Monastir	A	120,000	0	--	--	?	0	20,000	50.0	0	--	70	87.5	0	0	0	--
	D	40,000	0	--	--	80	0	9,300	2.0	0	--	?	--	0	0	0	--
Adrianople	A	152,000	0	--	--	444	0	15,000	6.7	0	--	250	33.3	0	0	0	--
	D	75,000	0	--	--	250	0										

4. INTANGIBLE FACTORS
War: The Balkan Wars

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.
Kumanovo	A D	x x	C	O	N	N	C	x	x	x	?	8 5
Lille' Burgas	A D	x x	C	N	x	N	C	x	x	x	?	6 3
Prelip	A D	x x	C	O	N	x	C	x	x	x	?	7 5
Monastir	A D	x x	C	N	N	x	C	x	x	x	6.0	7 5
Adrianople	A D	x x	C	O	N	x	C	x	x	x	?	8 4

6. FACTORS AFFECTING OUTCOME

War: The Balkan Wars

Engagement	Air Superiority	Mobile Superiority	Reserves	Force Quality	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Maneuver, Mass, Nar-row Front	Logistics	Portfli-Catitions	Depth
Kumanovo	A D	X X	N N	N N	N N	N N	N N	X X	N X	N X	X X	N N	N N	N N
"Lule" Burgas	A D	X X	N N	N N	N N	N N	N N	N X	N X	N X	X X	N N	N N	N N
Prelip	A D	X X	N N	N N	N N	N N	N N	X X	N N	N N	X X	N N	N N	N N
Monastir	A D	X X	N N	N N	N N	N N	N N	N X	N X	N X	X X	N N	N N	N N
Adrianople	A D	X X	N N	N N	N N	N N	N N	N X	N X	N X	X X	N N	N N	N N

7. COMBAT FORMS AND RESOLUTION OF WAR

War: The Balkan Wars

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Kumanovo	A D	F D/O	-- --	-- --	X	P WD
Ille' Burgas	A D	F, E(LF) D	-- --	-- EE	X X	P WD
Prelip	A D	F D/O, F	-- --	-- FE	X	P WD
Monastir	A D	E(LF), F D/O, F	-- --	-- --	X	B, Ps WDL
Adrianople	A D	F D	-- --	-- --	X	B WD

THE BALKAN WARS

Kumanovo, 23-24 October 1912

In 1912, hoping to destroy Turkish power in the Balkans and to increase their own territorial holdings, Bulgaria, Serbia, and Greece formed a military alliance against Turkey, which was already at war with Italy. At the opening of hostilities, the Serbian First Army advanced into Turkish-occupied Macedonia where it met the Turkish Army of Macedonia at Kumanovo on 22 October. The Serbians attacked on the 23d with the Morava Division on the right, the Drina Division in the center, and the Danube Division on the left. The Drina Division was held up by difficult terrain and did not participate in the fighting of the 23d. The Turks, finding the Serbian flanks exposed, counterattacked, concentrating against the Danube Division. Severe fighting took place on the Serbian left flank, where the Turks put great pressure on the Danube Division. On the Serbian right flank the Morava Division had little difficulty in repelling the Turkish attacks. The fighting on the Serbian left flank lasted into the night, but, in the morning, the Drina Division arrived and took its position in the center of the Serbian line. With the arrival of the Drina Division and elements of the Timoc Division and Danube Division (second class), the Serbians took the offensive. The Turks held out most of the morning but were forced to retreat in the afternoon.

Significance: Kumanovo showed the superiority of the Serbians over the Turks. The Turks were forced to fall back on the Babuna Pass, near Prelip.

Sources: A.7; G.3.

THE BALKAN WARS

"Lule' Burgas, 28 October-1 November 1912

In late October 1912 a Bulgarian army group commanded by General Radko Dimitriev advanced into the Turkish European province of Thrace. A Turkish army group commanded by Abdalla Pasha met the Bulgars in a series of fiercely contested engagements (22-25 October) and was driven back to the line Lule' Burgas - Bunar Hisar, where it regrouped. The Bulgarian Second Army, on the right, invested Adrianople, while the other two Bulgarian armies wheeled to the east against the position of the Turkish field armies.

The Bulgarian battle plan envisioned a strong frontal attack against the Turkish position followed by an envelopment of the Turkish left (southern) flank, intended to drive the Turks off their line of communications to the south and Istanbul. The Bulgarian attack, however, when it developed on 28 October, was poorly coordinated. On the first day only the Bulgarian left engaged the Turks. On the second day of the attack the fighting became general, but the Bulgarian units again failed to coordinate their efforts, and the attacks were delivered piecemeal. Nonetheless, the Bulgarian right was successful in turning the Turkish left, and the Turks were forced to withdraw in some confusion. The Bulgarians did not pursue. The Turks subsequently reorganized behind the permanent fortifications of the Chatalja Line, between the Black Sea and the Sea of Marmora, protecting Istanbul.

Significance: The Bulgarian victory at Lule' Burgas resulted ultimately in the Turkish loss of Adrianople and most of Thrace to Bulgaria. The Bulgarians, however, were unsuccessful in their attempts to breach the Chatalja Line, and the two powers concluded an armistice on 3 December.

Sources: A.7; G.5; G.6.

THE BALKAN WARS

Prelip, 1-2 November 1912

After its defeat at Kumanovo, the Turkish Army of Macedonia took up a fortified position ten kilometers north of Prelip. The Serbian Morava Division attacked the Turkish position on 1 November, advancing against it in three columns. The Serbs, however, were stopped after making small gains. Early the next day the Turks tried to retake the ground they had lost the previous day but were repulsed. The Serbian Drina Division joined the Morava Division on the 2d and sent two regiments to attack the Turkish center and two to turn the Turkish left flank. At the same time the Turkish right flank was being enveloped by elements of the Morava Division. The Turks, finding themselves threatened by a double envelopment, retreated southward from Prelip.

Significance: The Turks delayed the Serbian advance but were forced from their position by Serbian tactics of fire and movement.

Sources: A.7; G.3.

THE BALKAN WARS

Monastir, 5 November 1912

In late October and early November 1912 a Serbian army group commanded by General Radomir Putnik defeated Turkish covering forces at Kumanovo in the narrow Vardar River Valley and pressed southward toward Skoplje, which the Turks evacuated. The Turkish forces retreated to a strong position at Monastir, where, reinforced to a strength of 40,000, they made a stand against the Serbs.

At Monastir a Serb division impetuously stormed commanding ground to threaten an envelopment of the Turkish left. The Turks met this threat with a counterattack, using troops drawn from the center of their line to reinforce the counterattack force. The Serbs on the height were almost annihilated. Meantime, a Serbian frontal attack against the weakened Turkish center broke through. This setback, combined with the threat of an advance by Greek forces from the south, led to the collapse of Turkish resistance. About 20,000 Turks were killed or captured in the pursuit. The remainder withdrew to the fortress of Yannina, where they were besieged by Greek forces.

Significance: The overwhelming Serb victory at Monastir effectively ended Turkish resistance in the Vardar River Valley and facilitated subsequent Allied siege operations against Salonika and other Turkish fortresses in the coastal region.

Sources: A.7; G.6.

THE BALKAN WARS

Adrianople, 23-25 March 1913

The Turkish stronghold of Adrianople in Thrace had been besieged by the Bulgarian Second Army and two Serbian corps since the early days of the First Balkan War. An attack was planned to break through the Turkish fortifications. At 1300 hours on 23 March an Allied artillery bombardment was begun against all defensive sectors except the northeast sector. The purpose of the bombardment was to mislead the fortress garrison, since the Allies intended to make their main attack against the northeast sector. The artillery preparation continued until 2000 hours, when two Bulgarian divisions advanced from the east and were stopped by Turkish fire coming from the forts in the area. At 0500 hours on the 24th the northeast sector was subjected to intense Allied artillery fire, forcing the Turks in the advanced positions to flee to the forts nearby. By 0700 hours all Turkish guns in the northeast sector had been silenced, but a thick fog developed in the area, and this allowed the Turks to recover and inflict heavy casualties on the advancing Allied infantry. The attack bogged down temporarily. After nightfall Bulgarian pioneers cut passages in the Turkish wire. Forty passages were cut with light losses. At 1400 hours on the 25th the final assault began, and the forts in the northeast sector were taken. The fortress garrison surrendered.

Significance: Careful planning, a ruse de guerre, and troop quality allowed the "impregnable" fortress of Adrianople to be taken fairly quickly -- though at great cost to the attacker.

Sources: G.4.

1. IDENTIFICATION
War: Russo-Polish War, 1920

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Marsaw, Poland	A 14-25 Aug 1920 D	Polish Counter- offensive	Pol Army Group Sov Army Group	Pilsudski Tukhachevski	12	335.0
The Nieman, USSR	A 23-28 Sep 1920 D	Polish Offensive, Sep-Oct 1920	Pol Army Group Sov Army Group	Pilsudski Tukhachevski	6	320.0
War: The Spanish Civil War						
Guadalajara- Brihuega, Spain	A 11-18 Mar 1937 D	Madrid, 1937	It Vol Corps Sp Rep Forces	Gen Roatta Gen Miaja	5 (combat)	12.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Russo-Polish War, 1920

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Warsaw	A D	HD	FB/RM	ST	Y	X	complete	N
The Nienan	A D	H/PD	RM	DST/MLT	FT	--	--	N

War: The Spanish Civil War

Guadalajara-Brihuega	A D	PD	FB/RB	WLC/MHC	SPT	Y	X	substantial
								x

3. STRENGTHS AND COMBAT OUTCOMES

War: Russo-Polish War, 1920

Engagement	Strength			Air			Arty Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	Artillery Pieces	Battle Casualties Total	Air Sorties Total	Armor Losses Total	\$/Day	Total \$/Day	Arsenal Total	Sorties Total	Aircraft Losses	
Warsaw	A 160,000	1	--	179	?	50,000	2.6	0	--	?	--	
	D 200,000	?	?	598	?	150,000	6.3	?	--	231	3.2	
The Nieman	A 80,000	?	?	220	?	?	?	?	--	?	--	
	D 108,500	?	?	571	?	50,000	7.7	?	--	160	4.7	

War: The Spanish Civil War

Guadalajara-Brihuega	A 52,000	50	?	?	230	200	6,460	2.5	15	6.0	10	1.7
	D 100,000	70	?	?	?	240	6,660	1.3	21	6.0	0	1.8

4. INTANGIBLE FACTORS
War: Russo-Polish War, 1920

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.
Warsaw	A D	x x	C	N	N	x	C	x	x	x	30.0	9 3
The Nieman	A D	x x	C	N	N	x	N	C	x	x	20.0	9 4
War: The Spanish Civil War												
Guadalajara-Brihuega	A D	C C	x	N	O	N	N	C	N	x	1.4 7	4 7

6. FACTORS AFFECTING OUTCOME

War: Russo-Polish War, 1920

Engagement			Depth										
			Fortifi-cations		Logistics		Nar-row Front Mass, Maneuver, Surprise		N		N		
		A	D	A	D	N	N	N	N	N	N	N	N
Warsaw		x		x		N	N	N	N	N	N	N	N
The Nieman		x		x		N	N	N	N	N	N	N	N
Guadalajara-Brihuega	A	N	x	N	x	x	x	x	x	x	x	x	x
	D												

War: The Spanish Civil War

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: Russo-Polish War, 1920

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Warsaw	A D	E(LF), F D	-- --	X B, Ps WDL
The Nieman	A D	E(RR) D/O	F --	X B, Ps WDL
War: The Spanish Civil War				
Guadalajara-Brihuega	A D	F D/O, F	E (LF) E (LF)	X P, WD B, Ps

THE RUSSO-POLISH WAR

Warsaw, 14-25 August 1920

In mid-May 1920 the Soviet-Russian army group facing Polish forces east of Warsaw, initiated an offensive on both sides of the Prypet Marshes, forcing the Poles back on Warsaw and Lvov and threatening the Polish capital. However, Polish commander in chief, General Josef Pilsudski, formulated a masterful counterattack plan. Pilsudski, mindful of the fact that the Russians were advancing rapidly on a wide front and were living off the land, planned to counterattack the weak Russian center south of Warsaw, pierce it, and then swing northward to envelop the left of the group of Russian armies advancing on the capital from the northeast.

On 14 August the Polish counterattack force struck eastward from Deblin, approximately 80 kilometers south of Warsaw, and broke through the Soviet center, shattering the left wing of the Red Sixteenth Army. The Poles advanced along the axis of the Warsaw-Brest Litovsk railway. Simultaneously, reorganized Polish forces on the line north of Warsaw made frontal attacks advancing against desperate Soviet resistance. The Polish counterattack force then turned north, threatening in turn the Soviet Third, Fifteenth, Sixteenth, and Fourth armies, all under the overall command of Marshal Mikhail N. Tukhachevski. Pilsudski ignored Red Army elements south of his penetration. Tukhachevski's forces disintegrated under the pressure of the Polish attacks. Some 30,000 fled north into East Prussia, where they were disarmed by the Germans; the remainder fled eastward, closely pursued.

Significance: Although Tukhachevski managed to rally, regroup, and reinforce his forces in late August, the Polish victory at Warsaw was a decisive check to Soviet Communism's first overt westward thrust. In this sense Warsaw ranks among the decisive battles of the 20th century.

Sources: A.7; H.2; H.3; H.4.

THE RUSSO-POLISH WAR

The Nieman, 23-28 September 1920

Following the successful Polish Wieprz counteroffensive the shattered Soviet army group of Marshal Mikhail N. Tukhachevski fell back to White Russia, where it regrouped on a new front west of the Nieman and Szczara Rivers and east of the Bug. The new Soviet front line, which was some 320 kilometers long, ran generally southeast from Grodno, which was its northern anchor, to the Prypet Marshes in the south. The Russian units were quickly reorganized and rearmed, and Tukhachevski began to plan a new offensive.

The Polish commander in chief, General Josef Pilsudski, ordered his armies to resume the offensive against the Tukhachevski's group on 23 September, following pre-offensive operations during 20-22 September. Pilsudski planned to envelop the right flank and rear of the Red armies at Grodno, cutting their line of retreat to the east and driving them on to the Prypet Marshes, where they would be destroyed. While the Polish turning movement was being made, Polish holding attacks would be made all along the Soviet front.

The Polish attacks were launched on 23 September, and after hard fighting punctuated by Red counterattacks, achieved success by the 26th, when the Red armies began withdrawing all along the front. The Soviet route of retreat was cut at Lida, but the Red troops fought their way through and by the Polish blocking force, which was too weak to prevent their passage, but inflicted severe casualties on the Reds and captured large numbers of men and great quantities of material. The Polish forces were exhausted but pursued the Reds eastward to the borders Pilsudski thought necessary for the new Polish frontier.

Significance: The Polish victory at the Nieman completed the defeat and rout of the Red armies begun with the Battle of Warsaw. A Polish-Soviet armistice was concluded on 18 October and the negotiations toward a peace treaty were initiated.

Sources: A.7; H.2; H.3; H.4.

THE SPANISH CIVIL WAR

Gaudalajara-Brihuega, 11-18 March 1937

In November 1936 Spanish Nationalist forces under the overall command of General Emilio Mola besieged Madrid, a stronghold of the Spanish Republicans. Incessant fighting in the Madrid region continued until February 1937, when a brief lull occurred. Neither side had been able to gain an advantage. The Nationalists resumed the offensive on 11 March when the Italian Volunteer Corps, commanded by General Mario Roatta, made a surprise attack against the Republican defenses on the Plateau of Guadalajara, about 60 kilometers northeast of Madrid. Ironically, the sector attacked by the Italians was manned largely by the international brigades, foreign leftist "volunteers", including Italians, who had enlisted in the armed forces of the Republicans.

The Italian Corps, which consisted of four divisions and attached armor, achieved substantial surprise and made significant gains on the first day of the offensive. The Italian right, attacking along the axis of the Strada di Francia, penetrated the Republican lines to a depth of seven kilometers and threatened to take the town of Torija. The Italian left advanced two kilometers into the Republican defenses along the Brihuega-Torija road. Republican forces between the Italian pincers, however, held fast. During 12-14 March the Republicans fought successfully to prevent the Italians from enlarging their narrow penetrations. Cold, wet weather confined the Italians largely to the two main road axes, where they were attacked repeatedly by the Republican air force, which enjoyed complete air superiority. On 18 March, following a three-day pause, the Republicans counterattacked, concentrating their efforts against the Italian left, southwest of Brihuega. The Italians, demoralized by the continuous attacks of the Republican air force and their lack of progress since the 11th, collapsed and withdrew in disorder. The Republicans captured Brihuega and much war material in the pursuit.

Significance: The defeat of the Italian offensive was widely hailed in the leftist press as European fascism's first defeat. The Nationalists, again frustrated in their attempt to take Madrid, turned their attention to other fronts.

Sources: I.1; I.2.

1. IDENTIFICATION
War: The Manchurian Incident, 1938-1939

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Changkufeng/ Shachao feng, Manchuria	A 30/31 Jul 1938 D	Changkufeng	Jap I/75th Inf Rgt. (+) Sov 59th Border Guard Unit (-)	Col Sato Col Grebennik	1	2.0
Hill 52/Shachao- feng, Manchuria	A 2-3 Aug 1938 D	Changkufeng	Sov 40th Rifle Div (-) (+) Jap 19th Inf Div (-)	Marshal Blucher Lt Gen Suetaka	2	2.0
Changkufeng/ Hill 52, Manchuria	A 6-10 Aug 1938 D	Changkufeng	Sov Special Far East- ern Army (-) Jap 19th Inf Div (+)	Marshal Blucher Lt Gen Suetaka	5	3.0
Nononhan: Opening Engage- ment, Manchuria	A 23-29 May 1939 D	Nononhan	Jap 64th Inf Rgt (-) (+) Sov 11th Tk Bde (-) (+)	Col Yamagata Maj Bykov	2	15.0
Nononhan: Soviet Counter- offensive, Manchuria	A 20-31 Aug 1939 D	Nononhan	Sov First AG Jap Sixth Army (-)	Gen Zhukov Lt Gen Ogiyu	12	45.0
War: Russo-Finnish War, 1939-1940						
Suomussalmi, Finland	A 11 Dec 1939- D 8 Jan 1940	Finland 1939-1940	Fin 9th Inf Div Sov 163 Ukrainian Div, 44th Mot Div	Col Siilasvuo Gen Selentsov	29	32.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: The Manchurian Incident, 1938-1939

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Changkufeng/Shachao-feng	A D PD	RgB/RB	NOT/MLT	ST	Y	X	minor	N
Hill 52/Shachao feng	A D H/PD	RgB/RB	DST/DOT	ST	N	--	--	X
Changkufeng/Hill 52	A D PD	RgB/RB	DST	ST	N	--	--	X
Nononhan: Opening Engagement	A D HD	RB	DST	Spt	N	--	--	X
Nononhan: Soviet Counteroffensive	A D PD	RB	DST/DST	ST	Y	X	substantial	X

War: Russo-Finnish War, 1939-1940

Suomussalmi	A D HD	RM/RW	W/C	WT	Y	X	substantial	X
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3. STRENGTHS AND COMBAT OUTCOMES

War: The Manchurian Incident, 1938-1939		Strength				Battle Casualties				Arty Pieces Lost		Aircraft Losses	
Engagement	Personnel Total	Total Lt.	Armor MBT	Arty Pieces	Air Sorties	Total	4/Day	Total	4/Day	Total	4/Day	Total	Sorties/Day
Changkufeng / Songlufeng	A 1,410 D 1,460	0 20	0 ?	14 20	0 0	178 350	12.6 24.0	0 17	-- 85.0	0 ?	-- ?	0 0	-- --
Hill 52/Shachaofeng	A 4,000 D 3,010	30 0	?	40 0	103 0	400 41	5.0 0.7	15 0	25.0 --	?	?	0 0	-- --
Changkufeng / Hill 52	A 20,000 D 8,000	200 0	?	100 0	407 37	4,000 0	4.0 1,100	50 2.8	50 0	?	?	6 0	0.3 --
Nononhan: Opening Engagement	A 1,300 D 1,228	10 0	0	4 0	40 ?	278 250	10.7 10.2	10 0	50.0 --	0 -	0 -	0 0	-- --
Nononhan: Soviet Counteroffensive	A 57,000 D 30,000	498 120	?	216 ?	?	10,000 11,500	1.5 3.2	?	?	?	?	51 ?	?

War: Russo-Finnish War, 1939-1940

Suomussalmi	A 9,000 D 29,954	9 55	9 ?	8 96	?	2,670 19,600	1.9 2.3	0 44	-- 2.8	0 96	-- 3.4	?	-- ?
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4. INTANGIBLE FACTORS

War: The Manchurian Incident, 1938-1939

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momentum	Intelligence	Technology	Initiative	Victor	Distance Advanced (Km/Day)	Mission Accompl.
Changkufeng/ Shachao feng	A D	x 0	C	N	N	N	N	N	x	x	0.5	8 6
Hill 52/ Shachao feng	A D	x x	C	N	N	N	N	N	x	x	0	4 6
Changkufeng/ Hill 52	A D	x x	C	N	N	N	N	N	x	x	0.2	5 6
Nononhan: Opening Engagement	A C D	C N	C	N	N	N	N	N	x	x	3.7	5 5
Nononhan: Soviet Counter-D offensive	A C D	C N	C	N	x	N	0	N	x	x	1.8	7 4
War: Russo-Finnish War, 1939-1940												
Suomussalmi	A D	x x	x	x	N	x	C	x	x	x	0.0	9 1

6. FACTORS AFFECTING OUTCOME

War: The Manchurian Incident, 1938-1939

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Roads Terrain	Ship Leader-	Planning Surprise	Front Mass, Nar-	Logistics	Portifi-cations	Depth
Changkufeng/Shachaofeng	A D	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	O N	N
Hill 52/ Shachaofeng	A D	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N
Changkufeng/Hill 52	A D	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N
Nononhan: Opening Engagement	A D	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N
Nononhan: Soviet Counteroffensive	A D	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N
War: Russo-Finnish War, 1939-1940	A D	X	X	X	X	X	X	X	X	X	X	X	N
Suomussalmi	A D	X	X	X	X	X	X	X	X	X	X	X	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: The Manchurian Incident, 1938-1939

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Changkufeng/Shachaofeng	A D	E(LF), F D/O	F --		X	P WDL
Hill 52/Shachaofeng	A D	EE D	--		X	R, WD
Changkufeng/Hill 52	A D	F, E (RF) D/O	E (LF) --		X	--
Nononhan: Opening Engagement	A D	F, EE D/O	WD --		X	R, P, S
Nononhan: Soviet Counteroffensive	A D	F, E(RF) D/O	WD E(LF) --		X	P, S
War: Russo-Finnish War, 1939-1940					X	WD
Suomussalmi	A D	F, EE D/O	F, EE --		X	B WDL
					X	P A

MANCHURIA, 1938-1939 (CHANGKUFENG)

Changkufeng/Shachaofeng, 30/31 July 1938

On 9 July 1938 Soviet border guards occupied the summit of a steep-sided hill, known in Chinese as Changkufeng, which was located in a narrow strip of disputed territory at the frontier meeting point of three regions: the Far Eastern Province of the Soviet Union, Japanese-occupied Manchuria, and Korea (a Japanese colony). Prior to the Soviet occupation of Changkufeng, both sides had tacitly agreed not to occupy the hill, although it provided excellent all around observation of the surrounding countryside. The prior peaceful situation in this disputed region had been much to the benefit of the Japanese, who were involved in a major war with China. However, following the beginning of Soviet activity on Changkufeng the Japanese dispatched to this area a reinforced regiment (the 75th Infantry) of the Japanese 19th Infantry Division. On 27 July this unit was recalled by the Japanese Korea Army commander, General Nakamura, who hoped that a diplomatic solution could be reached. Two days later, a small detachment of Soviet troops began to occupy a hill near the uninhabited village of Shachaofeng, about 2.5 kilometers north of Changkufeng. Japanese retaliation, initiated by the 19th Division commander, Lieutenant General Suetaka, was swift, and the Soviet detachment was destroyed by elements of the 19th Division still located at the borders. Plans were then formulated by 19th Division officers for an attack on Changkufeng and the area to the north, ostensibly to pre-empt a Soviet offensive. Changkufeng was to be seized in a night assault on 30/31 July by the 1st Battalion of the 75th Infantry attacking the hill's left (southern) flank. A reserve company was available for an attack against the northwestern slope of the hill. Flank protection for the night assault was to be provided by infantry units on Hills 24 and 52, north and south of Changkufeng respectively. A dawn attack was also planned for 31 July in the Shachaofeng area by the 1st Battalion of the 76th Infantry. Artillery support (not to be used in the night assault) was to be provided by two 150mm howitzers.

Moving out on the night of 30 July, the 1/75th Infantry advanced to the southern base of Changkufeng and proceeded up the slopes. The Soviet detachment, taken only slightly by surprise, reacted quickly and a fierce struggle ensued. Both sides used grenades and the Soviets employed machine guns in the defense. Japanese night warfare tactics encouraged close combat

MANCHURIA, 1938-1939 (CHANGKUFENG)

Changkufeng/Shachaofeng, 30/31 July 1938 (Continued)

and the use of blade weapons, but when the assault troops reached Changkufeng's crest, they brought their machine guns into action. In the assault up the hill, casualties were particularly high for the attackers, and the battalion commander and all company commanders were either killed or wounded. When the momentum of the attack slowed, the reserve company was directed up the hill's northwestern slope, but it was pinned down by Soviet fire. Around dawn, a final rush by the remnants of the 1/75th Infantry seized the summit and forced the Soviets, who lacked a second line of defense, off the hill. Flank protection around Hills 24 and 52 was very effective, and the Japanese destroyed several tanks at each location while driving off Soviet reinforcements moving toward Changkufeng. At dawn, the 1/76th Infantry attacked Soviet positions near Shachaofeng and engaged Soviet forces retreating from Changkufeng and reinforcements arriving from the north. Japanese attempts to advance around the Soviet right flank ended when the Soviets withdrew in the late morning and began to shell the newly-won Japanese positions.

Significance: In a costly assault, initiated without Japanese high command approval and characterized by aggressive leadership, the Japanese drove the Soviets from Changkufeng. By the end of the first week in August the opponents had both reinforced their forces in the area, and were battling in earnest for possession of Changkufeng.

Sources: J.1; J.3.1.

MANCHURIA, 1938-1939 (CHANGKUFENG)

Hill 52/Shachaofeng, 2-3 August 1938

On 1 August 1938, in reaction to the previous day's successful Japanese assault on Soviet positions on and near the hill of Changkufeng, Soviet aircraft bombed Japanese forward positions around the hill as well as towns on the Korean side of the Tumen River. On the same day, while the Soviets moved up reinforcements in preparation for an attack to regain Changkufeng, units of the Japanese 19th Infantry Division were ordered by the divisional commander, Lieutenant General Suetaka, to assemble on the Korean side of the Tumen for reinforcement of 19th Division elements already across the river.

In the early morning of 2 August, a two-pronged attack by Soviet 40th Rifle Division elements supported by armor, artillery, and aircraft struck Japanese positions at Shachaofeng and Hill 52 on the northern and southern flanks of Changkufeng. A tenacious Japanese defense checked both assaults and inflicted heavy losses on the attackers. At Hill 52, the anchor of the Japanese right flank, another Soviet assault struck the Japanese lines during the late evening. Once again the Soviets were repulsed. The Soviets repeated their tactics on the morning of 3 August when infantry with armor and artillery support again struck the Japanese flanks. Very early on 3 August, Shachaofeng was attacked, but the Japanese held and the Soviet attacks subsided around dawn. At this time another unsuccessful attack began near Hill 52, but the Japanese contained the attack by mid-morning. During the action on the morning of 3 August, Japanese reinforcements began to arrive at the front, and their timely appearance bolstered the defense and morale of their hard-pressed comrades.

Significance: Despite the support of aircraft and armor, the Soviet attack around Changkufeng failed to dislodge the Japanese from the hill. On the afternoon of 3 August, the Soviets pulled back and reorganized.

Sources: J.1; J.3.1.

MANCHURIA, 1938-1939 (CHANGKUFENG)

Changkufeng/Hill 52, 6-10 August 1938

Following an unsuccessful attempt to retake the hill of Changkufeng from the Japanese on 2-3 August, Soviet reinforcements moved into the disputed border area in preparation for a renewed attack to seize Changkufeng. On the morning of 6 August elements of the Soviet Far Eastern Army, with complete supremacy in aircraft and tanks, attacked the left and right flank positions of the Japanese 19th Infantry Division north and south of Changkufeng. Fierce Japanese resistance checked the Soviet attack. However, during the night of 6/7 August, a Soviet assault against Changkufeng reached the summit of the hill. A Japanese counterattack drove the attackers back, but the Soviets retained a foothold on the hill's eastern slopes. On 7 August Soviet attacks were concentrated against Hill 52, the anchor of the Japanese right flank. The Soviets again employed aircraft and tanks to support their attack. Artillery and air strikes destroyed numerous Japanese defensive positions, but Japanese reserves were sent into the line and aided in holding Hill 52. Like the battle on 6 August, fighting was fierce and characterized by Japanese counterattacks. On the Japanese left flank, less determined Soviet attacks were repulsed during the day and the night of 7 August. On 8 and 9 August, Soviet ground attacks were directed primarily against Changkufeng, Hill 52, and the line between these hills. However, support from Soviet armor and aircraft decreased considerably. By this time, attrition and fatigue had taken a toll of the combat effectiveness of Soviet and Japanese units which had been committed since the beginning of August. By 10 August, Japanese reinforcements, including much needed heavy artillery, were arriving at the front, and fighting was limited on 10 August to a massive artillery duel.

Significance: Despite superiority in manpower and an advantage in tanks and aircraft, the Soviets were unable to retake Changkufeng, although they established positions on the hill's eastern slope and part of the crest. On 11 August peace negotiations commenced and by the end of 13 August, almost all Japanese forces had withdrawn to the Korean side of the Tumen River. Although the Japanese had won a tactical victory at Changkufeng, the settlement of the incident left the Soviets in possession of the hill.

Sources: J.1; J.3.1.

MANCHURIA, 1938-1939 (NOMONHAN)

Nomonhan: Opening Engagement, 28-29 May 1939

Following the Japanese occupation of Manchuria in 1931, border skirmishes between armed forces of the Soviet Union and Japan erupted along disputed portions of the extensive Mongolian-Manchurian border. In May 1939, less than one year after the Changkufeng incident, confrontations between Soviet-backed outer Mongolian and Japanese-backed Manchukuoan cavalry precipitated a new round of combat in the area between the Halha River (Khalkhin Gol) and the town of Nomonhan to the east. Since the Japanese claimed the Halha River as the border and the Soviets maintained that the border lay east of Nomonhan, both sides contended that the other was violating its territory. After small skirmishes between local border guard units during the second week of May, elements of the Japanese 23d Infantry Division, stationed almost 200 kilometers north of Nomonhan at Hailaerh, were dispatched to drive the Outer Mongolians back across the Halha. The Japanese accomplished this mission on 15 May, but within a week, Soviet forces moved to the Halha's east bank and elements of the 23d Division were once again called upon to drive the Soviets and their allies back across the river.

Japanese forces assigned this task included one infantry battalion of the 64th Infantry Regiment, a reconnaissance unit consisting of one cavalry troop and one light tank company, a regimental gun company (four 75mm mountain guns), and some Manchukuoan Army cavalry stationed near Nomonhan. Soviet forces on the east bank of the Halha included elements of the 11th Tank Brigade, equipped with armored cars, and elements of the 6th Outer Mongolian Cavalry Division. Near the crossing site on the river's west bank the Soviets had deployed their artillery which included one battery of four SU-76 self-propelled guns. The Japanese attack plan was to strike the Soviet positions frontally with their infantry battalion, while the reconnaissance detachment and the Manchukuoan cavalry encircled the Soviets' left and right flanks and severed the Soviet line of retreat to the Halha.

On the morning of 28 May the attack began and proceeded according to plan, although contact was quickly lost with Lieutenant Colonel Azuma's reconnaissance unit as it moved around the Soviet left flank. With their left-front units pressured by Japanese infantry, the Soviets fell back from Nomonhan. While withdrawing, they encountered the Japanese reconnaissance unit and, reinforced by forces coming from the west bank of the Halha, encircled it. Employing

MANCHURIA, 1938-1939 (NOMONHAN)

Nomonhan: Opening Engagement, 28-29 May 1939 (Continued)

their reinforcements, the Soviets checked the Japanese frontal attack and proceeded to assault Azuma's detachment, employing units that included the battery of SU-76 self-propelled guns. On 29 May, the Soviets virtually annihilated Azuma's force and, by counterattacking the main Japanese force, retained a small bridgehead on the east bank of the Halha. Soviet artillery firing from the west bank protected the bridgehead. On the night of 30 May Japanese troops moved toward the Halha and discovered destroyed vehicles and the bodies of the men of the reconnaissance detachment.

Significance: In the action of 28-29 May, the Japanese drove the Soviets back from Nomonhan but failed to push them back across the Halha River. However, following the battle the Soviet force on the east bank of the Halha withdrew across the river after receiving inaccurate reports that the Japanese were moving up reinforcements. The Soviets soon returned to the east bank and both sides then moved more forces to the area. By July 1939 a minor border dispute had escalated into a major armed confrontation.

Sources: J.2, J.3.2.

MANCHURIA, 1938-1939 (NOMONHAN)

Nomonhan: Soviet Counteroffensive, 20-31 August 1939

In July 1939 forces of the Japanese Kwantung Army, primarily elements of the 7th and 23d Infantry Divisions, launched two offensives against Soviet and Outer Mongolian positions west of the town of Nomonhan on the east bank of the Halha River. Since May 1939 Soviet and Outer Mongolian forces had maintained a bridgehead on the east bank of the Halha River in disputed territory on the Mongolian-Manchukuoan border which the puppets of both the Soviets and the Japanese claimed. The Japanese offensives of July did not dislodge the Soviets from their bridgehead, and both sides incurred heavy casualties and equipment losses. Following the termination of the second Japanese attack on 25 July, the opposing forces settled down to a war of attrition during which the Soviets, commanded by General Georgi K. Zhukov, began a massive buildup in preparation for a counteroffensive. Japanese intelligence failed to detect the Soviet preparations and so the Japanese were caught by surprise when the Soviet offensive began on 20 August. Having experienced supply difficulties, the Japanese had inadequate numbers and types of weapons to resist Zhukov's overwhelming armored and aerial assaults.

The Soviet plan called for a frontal attack against the Japanese positions and envelopments of the Japanese flanks. Massing his armor opposite the Japanese left, where the main effort was to be made, Zhukov planned to pin down the Japanese with frontal attacks, while Soviet pincers encircled and destroyed Japanese forces west of Nomonhan.

On 20 August Soviet infantry, with artillery, air, and armor support, attacked the Japanese defenses. In a long and fierce battle over the next 12 days, the Soviets drove in the Japanese flanks and smashed several Japanese counterattacks. By 31 August many Japanese units had been destroyed, and the Soviet pincers had met just west of Nomonhan. Remnants of the encircled Japanese forces escaped from the trap but not before the Soviets had inflicted heavy losses on the defenders.

Significance: Fighting continued into the first half of September, but by this time, it had diminished considerably and the Soviets seemed content with their achievements. The Japanese, heavily involved in China, did not wish to escalate the encounter. With the outbreak of war in Europe and the signing of the Nazi-Soviet Non-Aggression Pact, both sides sought an end to the hostilities around Nomonhan, and on 16 September, negotiations brought about a cease-fire.

Sources: J.2; J.3.2; J.3.3; J.4.

RUSSO-FINNISH WAR, 1939-1940

Soumussalmi, 11 December 1939-8 January 1940

In the fall of 1939 the Soviet government demanded that Finland agree to a mutual military assistance pact similar to those already concluded between Russia and the lesser Baltic states, Estonia, Latvia, and Lithuania. Since the pact would have infringed Finland's sovereignty, the Finns rejected it and began to mobilize along the frontier. On 30 November, without a declaration of war, the Soviets initiated hostilities. Soviet armies totalling over one million men attacked Finland on three fronts: from the east, driving toward Petsamo on the Arctic Sea, in central Finland, and on the Karelian Isthmus. The Soviets, however, were not well prepared for combat in the heavy snows and subzero temperatures of the Finnish winter, and their offensives soon bogged down or were repulsed.

In December 1939-January 1940 the Soviets suffered a humiliating reverse at Soumussalmi in eastern Finland. The Soviet 163d Ukrainian Infantry Division marched westward from the frontier to the town of Soumussalmi, arriving there on 7 December. The division's orders were to advance to the town of Puolanka, deep in Finnish territory. The Soviet objective, apparently, was to establish a base at Puolanka, then advance eastward to the coast to cut the single track railway from Sweden, used by the Finns to supply the defenses of the Mannerheim Line on the Karelian Isthmus. The Soviet troops lacked proper winter clothing (there was one meter of snow on the ground, and temperatures reached as low as -40 degrees Centigrade). On their way to Soumussalmi the Soviets had been constantly harassed by Finnish civil guard troops mounted on skis. By the time the Soviets arrived at Soumussalmi the Finns had brought up reserves and begun to form them into what would become the 9th Infantry Division.

On 11 December the Finnish 27th Infantry Regiment cut the road east of Soumussalmi, behind the Ukrainians, and began an attack in a westerly direction. On Christmas Day another Finnish regiment, the 64th, began an attack from the north. By 27 December the isolated Soviet division, worn down by continuous attacks, began to collapse. However, survivors were able to break out by marching north across frozen Lake Kiantajarva. Meanwhile, unknown to the 163d Division, the Soviet 44th Motorized Division was marching to its relief from the east.

RUSSO-FINNISH WAR, 1939-1940

Soumussalmi, 11 December 1939-8 January 1940 (Continued)

Acting quickly, the commander of the Finnish 9th Division sent patrols to discover the positions of the Soviet 44th Motorized Division, and Finnish engineers began to construct a road parallel to the existing east-west road being used by the Soviets. The new road permitted the Finns to march east, south of the existing road, without being detected, to assembly areas south of the 44th Division. During 1-8 January the Finns attacked the road-bound Soviet column, cutting it up into smaller groups, each of which was in turn mopped up. The Soviets were annihilated.

Significance: One understrength, pick-up Finnish division destroyed two Soviet divisions. The commander of the Soviet 44th Motorized Division was later executed by Stalin's order.

Sources: K.1; K.2.

1. IDENTIFICATION
War: World War I
Western Front, 1914

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Alsace-Lorraine I, Germany	A 15-19 Aug 1914 D	The Frontiers	Fr First & Second Armies, Army of Alsace Ger Sixth & Seventh Armies	Gen Joffre Cr Pr Rupprecht	5	225.0
Alsace-Lorraine II, Germany & France	A 20-21 Aug 1914 D	The Frontiers	Ger Sixth & Seventh Armies Fr First & Second Armies, Army of Alsace	Cr Pr Rupprecht	2	225.0
The Ardennes, France	A 22-23 Aug 1914 D	The Frontiers	Fr Third & Fourth Armies Ger Fourth & Fifth Armies	Gen Joffre Cr Pr William & Duke Albrecht	2	100.0
The Sambre, Belgium	A 22-23 Aug 1914 D	The Frontiers	Ger Second & Third Armies Fr Fifth Army	Gen Bülow Gen Lanrezac	2	53.0
Mons, Belgium	A 23 Aug 1914 D	The Frontiers	Ger First Army Br Exped Force	Gen Kluck FM French	1	35.0
Le Cateau, France	A 26 Aug 1914 D	Advance to the Marne	Ger First Army Br Exped Force	Gen Kluck FM French	1	23.0
Guise, France	A 29 Aug 1914 D	Advance to the Marne	Ger Second Army Fr Fifth Army	Gen Bülow Gen Lanrezac	1	50.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I
Western Front, 1914

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Alsace-Lorraine I	A	RM	DST	ST	N	--	--	N
	D	De1/FD	RM	DST	ST	N	--	N
Alsace-Lorraine II	A	RM	DST	ST	N	--	--	N
	D	H/FD	RM	WOT/DST	ST	N	--	N
The Ardennes	A	RW	WOT/DST	ST	N	--	--	N
	D	HD	RM	DST	ST	N	--	N
The Sambre	A	RM	DST	ST	N	--	--	N
	D	HD	RM	DST	ST	N	--	N
Mons	A	RM	DST	ST	N	--	--	N
	D	HD	RM	DST	ST	N	--	N
Le Cateau	A	HD/WD	RM	DST	ST	N	--	N
	D	HD	RM	DST	ST	N	--	N
Guise	A	HD	RM	DST	ST	N	--	N
	D	HD	RM	DST	ST	N	--	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1914

Engagement	Strength			Battle Casualties			Arty. Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	Lt.	Arty. Pieces	Air Sorties	Total	Day	Armor Losses	Total	Day	Total	Sorties/Day
Alsace-Lorraine I	A 457,000	0	--	--	?	0	65,340	2.9	0	--	?	--
	D 345,000	0	--	--	?	0	32,880	1.9	0	--	?	--
Alsace-Lorraine II	A 350,000	0	--	--	?	0	11,000	1.6	0	--	?	--
	D 400,000	0	--	--	?	0	21,780	2.7	0	--	?	--
The Ardennes	A 360,000	0	--	--	?	0	17,196	2.4	0	--	?	--
	D 400,000	0	--	--	?	0	12,720	1.6	0	--	?	--
The Sambre	A 440,000	0	--	--	?	0	21,018	2.4	0	--	?	--
	D 254,000	0	--	--	?	0	8,000	1.6	0	--	?	--
Mons	A 260,000	0	--	--	600	0	6,210	2.4	0	--	?	--
	D 70,000	0	--	--	328	0	1,638	2.4	0	--	2	0.6
Le Cateau	A 250,000	0	--	--	?	0	7,800	19.9	0	--	?	--
	D 40,000	0	--	--	150	0	12,000	4.6	0	--	38	25.3
Guise	A 260,000	0	--	--	?	0	8,000	4.2	0	--	?	--
	D 200,000	0	--	--	?	0	12,000	4.6	0	--	?	--

4. INTANGIBLE FACTORS

War: World War I
Western Front, 1914

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.
Alsace-Lor- raine I	A C D	C C	C C	C C	N N	N N	C C	N N	x x	x x	7.0	4
Alsace-Lor- raine II	A C D	C C	C C	C N	N N	N N	C C	N N	x x	x x	28.0	8
The Ardennes	A C D	C C	C C	C N	N N	N N	C C	N N	x x	x x	14.0	5
The Sambre	A C D	C C	C C	C N	N N	N N	C C	N N	x x	x x	6.0	6
Mons	A C D	C C	C C	C N	N N	N N	C C	N N	x x	x x	5.0	6
Le Cateau	A C D	C C	C C	C N	N N	x x	C C	N N	x x	x x	3.0	4
Guise	A C D	C C	C C	C N	O O	x x	C C	N N	x x	x x	4.0	4
												5

6. FACTORS AFFECTING OUTCOME War: World War I, Western Front, 1914

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War I
Western Front, 1914

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
				Secondary Attack		
Alsace-Lorraine I	A	F	--		X	P, R
	D	D	--			WD
Alsace-Lorraine II	A	F	--		X	P, Ps
	D	D	--			WD
The Ardennes	A	F	--		X	R, WD
	D	D	--			Ps
The Sambre	A	F	E (RF)		X	P, Ps
	D	D/O	--			WD
Mons	A	F	E (LF)		X	P
	D	D	--			WD
Le Cateau	A	F, EF	--		X	P
	D	D	--			WDL
Guise	A	F, E (LF)	--		X	P, R
	D	D/O	F			PD

1. IDENTIFICATION
War: World War I, Western Front, 1914

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Heights of Nancy, France	A 3-8 Sep 1914 D	The Marne, 1914	Ger Sixth & Seventh Armies Fr First & Second Armies	Cr Pr Rupprecht Gen Joffre	5	180.0
Ourcq I, France	A 5 Sep 1914 D	The Marne, 1914	Fr Sixth Army Ger IV Reserve Corps	Gen Maunoury Gen Gronau	1	18.0
Ourcq II, France	A 6-9 Sep 1914 D	The Marne, 1914	Fr Sixth Army Ger First Army (-) (+)	Gen Maunoury Gen Kluck	4	32.0
Petit Morin, France	A 6-9 Sep 1914 D	The Marne, 1914	Fr Fifth Army Ger Second Army	Gen Franchet d'Esperey Gen Bülow	4	23.0
Two Morins, France	A 6-9 Sep 1914 D	The Marne, 1914	Br Exped Force Ger First Army (-)	Br French Gen Kluck	4	74.0
Mashes of St. Gond, France	A 6-9 Sep 1914 D	The Marne, 1914	Ger Second (-) & Third Armies Fr Ninth Army	Gen Hausen Gen Foch	4	42.0
Vitry le Francois, France	A 6-9 Sep 1914 D	The Marne, 1914	Ger Third (-) & Fourth Armies Fr Fourth Army	Dk of Württemburg Gen Langle de Cary	4	40.0
Gap of Revigny, France	A 6-9 Sep 1914 D	The Marne, 1914	Ger Fifth Army Fr Third Army	Cr Pr Wilhelm Gen Sarrail	4	64.0
The Aisne, France	A 13-18 Sep 1914 D	Retreat from the Marne	Pr Fifth & Sixth Armies Br Exped Force Ger First, Seventh, & Second Armies	Gen Joffre Gen Falkenhayn	6	136.0

2.. OPERATIONAL AND ENVIRONMENTAL VARIABLES
 War: World War I , Western Front, 1914

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Heights of Nancy	A D	FM	RM/RgW	DST	FT	N	--	N
Ourchq I	A D	HD	RM	DST	FT	Y	--	N
Ourchq II	A D	HD	RM/RM	DST	FT	N	--	N
Petit Morin	A D	HD	RM	DST	FT	N	--	N
Two Morins	A D	Delay	RM	DST	FT	N	--	N
Marsches of St. Gond	A	FM/RM	DST	FT	N	--	--	N
Vitry le Francois	A D	HD	RM	DST/WLT	FT	N	--	N
Gap of Revinay	A D	HD	RM/RW	DST/WLT	FT	N	--	N
The Aisne	A	RM	WLT	WLT	FT	N	--	N
	D	H/PD						

3. STRENGTHS AND COMBAT OUTCOMES
World War I, Western Front, 1914

Engagement	Strength			Battle Casualties			Arty. Pieces Lost			Aircraft Losses		
	Personnel Total	Total Lt.	Armor MBT	Air Sorties	Total %/Day	Armor Losses	Total %/Day	Arty. Pieces Lost	Total %/Day	Aircraft Sorties Total	Aircraft Losses Total	
Heights of Nancy	A 350,000 D 376,000	0 0	-- --	? ?	0 0	75,000 52,000	4.3 3.8	0 0	-- --	? ?	-- --	
Ourcq I	A 100,000 D 45,000	0 0	-- --	? 72	0 0	5,600 2,500	4.6 5.5	0 0	-- --	? ?	-- --	
Ourcq II	A 198,000 D 157,000	0 0	-- --	? ?	0 0	40,000 39,000	5.1 6.2	0 0	-- --	? ?	-- --	
Petit Morin	A 227,000 D 82,000	0 0	-- --	? ?	0 0	45,000 19,000	5.0 5.8	0 0	-- --	? ?	-- --	
Two Morins	A 90,000 D 13,000	0 0	-- --	380 24	0 0	2,500 3,500	0.7 6.7	0 0	-- --	? ?	-- --	
Marshes of St. Gond	A 101,000 D 141,000	0 0	-- --	? ?	0 0	25,000 29,000	6.2 5.1	0 0	-- --	? ?	-- --	
Vitry le Francois	A 113,000 D 170,000	0 0	-- --	? ?	0 0	26,000 27,000	5.8 4.0	0 0	-- --	? ?	-- --	
Gap of Revigny	A 142,000 D 180,000	0 0	-- --	? ?	0 0	29,000 29,000	5.1 4.0	0 0	-- --	? ?	-- --	
The Aisne	A 343,000 D 290,000	0 0	-- --	? ?	0 0	50,000 30,000	2.4 1.7	0 0	-- --	? ?	-- --	

4. INTANGIBLE FACTORS

War: World War I , Western Front, 1914

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.
Heights of Nancy	A D	C C	C C	C C	C N	N N	O O	C C	N X	X X	2.7 1.0	4 7
Ourcq I	A D	C x	C C	C C	C N	N N	N N	C C	N X	X X	2.0 1.0	6 7
Ourcq II	A D	C C	C x	C C	C N	N N	N N	C C	X X	X X	7.0 10.0	6 3
Petit Morin	A D	C C	x C	C C	C N	N N	N N	C C	N X	X X	4 4	4 3
Two Morins	A D	C C	C C	C C	C N	N N	N N	C C	N X	X X	3.2 5	5 7
Marshes of St. Gond	A D	C D	C x	C C	C N	N N	N N	C C	N X	X X	0.0 0.0	5 6
Vitry le Francois	A D	C C	C C	C C	C N	N N	N N	C C	X X	X X	0.0 0.0	5 7
Gap of Revigny	A D	C C	C C	C C	C N	N X	O 0	C C	N X	X X	0.0 0.0	5 7
The Aisne	A D	C D	C C	C C	C N	N X	O 0	C C	N X	X X	0.0 0.0	5 7

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1914

Engagement	Heights of Nancy	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Depth
Ourcq I	Ourcq II	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Fortifi- cations	
Petit Morin	Two Morins	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Logistics	
Marthes of St. Cond	Vitry le Francois	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Maneuver, Mass	
	Gap of Revinay	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Surprise	
	The Aisne	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Planning	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Leader- ship	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Roads	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Terrain,	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Weather	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Prepon- derance	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Air Superiority	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Mobile- ility	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Reserves	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Force Quality	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Engagement	
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Heights of Nancy	

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War I, Western Front, 1914

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
				Secondary Attack		
Heights of Nancy	A D	F D/O, F	FE --		X	R, WD --
Ourcq I	A D	F D/O, F	E (RF) --		X X	S WD
Ourcq II	A D	F D/O, F	E (RF) E (LF)		X	R WD
Petit Morin	A D	F, E(RF) D	-- --		X	P WD
Two Morins	A D	F D	E (LF)		X	P WD
Marshes of St. Cond	A D	F, EE D	-- --		X	R, WD --
Vitry le Francois	A D	D/O, F F, EE	-- --		X	R, WD --
Gap of Revigny	A D	D/O, F F, E (LF)	-- --		X	R, WD --
The Aisne	A D	F D/O, F	-- --		X	R, S S

WORLD WAR I (WESTERN FRONT, 1914)

Alsace-Lorraine I, 15-19 August 1914

The French strategic plan at the outbreak of the war (Plan XVII) was to seize the initiative by recapturing the provinces of Alsace and Lorraine which France had lost in the Franco-Prussian War (1870-1871). The German plan, based on von Schlieffen's concept, and predicated partly on expectation of the French plan, was for the French to become so committed in Alsace-Lorraine that significantly less French manpower would be available to oppose the enveloping German right wing which would undertake the German main effort.

The French First and Second Armies, initially deployed along the line Pont a Mousson-Nancy-Lunéville-Saar River, attacked on 14 August and advanced steadily for four days, eventually reaching the line Morhange-Sarrebourg. The Army of Alsace on the French right captured Mulhouse on 19 August. As the French attacked, the German Sixth and Seventh Armies, under the overall command of General Helmuth von Moltke, withdrew according to plan, inflicting heavy casualties on the French in the process. The French attack faltered when it hit the fortified German main line resistance.

Significance: The French were forced to go on the defensive after their initial success. The Germans subsequently counterattacked fiercely.

Sources: A.11.2; L.30.2; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

Alsace-Lorraine II, 20-21 August 1914

On 20 August the French Armies in Alsace and Lorraine were struck by a strong German counterattack. The French First Army retreated in good order, but two corps of Second Army were routed. However, General Ferdinand Foch's XX Corps ("The Iron Corps") made a strong defense of Nancy and prevented the French retreat from becoming a complete rout.

The French had expected the German counterattack, but General Joseph J.C. Joffre, the overall commander of the French armies, believed he had sufficient forces to counter it. After the disaster of the 20th and 21st the French withdrew to the fortified zone behind the Meurthe River.

Significance: The German counterattack so overwhelmed the French that German commander General Helmuth von Moltke modified the Schlieffen Plan maneuver to attempt a double envelopment of the French armies. By weakening the German right wing in favor of the attempted double envelopment, Moltke contributed to the German defeat on the Marne, and thus to the outcome of the First World War.

Sources: L.30.2; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

The Ardennes, 22-23 August 1914

In mid-August 1914, in accordance with the overall French war plan (Plan XVII), the French Fourth Army, under the command of General Fernand de Langle de Cary, and the French Third Army, under the command of General Pierre Ruffey, advanced to Arlon and Neufchateau in the Ardennes Forest. French commander in chief General Joseph J.C. Joffre assumed that these forces would advance through the Ardennes before they met any major German Force. Meantime, the German Fourth and Fifth Armies, comprising the pivot of the modified Schlieffen plan maneuver, had begun their own advance, when, on 22 August, they collided with the French armies. The Germans dug in along the line of contact and repulsed numerous French attacks. The French suffered shocking losses and, outnumbered, were forced to fall back to reorganize west of the Meuse River, with their right flank resting on the fortress and entrenched camp of Verdun.

Significance: The French exhausted themselves in a futile offensive and were forced to retreat. Plan XVII had, perforce, to be scrapped.

Sources: L.30.2; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

The Sambre, 22-23 August 1914

On 20 August 1914 French General Joseph J.C. Joffre, commander in chief of the French armies, ordered General Charles L.M. Lanrezac's Fifth Army to advance across the Sambre River and mount an attack against the flank of German General Karl von Bulow's Second Army.

When Lanrezac reached the Sambre, he could not decide whether or not to cross it. He finally decided to take up positions on the opposite (north) bank, but by this time (21 August) Bulow's advance guard had secured the river's bridges. On the 22d the French attacked the bridges but were repelled. The Germans then consolidated their positions and, on the 23d, attacked with their Second Army and elements of their Third Army. Hard-pressed, Lanrezac asked for and was granted permission to withdraw.

Significance: Attacked by superior German forces, Lanrezac was forced to withdraw.

Sources: L.30.2; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

Mons, 23 August 1914

On 18 August, German General Alexander von Kluck's First Army was placed under the command of General von Bulow's Second Army. Bulow ordered Kluck to march due south from the vicinity of Brussels instead of southwest. This was a slight modification of the original Schlieffen plan which Bulow thought necessary to assure protection of the right flank of the Second Army.

On the 23 August Kluck's leading elements hit the British Expeditionary Force under the command of Field Marshal Sir John French frontally, instead of on the British left, as would have been the case if Kluck's Army had marched in the direction originally planned. Rapid and accurate fire from the British infantry caused serious casualties among the Germans and checked their advance. However, the pressure of Kluck's superior strength was very severe on the British. Furthermore, when the French Fifth Army withdrew after the Battle of the Sambre, the British had no choice but to withdraw to protect their right flank.

Significance: The BEF administered a temporary check to the progress of Kluck's First Army, but was defeated by superior numbers.

Sources: L.9.1914.1; L.32.

WORLD WAR I (WESTERN FRONT, 1914)

Le Cateau, 26 August 1914

Following the Battle of Mons (23 August) the British Expeditionary Force withdrew southwest, hard-pressed by German General Alexander von Kluck's First Army. The British were compelled to fight daily rear guard actions. At Le Cateau, on 26 August, the exhausted British II Corps, commanded by General Sir Horace Smith-Dorrien, made a stand because he felt his troops were too tired to fall back further. They became engaged in the biggest battle the British Army had fought since Waterloo.

The British corps fought off an attempted double envelopment by Kluck's army, but German numbers were decisive, and Smith-Dorrien ordered a retreat at 1400 hours 26 August. Thus, no matter how tired, the British had to withdraw under circumstances much more difficult than would have been the case if Smith-Dorrien had not decided to stand. Fortunately, however, for the British, the II Corps was not pursued vigorously since Kluck's troops were also fatigued.

Significance: The gallant but costly battle at Le Cateau did little to stay Kluck's progress. On the other hand, this second victory convinced Kluck that the BEF was finished as a fighting force for the time being.

Sources: L.9.1914.1; L.55.

WORLD WAR I (WESTERN FRONT, 1914)

Guise, 29 August 1914

The French commander in chief, General Joseph Jacques Cesaire Joffre, ordered the French Fifth Army under General Charles L.M. Lanrezac to attack the left flank of General Alexander von Kluck's German First Army, which was threatening to overwhelm the British Expeditionary Force, now severely strained after its defeat in the Battle of Le Cateau. The British, under the command of Field Marshal Sir John French, were deployed along the line Noyon-La Fere. Lanrezac, to accomplish his mission, had to wheel approximately 90 degrees and present his right flank to the German Second Army, advancing on Kluck's left.

On 29 August, before Lanrezac could execute his maneuver, General Karl von Bulow's German Second Army attacked the French Fifth Army along the line Moys-Vervins. Intense fighting ensued for several hours, after which the French right flank appeared in danger of collapse because of pressure by two German corps. Lanrezac then ordered his reserve, the I Corps under the command of General Louis Franchet d'Esperey, to attack to the north in the direction of Audigny in order to relieve the pressure against French forces there. This counterattack hit the Germans hard and allowed Lanrezac time to withdraw without being pursued.

Significance: Guise was the first check administered to the Germans in the campaign. After the battle Bulow was forced to halt for 36 hours and call on Kluck for assistance. This allowed the British Expeditionary Force and the French Fifth Army to withdraw without being pursued immediately.

Sources: A.7; A.11.2; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

The Heights of Nancy, 3-8 September 1914

The French First and Second Armies, under the command of General Auguste Dubail and General Noel Marie de Curieres de Castelnau respectively, were deployed in Lorraine. The Second Army was on the left with its left flank anchored on Pont a Mousson, and the First Army was on the right with its right flank resting on the Vosges Mountains. The German Sixth and Seventh Armies were deployed opposite the French in Lorraine and were under the overall command of Crown Prince Rupprecht of Bavaria. The German plan called for the Seventh Army to pin down the French First Army with a holding attack and then transfer troops to the Sixth Army, which would make the main effort by piercing the lines of the French Second Army in the vicinity of Nancy.

On the afternoon of 3 September the German attack was heralded by a short, intense artillery bombardment. The battle raged through the night, and the French were pushed back slightly between the Champenoux Forest and Rambetant. By 6 September the Germans had driven to within ten kilometers of Nancy. The battle reached its climax on the 7th when the Germans threatened the key French position on the Hill of Amance, but repeated German attacks were repelled. The intensity of the German attacks waned on the 8th, and by the 9th the Germans began to withdraw all along the line.

Significance: The repulse of the Germans at the Heights of Nancy prevented a rupture of the Allied line at a particularly sensitive point.

Sources: L.3.1; L.35.

WORLD WAR I (WESTERN FRONT, 1914)

The Ourcq I, 5 September 1914

The French Sixth Army, under the command of General Michel J. Maunoury, was northeast of Paris with its right flank on the Marne River and its left flank near Rovres. In accordance with the counteroffensive plan of the French commander-in-chief, General Joffre, the Sixth Army was to strike the right flank and rear of the German First Army on 6 September, to initiate a general Allied counteroffensive. The army was marching toward its jump-off position in an easterly direction when it collided with the German IV Reserve Corps, commanded by General Hans von Gronau, which was the rear and flank guard of the German First Army. The French army had not expected early resistance to its progress, and when Gronau's artillery began firing into its march columns, it was surprised.

Major combat ensued around the Monthyon Hill and Penchard Hill. All day long a confused battle raged. The French made numerous uncoordinated attacks, each of which was repelled by the Germans. After dark the greatly outnumbered German corps fell back 11 kilometers and waited for reinforcements from the rest of the German First Army.

Significance: Gronau's brilliant defense prevented the French Sixth Army from reaching its jump-off position in the rear of the German First Army. His actions gained time for the German First Army to recross the Marne to protect the right flank of the German armies.

Sources: A.11.2; L.3.1; L.35; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

The Ourcq II, 6-9 September 1914

Following his spoiling attack against General Michel J. Maunoury's French Sixth Army on 5 September, General von Gronau withdrew and took up defensive positions north and slightly west of Meaux, with his left flank on the Marne just west of Meaux. He appealed for reinforcements to the First Army commander, General Alexander von Kluck. Early on the 6th the advancing French Sixth Army resumed its attack, and again began driving the Germans back. However, Kluck ordered his two right flank corps -- the II and IV -- to withdraw from their advanced positions south of the Marne, to reinforce Gronau. The arrival of these corps permitted the Germans to counterattack, and to regain much of the ground the French had seized in the morning.

Meanwhile, Kluck placed his three cavalry divisions and some light infantry to cover the gap between his three corps now engaged west of the Ourcq, and the two that were still in combat with the left flank of the French Fifth Army south of the Marne.

On the 7th, General Maunoury, who had brought up reinforcements, attacked again, pushing the Germans back further toward the Ourcq. By this time Kluck realized that the threat to his right flank was severe and that his army was in danger of being encircled. He therefore ordered his III and IX Corps to withdraw from south of the Marne, to build up his strength west of the Ourcq. This meant that his cavalry and light infantry screen was now covering a gap of nearly 50 kilometers between his army and General von Bulow's Second Army to the east.

Kluck ordered an attack for the morning of the 8th. However, Maunoury had also been reinforced by elements of the garrison of Paris, sent by truck and taxicab by Marshal Joseph S. Gallieni, commander of Paris. So Maunoury, too, attacked, and the vicious battle continued to rage north of Meaux, with some advantage to the French, who still enjoyed numerical superiority. On the 9th, Kluck committed his last reserves in an effort to envelop Maunoury's left flank. Meanwhile, warned by his cavalry of the approach of the BEF to his left, he refused his left flank by withdrawing it to the Ourcq.

The German envelopment was proceeding with some success when Kluck received orders from Colonel Richard Hentsch, in the name of General von Moltke, to withdraw before he was encircled by the advancing BEF and French Fifth Army, both of which were crossing the Marne to his left rear.

WORLD WAR I (WESTERN FRONT, 1914)

The Ourcq II, 6-9 September 1914 (Continued)

Significance: This German army had been marching and fighting for three weeks without rest. Its performance, in its fight against substantial odds, was amazing. However, by allowing himself to become engaged simultaneously along the Ourcq and south of the Marne, Kluck had provided an opportunity for Allied troops to advance into the gap between his army and the Second Army, to his east. This situation meant defeat for the Germans on the Marne. The responsibility for this state of affairs, however, was primarily that of the German commander in chief, von Moltke.

Sources: L.35; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

The Petit Morin; 6-9 September 1914

On 5 September the French Fifth Army, under the command of General Louis Franchet d'Esperey, was between the Seine and Marne Rivers, about 50 kilometers southeast of Paris, with its left flank near Provins and its right flank at Sezanne. To the front of this French force was the German Second Army, while most of the German First Army, in pursuit of the British Expeditionary Force, was advancing south of the Marne River and had crossed the Grand Morin River. This advance threatened the left flank of the Fifth Army. That day, however, elements of the First Army began to withdraw across the Marne to join in a battle that had broken out along the Ourcq River, as the French Sixth Army threatened the First Army's right flank and rear. The withdrawal of these troops, which continued on the 6th, created a large gap in the German front between the First and Second Armies that stretched from Meaux just east of Paris, to the Petit Morin River in the vicinity of Montmirail in the east. The right flank of General Karl von Bulow's German Second Army was at the eastern limit of the gap on the northern bank of the Grand Morin River. The front of the French Fifth Army overlapped Bulow's front to the west. As the First Army units withdrew, the French Fifth Army attempted to exploit Bulow's open flank by attacking the right flank and rear of the Second Army.

The French started their advance on 6 September and met stiff resistance from elements of the Second Army in strong positions on the northern bank of the Grand Morin River. By the end of the day the French had driven the Germans from the town of Chatillon sur Morin and had made progress also in the vicinity of Esternay. By 8 September the Germans had been forced across the Petit Morin, their withdrawal in part resulting from the dangerous exposure of their right flank. As a result of a surprise night attack by Franchet d'Esperey, by 9 September the German line had been bent back along the line Margny-le Thoult and was facing west. Their position no longer tenable, the German Armies from the Ourcq to the height, around Nancy and the Vosges Mountains were forced to withdraw.

Significance: The Battle of the Petit Morin resulted by 9 September in the French Fifth Army attaining a position from which it could advance into the gap between the German right flank armies, either further to envelop the Second Army's exposed right flank, or to join the BEF in encircling the First Army, or both. The German offensive had been decisively defeated.

Sources: A.11.2; L.3.1; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

The Two Morins, 6-9 September 1914

On 6 September the British Expeditionary Force, under the command of Field Marshal Sir John French, was deployed east of Paris along the line Crecy-St. Simeon, straddling the Grand Morin River. To the front of the BEF the German First and Second Armies advancing to the Marne River had diverged, creating a large gap in the German front that stretched from Ovarre Des Germigny in the west, just north of Paris, to the Petit Morin River in the vicinity of Montmirail in the east. This gap was approximately 40 kilometers wide and was covered by a weak German cavalry screen provided by General Alexander von Kluck's German First Army, the westernmost of the German Armies. The British advanced slowly into this gap to threaten the left flank of the German First Army.

The British Expeditionary Force started its advance on 6 September and by 8 September was facing northeast along the southern bank of the Marne River. The Germans opposing the BEF -- two cavalry divisions and a few light infantry battalions -- could do nothing but delay the advance (which they did skillfully). However, by 9 September, the British were crossing the Marne and threatening the left and rear of the German First Army.

Significance: By 9 September the BEF had interposed itself between the German First and Second Armies, and threatened to encircle the First Army. A German disaster was inevitable unless the First Army was able to escape from its trap between the BEF and Maunoury's French Sixth Army.

Sources: A.11.2; L.3.1; L.9.1914.1.

WORLD WAR I (WESTERN FRONT, 1914)

The Marshes of St. Gond, 6-9 September 1914

On 5 September the French Ninth Army under the command of General Ferdinand Foch was in the vicinity of Champaubert just north of the Marshes of St. Gond, with its left flank on the Brie Plateau and its right flank on the Troyes-Chalons road. To its front was the left wing of General Karl von Bulow's German Second Army. To the east, near Chalons, but in front of the Ninth Army's right flank, was the bulk of General Baron Max von Hausen's German Third Army. Foch had been ordered to hold his position at all costs. The German mission was to drive the French in a generally southeasterly direction between the Seine and Marne rivers.

Under orders from the French Commander in Chief, General Joffre, the Ninth Army began a counterattack on the morning of the 6th. However, the Germans were also attacking. An intense battle raged along the northern edge of the marshes, and was particularly fierce near the villages of Ecurie and Normee in the east. The French were driven back all along the line, due in part to their inferiority in artillery. On 7 September the French right wing was imperiled by the Third Army. At the same time the Second Army advanced south of the marshes and approached Mondement, the anchor of Foch's left wing. With his right wing bent back at a severe angle, and his left wing threatened, Foch ordered a counterattack to restore his position. On 9 September, after Mondement had once fallen and had been recaptured in fierce fighting, the German attack waned. The order had been given for the German armies to withdraw.

Significance: Foch's desperate defense prevented a German breakthrough, and gave the French Fifth Army and the British Expeditionary Force time to exploit the gap between the German First and Second Armies (see the Battle of the Two Morins and the Battle of the Petit Morin).

Sources: A.11.2; L.3.1; L.35; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

Vitry le Francois, 6-9 September 1914

The French Fourth Army under the command of General Fernand de Langle de Cary was deployed with its left flank east of Mailly, its center north of Vitry le Francois (at the confluence of the Ornain and Marne Rivers), and its right flank on the north bank of the Ornain, west of Revigny. Opposed to the French Fourth Army was part of the left wing of the German Third Army under the command of General Baron Max von Hausen and the entire German Fourth Army under the command of Duke Albrecht of Württemburg. Hausen's army had its left flank on the west bank of the Marne; Duke Albrecht's army was on the east bank. The plan of the German Fourth Army was to attack to penetrate the French Fourth Army's front.

The German Armies attacked on 6 September, forcing the French back. The French right wing was pushed across the Ornain, and the French center almost became separated from the right wing when it too was pushed back. On 7 September the hamlets of Etrepy and Sermaize were seized by the Germans. On 8 September both flanks of the French army were bent back and for a time it seemed on the verge of collapse. However, French reserves arrived to reinforce the flanks and to restore the situation at Mount Moret. On 9 September the French counterattacked at Sommesous and won the town. German pressure relaxed, and the Germans began their retreat the next day.

Significance: The French Fourth Army's defense prevented the Germans both from outflanking the French Ninth Army, and from encircling Verdun.

Sources: A.11.2; L.3.1; L.35; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

The Gap of Revigny, 6-9 September 1914

The French Third Army under the command of General Maurice Sarrail was deployed on the western limit of the Argonne Forest. Sarrail's left flank was just east of the town of Revigny, leaving a small gap between the French Third and Fourth Armies as the French Fourth Army had its right flank west of the town. Sarrail's right flank connected with the fortified zone of Verdun. Deployed against the Third Army was the German Fifth Army under the command of Crown Prince Wilhelm. Crown Prince Wilhelm's right flank was just opposite Sarrail's left flank, but the left flank of the German Fifth Army snaked around the fortified camp of Verdun. The Fifth Army was facing in a southeasterly direction, and had as its main objective the town of Bar le Duc, south of Revigny along the Ornain River.

The German attack began on 6 September and almost at once the gap at Revigny proved to be a liability for Sarrail, as the town was taken fairly easily. However, the center of the French line did not budge. On 7 September the situation remained critical on Sarrail's left and the Germans shelled Fort Troyon. On the evening of the next day Sarrail received orders to withdraw because of the precarious situation of his left flank, but he disobeyed the order and held his position. On the 9th the situation continued to look serious, but Verdun was holding against repeated batterings of German forces, and Sarrail's left flank also held. By the next day the Germans were beginning their withdrawal.

Significance: Had Sarrail withdrawn, the important communications center of Verdun, the eventual pivot of the Allied line, might have fallen.

Sources: L.3.1; L.47.

WORLD WAR I (WESTERN FRONT, 1914)

The Aisne, 13-18 September 1914

Following the Battle of the Marne the German Armies withdrew to a position on the heights overlooking the northern bank of the Aisne River. There, about 100 kilometers north by northeast of Paris the First and Second German Armies turned to face the pursuing Allied Armies. The German First Army protected the right flank of the German armies with its right (west) flank anchored on the Oise River just north of its intersection with the Aisne. On the left of the First Army a thin cavalry screen covered a gap of about 11 kilometers in between the First and Second armies. By 16 September, however, the German Seventh Army moved into the gap. During the course of the battle the command of the German armies passed from General Helmuth von Moltke to General Erich von Falkenhayn. The Allied armies, on their arrival before the German position on 13 September were deployed with the French Sixth Army on the left, the British Expeditionary Force in the center, and the French Fifth Army on the right. The Allied Armies were under the overall command of General Joseph Jacques Cesaire Joffre.

The strength and extent of the German position were unknown to Joffre, but he decided nonetheless to make a frontal attack. On 13 September the Allies began to cross the Aisne on ponton bridges under murderous artillery fire. The next day the French Sixth Army captured the village of Autreches and began to approach the main German position. The British also began the ascent of the ridge; after contact with the entrenched Germans, they began digging in on the slope. On 15 September the Germans counterattacked with some local success, especially against the French Sixth Army. For the next three days the Sixth Army fought to win back the ground that had been lost in the counterattack. The remaining Allied forces attacked and were repelled from the German main positions.

Significance: The Allied check on the Aisne marked the beginning of trench warfare in the West.

Sources: A.11.2; L.3.1; L.9.1914.1.

1. IDENTIFICATION
War: World War I
Eastern Front, 1914

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Stalluponen, Germany	A 17 Aug 1914 D	E. Prussia, 1914	Rus III Corps Ger I Corps	Gen Rennenkampf Gen von Francois	1	32.0
Gumbinnen, Germany	A 20 Aug 1914 D	E. Prussia, 1914	Ger Eighth Army Rus First Army	Gen von Prittwitz Gen Rennenkampf	1	64.0
Tannenberg, Germany	A 26-29 Aug 1914 D	E. Prussia, 1914	Ger Eighth Army Rus Second Army	Gen von Hindenburg Gen Samsonov	4	120.0
Masurian Lakes, Germany	A 9-13 Sep 1914 D	E. Prussia, 1914	Ger Eighth Army Rus First Army	Gen von Hindenburg Gen Rennenkampf	5	121.0
Krasnik, Russian Poland	A 23-25 Aug 1914 D	Galicia, 1914	Aus First Army Rus Fourth Army	Gen Dankl Gen Salza	3	64.0
Komarov, Polish Russia	A 26-30 Aug 1914 D	Galicia, 1914	Aus Fourth Army (+) Rus Fifth Army	Gen Auffenberg Gen Plehve	5	72.0
Gnila Lipa, Austrian Galicia	A 26-30 Aug 1914 D	Galicia, 1914	Aus Third Army (+) Rus Third & Eighth Armies	Gen Bruderman Gen Ivanov	5	150.0
Rava Russka, Austrian Galicia	A 3-10 Sep 1914 D	Galicia, 1914	Aus Second, Third, & Fourth Armies	Gen Conrad Gen Ivanov	8	160.0
Lodz, Russian Poland	A 12-24 Nov 1914 D	W. Poland, 1914	Rus Third, Fifth, & Eighth Armies	Gen Mackensen Grand Dk Nicholas	13	120.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Eastern Front, 1914

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Stalluponen	A D	FM/RM HD	DST	ST	X	minor	N	N
Gumbinnen	A D	FM/RM HD	DST	ST	--	--	N	N
Tannenberg	A D	FW/RW HD	DST/WLT	ST	X-	substantial	N	N
Masurian Lakes	A D	FW/RW PD	DST/WLT	ST	--	--	N	N
Krasnik	A D	RM HD	DST	ST	--	--	N	N
Konarov	A D	RM HD	DST	ST	--	--	N	N
Gnila Lipa	A D	RM HD	DST	ST	--	--	N	N
Rawa Russka	A D	RM HD	DST	ST	N	--	--	N
Lodz	A D	RM HD	WLC	HT	N	--	--	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Eastern Front, 1914

Engagement	Strength				Air Sorties				Battle Casualties				Armor Losses Lost				Arty Pieces Lost				Aircraft Losses			
	Personnel Total	Total Lt.	Armor	Art.	Art. Pieces	Air Sorties	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day	Total \$/Day	\$/Day		
Stalluponen	A 50,000	0	--	--	120	0	3,500	7.0	0	--	?	--	?	--	0	0	0	--	0	0	--			
	D 40,000	0	--	--	100	0	2,000	5.0	0	--	?	--	?	--	0	0	0	--	0	0	--			
Gumbinnen	A 120,000	0	--	--	300	0	20,000	16.7	0	--	?	--	0	--	0	0	0	--	0	0	--			
	D 150,000	0	--	--	450	0	20,000	13.3	0	--	?	--	0	--	0	0	0	--	0	0	--			
Tannenberg	A 187,000	0	--	--	818	0	13,212	1.8	0	--	?	--	0	--	500	20.8	0	0	0	0	--			
	D 160,000	0	--	--	600	0	120,000	18.8	0	--	500	20.8	0	--	0	0	0	--	0	0	--			
Masurian Lakes	A 288,600	0	--	--	?	0	40,000	2.8	0	--	?	--	0	--	150	3.8	0	0	0	0	--			
	D 273,000	0	--	--	800	0	125,000	9.2	0	--	150	3.8	0	--	0	0	0	--	0	0	--			
Krasnik	A 350,000	0	--	--	875	0	50,000	4.8	0	--	40	1.5	0	--	0	0	0	--	0	0	--			
	D 260,000	0	--	--	690	0	50,000	6.4	0	--	28	1.4	0	--	0	0	0	--	0	0	--			
Komarov	A 300,000	0	--	--	750	0	40,000	2.7	0	--	30	0.8	0	--	0	0	0	--	0	0	--			
	D 260,000	0	--	--	720	0	90,000	6.9	0	--	100	2.8	0	--	0	0	0	--	0	0	--			
Gnila Lipa	A 240,000	0	--	--	828	0	76,000	3.0	0	--	75	3.0	0	--	0	0	0	--	0	0	--			
	D 480,000	0	--	--	1,340	0	35,000	1.6	0	--	30	0.4	0	--	0	0	0	--	0	0	--			
Rava Russka	A 900,000	0	--	--	2,000	0	180,000	2.5	0	--	160	1.0	0	--	0	0	0	--	0	0	--			
	D 936,000	0	--	--	2,000	0	82,000	1.1	0	--	30	0.2	0	--	0	0	0	--	0	0	--			
Lodz	A 260,000	0	--	--	?	0	60,000	1.8	0	--	?	--	0	--	0	0	0	--	0	0	--			
	D 400,000	0	--	--	?	0	95,000	1.8	0	--	?	--	0	--	0	0	0	--	0	0	--			

4. INTANGIBLE FACTORS

War: World War I, Eastern Front 1914

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.
Stalluponen	A D	x x	x N	N N	N N	x N	C C	x N	x x	x x	10.0	5 8
Gumbinnen	A D	x x	x x	N N	N x	x N	C C	x x	x x	x x	8.0	5 5
Tannenberg	A D	x x	x x	N N	x N	x N	C C	x x	x x	x x	3.0	8 1
Masurian Lakes	A D	x x	x x	x N	N N	x N	C N	x N	x x	x x	17.0	8 2
Krasnik	A D	N N	N N	N N	N N	N N	C N	N C	x x	x x	4.0	8 6
Konarov	A D	N N	N N	N N	N N	N N	C N	N C	x x	x x	2.0	8 3
Gniča Lipa	A D	N N	N N	N N	N N	N N	N N	N N	x x	x x	13.0	2 8
Rava Russka	A D	N D	N x	N x	N x	N x	O 0	C N	x x	x x	1.0	3 8
Lodz	A D	x x	x x	x x	x x	x x	x x	x x	x x	x x	13.0	8 7

6. FACTORS AFFECTING OUTCOME
War: World War I, Eastern Front, 1914

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Marketer, Mass	Logistics	Portfifi-cations	Depth
Staluponen	A D	x	N	N	N	N	N	N	N	N	N	N	N	N
Gumbinnen	A D	x	N	N	N	N	N	N	N	N	N	N	N	N
Tannenberg	A D	x	N	N	N	N	N	N	N	N	N	N	N	N
Masurian Lakes	A D	x	N	N	N	N	N	N	N	N	N	N	N	N
Krasnik	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Konarov	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Guila Lipa	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Rava Russka	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Lodz	A D	x	x	x	x	x	x	x	x	x	x	x	x	x

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War I , Eastern Front, 1914

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Stalluponen	A D	F D/O, E (LF)	--	--	X	R WD
Gumbinnen	A D	F, E (RF) D/O, F	--	--	X	R WD
Tannenberg	A D	F, EE D/O, F	--	--	X	B, Ps A
Masurian Lakes	A D	F, E (LF) D	--	--	X	B, Ps WDL
Krasnik	A D	F, E (RF) D	--	--	X	P WD
Konarov	A D	F D/O, F	--	--	X	P WD
Gnila Lipa	A D	F D/O, F	--	--	X	WD P
Rava Russka	A D	F D/O, F	--	E (LF)	X	R, WD P
Lodz	A D	F, EE D/O, F	--	--	X	P, WD WD

WORLD WAR I (EASTERN FRONT, 1914)

Stalluponen, 17 August 1914

To relieve German pressure on France, the Russian First Army, though only partly mobilized, invaded East Prussia on 17 August. Near Stalluponen its III Corps came in contact with a detachment of the German I Corps, whose commander, General Hermann von Francois, immediately reinforced the detachment and counterattacked. A German division at Tollmingkehnem was then moved north, and then took the III Corps in the rear. The disorganized Russians fell back to the border with heavy losses.

Significance: The Russians had moved out with understrength units and without adequate reconnaissance. They had also sent radio messages in the clear, so that the Germans were informed of their movements. The Russian advance was temporarily halted.

Sources: A.11.2; L.8.2; L.27; L.35.

WORLD WAR I (EASTERN FRONT, 1914)

Gumbinnen, 20 August 1914

Recovering from its defeat at Stalluponen and subsequent withdrawal, the Russian First Army resumed its advance into eastern Prussia. Late on 19 August the Russians had moved about 16 kilometers beyond Stalluponen, and began to encounter German outposts near Gumbinnen. There the German Eighth Army attacked them the next morning. On the German left, the I Corps hit the Russian XX Corps, pushing it back almost eight kilometers. However, the German XVII Corps, in the center, was repulsed by the Russian III Corps and forced to retreat in confusion. On the right, the German I Reserve Corps and the Russian IV Corps fought each other to a standstill. German General Max von Prittwitz, the Eighth Army commander, afraid of an encirclement by the Russian Second Army, advancing into East Prussia from the south, ordered a withdrawal.

Significance: Gumbinnen was a drawn battle, but Prittwitz's withdrawal made it a German defeat. General von Moltke, Chief of the Army General Staff, relieved Prittwitz of command and replaced him with General Paul von Hindenburg. Moltke also weakened his forces in the West by shifting two corps to the Eastern Front. Thus, the Russian invasion had already succeeded in its purpose of relieving pressure on France.

Sources: A.11.2; L.8.2; L.35.

WORLD WAR I (EASTERN FRONT, 1914)

Tannenberg, 26-29 August 1914

Russian General Alexander Samsonov's Second Army, invading East Prussia from the south, came into contact on 24 August with the German XX Corps, which withdrew. The next day, the Second Army continued its advance, and by the end of the day it was spread over a front of about 120 kilometers, with the corps on both flanks isolated.

General von Hindenburg, new commander of the German Eighth Army, approved the plan of his chief of staff, General Erich Ludendorff for a battle of annihilation against the Second Army. Leaving only a small cavalry screen to delay Rennenkampf's First Army, all of the Eighth Army was to move from northeast East Prussia to face the Second Army. Ludendorff planned a double envelopment of Samsonov's armies.

The German I Corps arrived by train from the north on 25 August and the next day attacked the Russian I Corps, on the Russian left flank. The Russian XV and XXIII Corps attacked the German XX Corps in the center and were repulsed. On the Russian right flank, the VI Corps was routed by the unexpected arrival of the German XVII and I Reserve Corps from the north.

On 27 August the German I Corps continued its attacks and routed the Russian I Corps. With both flanks defeated, the Russian center was exposed to envelopment. The German I Corps pushed eastward, cutting off the Russian southern escape route on 28 August, while the German XVII and I Reserve Corps continued the drive south, pushing in the Russian right flank. In the center, the German XX Corps attacked the Russian XV Corps, forcing it to withdraw. The next day, the German I Corps cut off the Russian escape route, so that the Second Army was completely encircled. All attempts to break out failed during the next few days.

Significance: The main Russian threat to East Prussia had been eliminated, and the Russian Second Army had been completely destroyed as a fighting force; its commander apparently committed suicide. The new German leadership team of Hindenburg and Ludendorff had gained a spectacular victory in its first days of command. The battle's results greatly strengthened German morale, dispirited the Russians, and shattered Allied confidence in Russia.

Sources: A.11.2; L.7; L.8.2; L.46.

WORLD WAR I (EASTERN FRONT, 1914)

Masurian Lakes, 9-13 September 1914

Following Tannenberg, the German forces in East Prussia concentrated against the Russian First Army in the northeast. Ludendorff planned a wide envelopment of the Russian left by his I and XVII Corps. On 9 September the German I Corps hit the Russian left flank, causing the II Corps to withdraw in disorder. Having used their reserves the previous day to stop a German attack through the Lotzen Gap, the Russian left flank was threatened with envelopment. General Pavel K. Rennenkampf, the army commander, realized the danger and ordered a withdrawal. To create a diversion that would cover the retreat, two divisions of the IV Corps attacked the XX Corps, in the German center, on 10 September, inflicting heavy losses. The XX Corps fell back and was out of action for two days. Ludendorff, concerned about these new developments in the center, limited the advance of the I and XVII Corps, which were ready to envelop the Russian left flank. The Russians were thus able to escape the ensuing close-in envelopment with most of their army.

Significance: Ludendorff's caution caused him to lose an opportunity for another Tannenberg. The Russian manpower losses at the Masurian Lakes were as great as those at Tannenberg, but -- unlike the situation after Tannenberg -- the Russians brought back most of their equipment and guns from the Masurian Lakes, and the surviving units, more than half the army, still made up an effective fighting force. However, Russian morale never fully recovered from the two defeats.

Sources: A.11.2; L.8.2.

WORLD WAR I (EASTERN FRONT, 1914)

Krasnik, 23-25 August 1914

At the outbreak of the war General Franz Conrad von Hötzendorf, the dynamic Austrian Chief of Staff, directed three of his six armies to advance into Russian Poland from Galicia. The First, Fourth, and Third Armies (from left to right) moved north and east from the vicinity of Lemberg (Lvov) on a 320-kilometer front, to clash headlong with General Nikolai Ivanov's Russian Southwestern Army Group (the Fourth, Fifth, Third, and Eighth Armies) southwest of the Pripet Marshes.

The Austrian First Army and Russian Fourth Army, to the surprise of both commanders, collided east of Krasnik, about 25 kilometers inside the Russian border. After three days of inconclusive combat, the Austrians threatened to envelop the Russian right, and the outnumbered Russians were forced back about 11 kilometers. The First Army was ordered to stop the pursuit, so as to keep the Austrian Fourth Army, on its right, from falling too far behind, and this alone saved the Russian Fourth Army from disaster.

Significance: This strategically insignificant battle illustrates the intelligence problems the two sides had experienced on the Eastern Front from the beginning. Neither had any idea of the other's whereabouts until they ran into each other.

Sources: A.11.2; L.8.2; L.26; L.33; L.43.

WORLD WAR I (EASTERN FRONT, 1914)

Kosarov, 26-30 August 1914

The first clash of the Russian and Austrian armies in Galicia had occurred near Krasnik, in southern Russian Poland, 23-24 August 1914, when the Austrian First Army, on the Austrian left, had defeated and driven back the Russian Fourth Army, on the Russian right. The Russian Fifth Army, advancing southward, shifted its line of march to the right, in a westerly direction to assist the hard-pressed Russian Fourth Army when it ran into the Austrian Fourth Army advancing, northward from Austrian Galicia. Both sides were surprised by the encounter, and four days of confused combat ensued. By 30 August, however, the Austrian commander, General Moritz Auffenberg, was close to enveloping both Russian flanks. That same day, Russian General Plehve, realizing his danger, ordered a withdrawal. On the following day, the Austrian corps commanders on the right and left flanks of the Fourth Army, both received false reports of threats to their flank security, and halted their attacks. The respite allowed the Russians to escape the threatened envelopment.

Significance: Failures of intelligence first led the Russians into a dangerous situation and then robbed the Austrians of a decisive victory.

Sources: A.11.2; L.8.2.

WORLD WAR I (EASTERN FRONT, 1914)

The Gnila Lipa, 26-30 August 1914

The Austrian plan provided for the Third Army and the Second Army on its right, to advance eastward from Galicia into southern Russian Poland, south of the Pripet Marshes. Because most of the Second Army was at first mobilized against Serbia, and then was being shifted back north to Galicia, the Austrian right wing was slower in getting started than the First and Fourth armies had been on the left. Meanwhile, on the Russian side, the Eighth and Third armies, on the left of the Southwest Army Group front, had moved more rapidly, and had crossed the frontier into Galicia before the Austrians began to move. A head on clash of the two opposing forces began on 26 August, about 30 kilometers east of the Gnila Lipa River. The Austrian Third Army, and some elements of the Second, ran into the combined Russian Third and Eighth Armies along a front of nearly 150 kilometers. Outnumbered three to one, the Austrians had been driven back 60 kilometers by 30 August. The right wing of the Russian Third Army was threatening Lemberg. The main portions of the Austrian Second Army arrived and took up a position covering the Third Army's right flank, during the last days of August, reducing the pressure on the Third Army in front of Lemberg.

Significance: The Austrians' confused change of plans at the onset of the war, combined with lack of reconnaissance, allowed their Third Army to meet the overwhelmingly stronger Russian Third and Eighth Armies, and certain defeat. Austrian lines of communications southward over the Carpathians were threatened, which also placed in some jeopardy the Austrian First and Fourth Armies, farther north, which had so far been successful.

Sources: A.11.2; L.8.2.

WORLD WAR I (EASTERN FRONT, 1914)

Rava Russka, 3-10 September 1914

Field Marshal Conrad von Hötzendorf, the overall Austrian commander, planned a huge double envelopment of the Russian Third and Eighth Armies. The Austrian Fourth Army was to turn around and attack southward against the Russian Third Army's right flank. The newly arrived Austrian Second Army was to attack the left flank of the Russian Eighth Army while the Austrian Third Army attacked the Russian center. Conrad thought the Russian Fifth Army was too badly damaged, following the Battle of Komarov, to interfere in his plans.

The Austrian Fourth Army, moving southward, unexpectedly struck the Russian Third Army on 3 September, meeting it almost head-on, rather than hitting its left flank, as planned. The two armies fought to a stalemate. Meanwhile, the Austrian Second Army made little progress against the Eighth Army, as inconclusive fighting raged in the Lemberg (Lvov) area for several days. By 9 September, the resilient Russian Fifth Army was pushing south into the gap left open between the Austrian Fourth and First Armies, threatening the left flank and rear of the Fourth Army. On 11 September Conrad realized the dangerous situation he was in and ordered a withdrawal.

Significance: The Austrian attack was a failure, mainly because of Conrad's mistaken belief that the Russian Fifth Army was destroyed and would not disrupt his plans. The Austrians withdrew 160 kilometers over a period of two weeks. Their 1914 offensive had ended in disaster.

Sources: A.11.2; L.8.2.

WORLD WAR I (EASTERN FRONT, 1914)

Lodz, 12-24 November 1914

Anticipating a major Russian offensive from western Poland into German Silesia, German Generals Paul von Hindenburg and Erich Ludendorff decided to seize the initiative and disrupt the Russian plans by an offensive in the other direction. The German Ninth Army, in the Posen-Thorn area, struck southeast between the First and Second Russian armies, which were protecting the northern flank of the Grand Duke's planned offensive. The Russian First Army was crushed and the Second, near Lodz, was embraced by an attempted double envelopment. The key element of the German stroke was the XXV Reserve Corps, commanded by General Reinhard von Scheffer-Boyadel. It rolled through the gap between the Russian armies and turned south and west. The movement was foiled by the Grand Duke's prompt counterattack. The Russian Fifth Army from the south and an improvised group from the northern forces checked the German advance. Scheffer's corps was completely surrounded. In an amazing display of leadership, Scheffer not only broke through to safety but also brought back with him 16,000 prisoners and 64 captured guns. This corps marched and fought continuously for 9 days in subzero weather with a net loss of 1,500 killed and 2,800 wounded, who were also brought safely back.

Significance: Lodz was a tactical success for the Russians but a strategic victory for Germany. A planned Russian offensive had been stopped before it could get started. After the battle the Russians canceled their offensive, evacuated Lodz, and fell back in a general retirement. Germany was not threatened by Russian invasion for the remainder of the war. Scheffer's handling of his fine corps was one of the outstanding military exploits of the war.

Sources: A.8; A.11.2; L.7; L.8.2.

1. IDENTIFICATION
War: World War I, Serbian Front, 1914

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
The Jadar, Serbia	A 12-19 Aug 1914 D	Serbia, 1914	Aus Second (-) & Fifth Armies Serb First, Second & Third Armies	Gen Potiorek FM Putnik	8	74.0
The Kolubra, Serbia	A 3-9 Dec 1914 D	Serbia, 1914	Serb First, Second & Third Armies Aus Fifth & Sixth Armies	FM Putnik Gen Potiorek	7	106.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I , Serbian front, 1914

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
The Jadar	A D	RgM/RM HD	DST/WLT	ST N	--	--	--	N
The Kolubra	A D	RgM/RM PD	WLT	WT Y	X	substantial		N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Serbian Front, 1914

Engagement	Strength				Air Sorties	Battle Casualties	Armor Losses	Arty Pieces Lost	Total \$/Day	Total Aircraft Losses	Total Sorties/Day
	Personnel Total	Total Art.	Lt.	HST							
The Jadar	A 200,000	0	--	0	?	0	34,000	2.1	0	--	70
	D 200,000	0	--	0	?	0	18,000	1.1	0	--	?
The Kolubra	A 200,000	0	--	0	?	0	45,000	3.2	0	--	?
	D 300,000	0	--	0	?	0	92,000	4.4	0	--	133

4. INTANGIBLE FACTORS

5. OUTCOME

War: World War I , Serbian Front, 1914

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Materiel	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
Jadar	A D	N x	N	N	0	N	N	C	x	x	3.0 9	3 9
Kolubra	A D	N x	N	N	0	N	N	C	x	x	14.0 2	10 2

6. FACTORS AFFECTING OUTCOME World War I , Serbian Front, 1914

Engagement	The Jadar	The Kolubra	A D	A D
Force Quality	N	N		
Reserves	N	X		
Mobility	N	N		
Air Superiority	N	N		
Force Prepon- derance	N	N		
Weather	O	N		
Terrain, Roads	X	N		
Leader- ship	I	X		
Planning	N	N		
Surprise	X	N		
Maneuver, Masses	N	N		
Logistics	O	N		
Fortifi- cations	N	N		
Depth	N	N		

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War I , Serbian Front, 1914

Engagement	Main Attack and Scheme of Defense		Secondary Attack	Success	Resolution
	Plan and Maneuver				
The Jadar	A D	F D/O, F	E (RF) E (RF)	X	R, WD P, Ps
The Kolubra	A D	F D	-- --	X	B, Ps WDL

WORLD WAR I (SERBIAN FRONT, 1914)

The Jadar, 12-19 August 1914

Just two weeks after war was declared, on 12 August 1914, two Austrian armies invaded Serbia. The Serbian commander, Field Marshal Radomir Putnik, concentrated his forces against the fastest-moving, the Fifth Army, and as it pushed into Serbia from the west, the Serbian Second and Third Armies moved out to meet it. The Serbian Third Army's counterattack was repulsed on the left by the Austrian XII Corps, but on the right, the Serbian Second Army pushed the Austrian VII Corps back to the frontier with heavy casualties. Hoping to give the VII Corps time to recover, General Potiorek, the Austrian commander, sent the IV Corps of the Austrian Second Army to threaten the Serbian Second Army's right flank. Marshal Putnik shifted his Second Army north, reinforced by units of the First Army, and, on 16 August, the Serbians drove leading elements of the IV Corps back to the border. The IV Corps then regrouped and stopped the Serbian attack. While this action was going on, the rest of the Serbian First Army was committed on the left flank to turn the right flank of the Austrian Fifth Army. Potiorek ordered a general withdrawal.

Significance: Through the skillful leadership of Serbian Marshal Putnik the invading Austrians were driven from Serbian territory.

Sources: A.11.2; L.8.2.

WORLD WAR I (SERBIAN FRONT, 1914)

The Kolubra, 3-9 December 1914

As the Austrians pushed their Sixth and Fifth Armies farther into the mountainous terrain of Serbia in their third invasion of that country in 1914, they had increasing difficulty supplying their men over extended lines of communication. Serbian Field Marshal Putnik realized the Austrian vulnerability and planned a counteroffensive. The Serbians, resupplied with ammunition from France and Russia, launched their offensive on 3 December. The attacking force was made up of the Second Army on the right, the Third in the center, and the First on the left, with the Belgrade Detachment on the extreme right and on Uzhitse Detachment on the far left. The exhausted and surprised Austrians fell back several miles on the first day, and many units broke under the determined Serbian attacks. The Austrians had another problem: The Kolubra River, behind them, had flooded its banks, making it impossible for supplies to reach the front lines. By 6 December, the Austrian line had collapsed completely, and men were streaming back to the border in a rout. On 9 December Austrian General Potiorek ordered a withdrawal from Serbia. The Serbians pursued as best they could, slowed by muddy roads.

Significance: The outnumbered and poorly equipped Serbians under Putnik again drove the Austrians from their country. They also kept important Austrian reserves away from the hard-pressed Galician Front.

Sources: A.11.2; L.8.2.

1. IDENTIFICATION
War: World War I

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Eastern Champagne, A France	15 Feb-16 Mar 1915	Noyon Salient	Fr Fourth Army Ger Third Army	Gen Langle de Cary Gen Hausen	30	17.0
Neuve Chapelle, France	A 10-13 Mar 1915 D	Noyon Salient	Br First Army Ger Sixth Army (-)	Gen Haig Cr Pr Rupprecht	4	19.0
Ypres II, Belgium	A 22 Apr-24 May 1915 D	Noyon Salient	Ger Fourth Army (-) Br Second Army (-)(+)	Dk of Wuertemberg Gen Smith-Dorrien	33	23.0
Festubert, France	A 16-26 May 1915 D	Noyon Salient	Br First Army (-) Ger Sixth Army (-)	Gen Haig Cr Pr Rupprecht	11	6.0
Loos, France	A 25 Sep-14 Oct 1915 D	Noyon Salient	Br First Army Ger Sixth Army (-)	Gen Haig Cr Pr Rupprecht	20	12.0
Winter Battle, Ger- many & Russ. Pol. D	A 7-21 Feb 1915	Eastern Front, 1915	Ger Eighth & Tenth Armies Rus Tenth Army	Gen Hindenburg Gen Sievers	15	209.0
Golice-Tarnow, (opening phase) Aus. Galicia	A 2-4 May 1915 D	Eastern Front, 1915	Ger Eleventh Army, Aus Third() & Fourth Armies Aus Third Army	Gen Mackensen Gen Dimitriev	3	121.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Eastern Champagne	A D	FM FD	NOR FM	DST/WLT WT	N Y	X X	-- --	N X
Neuve Chapelle	A D	FM FD	DST/WLT WT	Spt Spt	N Y	X X	-- --	N N
Ypres II	A D	FM FD	WLT Spt	N N	-- --	-- --	-- --	N N
Pestubert	A D	FM FD	DST/WLT WLT	FT Spt	N N	-- --	-- --	N N
Loos	A D	FM ED	WLT WT	FT Spt	N Y	X X	-- --	N N
Winter Battle	A D	FM PD	WLT WT	FT Spt	N Y	X Y	-- --	N N
Gorlice-Tarnow	A D	FM PD	WLT WT	FT Spt	N Y	X X	-- --	N N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I

Engagement	Strength				Battle Casualties				Arty Pieces Lost				Aircraft Losses	
	Personnel Total	Personnel Capt.	Armor Total	Armor Capt.	Air Sorties Total	Air Sorties Lost	Battle Casualties Total	Battle Casualties Lost	Arty Losses Total	Arty Losses Lost	Sorties/Day	Total Sorties/Day	Aircraft Losses	
Eastern Champagne	A ?	D ?	0 --	--	?	?	240,000	?	0	--	?	--	--	
Nerue Chapelle	A 87,000	D 40,000	0 --	--	530	?	12,892	3.7	0	--	?	--	--	
Ypres II	A ?	D ?	0 --	--	?	?	35,000	0	--	?	--	?	--	
Festubert	A 90,365	D ?	0 --	--	433	?	16,648	1.7	0	--	?	--	--	
Loos	A 298,437	D 75,000	0 --	--	?	?	61,713	1.0	0	--	?	--	--	
Winter Battle	A 650,000	D 300,000	0 --	--	?	?	135,000	1.4	0	--	?	--	--	
Gorlice-Tarnow	A 216,000	D 219,000	0 --	--	?	?	36,000	5.6	0	--	?	--	--	
					?	?	153,654	23.4	0	--	?	--	?	

4. INTANGIBLE FACTORS

War: World War I

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Morale	Intelli- gence	Technol- ogy	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Eastern Champagne	A	C	C	C	N	N	C	C	N	X	0.1	4
Neuve Chapelle	A	D	C	C	C	N	N	C	N	X	0.4	6
Ypres II	A	D	C	C	C	N	N	X	N	X	0.2	5
Festubert	A	D	C	C	C	O	N	C	N	X	0.1	6
Loos	A	D	C	C	C	N	N	C	N	X	0.3	5
Winter Battle	A	D	X	C	X	X	N	X	X	X	10.0	8
Gorlice-Tarnow	A	D	X	X	C	X	N	C	X	X	10.0	8
												3

6. FACTORS AFFECTING OUTCOME

War: World War I

Engagement	Eastern Champagne	Neuve Chapelle	Ypres II	Festubert	Loos	Winter Battle	Gorlice-Tarnow	Depth
	A D	A D	A D	A D	A D	A D	A D	N
	X	X	X	X	X	X	X	X
	O X	N O	N O	N O	N X	N N	N N	N
	N	N	N	N	N	N	N	N
Mobility	N	N	N	N	N	N	N	N
Air Superiority	N	X	N	N	N	N	N	N
Force Preparation	N	X	N	N	N	N	N	N
Weather	N	N	N	N	N	N	N	N
Terrain, Roads	N	N	N	N	N	N	N	N
Leader-ship	O X	O N	N N	N N	N N	N N	N N	N
Planning Surprise	N	X	N	X	N	X	N	N
Mass Maneuver,	N	N	N	N	N	X	N	N
Logistics	N	N	N	N	N	X	X	X
Fortifi-cations	N	X	X	X	X	X	X	X
Depth	N	N	X	X	X	X	X	X

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: World War I

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	A	D	F	D		
Eastern Champagne	A D	D	F D	--	X	R, S S
Neuve Chapelle	A D	D	F D	--	X	R, S S
Ypres II	A D	D	F D	--	X	P, S S
Festubert	A D	D	F D	--	X	R, S S
Loos	A D	D	F D	--	X	R, S S
Winter Battle	A D	D	FF D	--	X	B, Ps A
Gorlice-Tarnow	A D	D	F D	--	X	B, Ps WDL

WORLD WAR I (WESTERN FRONT, 1915)

Eastern Champagne, 15 February-16 March 1915

The French Fourth Army under the command of General Fernand de Langle de Cary was deployed in Eastern Champagne with its right flank at Souain and the left flank at Massiges. Opposed to the French was the German Third Army under the command of General Baron Max von Hausen. The objective of the French attack was a railroad line that ran about eight kilometers behind the German front and which supplied the German armies in the region.

The French began their attack on 15 February by a frontal assault of the German fortified positions. Little ground was won on that first day, and the attack was continued for another 29 days. The French suffered very heavy casualties, did not cut the railroad line, or make any appreciable headway. The attack was called off on 16 March.

Significance: The French incurred serious casualties in a series of futile assaults.

Source: L.35.

WORLD WAR I (WESTERN FRONT, 1915)

Neuve Chapelle, 10-13 March 1915

The British First Army commanded by General Sir Douglas Haig was deployed in the Artois region along the line Bois Grenier on the left to Givenchy on the right. Opposed to the First Army was the German Sixth Army under Bavarian Crown Prince Rupprecht. The British plan for the battle was ostensibly to take first Neuve Chapelle then the Aubers ridge, and, if successful, to continue the attack until the town of Lille had been taken. The planned attack was also to be a test of a new artillery technique. During a relatively brief preparation of 35 minutes, some of the artillery was to concentrate its fire on sections of barbed wire in front of the German positions. Then when the infantry jumped off, the artillery would lift its fire in a rolling barrage in front of the advancing infantry.

Beginning at 0730 on 10 March British artillery smashed the front lines of the German Sixth Army, and the barbed wire in front of them. The British preparation was successful; it knocked out the barbed wire and sent German troops scurrying for cover. After 35 minutes the British infantry began the advance as planned, behind the rolling barrage. The first day of the attack was successful, and the British took the town of Neuve Chapelle. However by the 11th the Germans had managed to bring up their reserves, and no British advance was made after the first day. The engagement was called off on the 13th of March.

Significance: The new artillery technique was a success, but the gains of the British were limited.

Sources: L.3.2; L.9.1915.1; L.35.

WORLD WAR I (WESTERN FRONT, 1915)

Ypres II, 22 April-24 May 1915

The German Fourth Army under General Duke Albrecht of Württemberg held the line facing the Belgian town of Ypres. The Allied front at the town was held by elements of the British Second Army under the command of General Sir Horace Smith-Dorrien. Just west of the town, occupying the line from the Ypres Canal on the left to just east of Langemarck on the right, were two French divisions, the 87th Reserve and the 45th Reserve divisions. The Germans planned to make a small, localized offensive to recapture Hill 60, just east of the village of Zwartelen. However, the use of chlorine gas by the Germans, the first use on the Western Front, created an opportunity which the attackers failed to exploit fully.

The German attack was preceded by a two-day artillery preparation that was concentrated on the town of Ypres, presumably for the purpose of interdicting the road nets through which supplies reached the front lines. At 1730 on 22 April the Germans gassed the area occupied by the two French divisions. The French troops panicked, and a seven-kilometer gap opened in the Allied line. However, this gap was filled by British local reserves, and the Germans did not follow up their initial advantage. General Smith-Dorrien, after 24 May, wished to withdraw slightly so as to reduce the salient at Ypres, but his recommendation was not approved and he was relieved of his command. German gains were small.

Significance: This was the first significant use of poison gas in warfare. (An earlier use in the Eastern Front had been ineffective due to cold weather.) If the Germans had used gas as a preparation for a major offensive, it is conceivable that they might have broken through the Allied line. As it was the use of gas did nothing more than facilitate limited gains.

Sources: L.3.2; L.9.1915.1; L.35.

WORLD WAR I (WESTERN FRONT, 1915)

Festubert, 16-26 May 1915

The British First Army, under the command of General Sir Douglas Haig, was deployed in the French region of Artois along the line Richebourg L'Avoue - Bully Grenay. The Army's primary objective was to prevent German reinforcements being sent to the south, where the French Tenth Army was fighting the First Battle of Arras. The First Army's geographical objective, however, was the capture of Auhers Ridge. Deployed against the British was the right wing of the German Sixth Army under the command of Crown Prince Rupprecht of Bavaria.

The British attack began just after dawn on the morning of 16 May. The attack was preceded by an artillery bombardment that lasted for several hours but was for the most part ineffective as it did little to cut the barbed wire in front of the German trenches. The left wing of the attacking forces made some progress with one division capturing the first two lines of the German trenches, but other units took no ground. The British center made some advances but was stopped by German troops firing into its flanks. The right wing, however, advanced more than one mile. German counterattacks prevented the British from retaining this ground. On 26 May the attack was called off. British gains were limited.

Significance: The Germans were prevented from sending reinforcements to fight against the French at Arras. British gains in the offensive were small, and losses were high.

Sources: L.3.2; L.9.1915.1; L.35.

WORLD WAR I (WESTERN FRONT, 1915)

Loos, 25 September-14 October 1915

The British offensive at Loos, France, in the fall of 1915 was initiated because the French commander in chief, General Joseph Jacques Cesaire Joffre, desired a diversionary attack in the area north of Vimy Ridge to facilitate planned French offensives in Artois and Champagne. The British First Army under the command of General Sir Douglas Haig therefore attacked southwest of Lille on 25 September on a front extending between Aubers on the left and Loos on the right. This area was defended by Bavarian Prince Rupprecht's Sixth German Army. This region was a coal-mining area and had been mined extensively before the war. Thus there were many excavations and slag heaps, features of the landscape which aided the defense.

The initial British attack penetrated the German lines, and it appeared for a while that the British might achieve a breakthrough. However, British reserves failed to come up in time to exploit the initial favorable situation, and German reserves did arrive. The battle became stalemated.

Significance: The high losses and small gains of the British force prompted the relief of the British commander, General Sir John French. French was succeeded in command of the BEF by Haig.

Sources: L.9.1915.2; L.35.

WORLD WAR I (EASTERN FRONT, 1915)

The Winter Battle (Masuria), 7-21 February 1915

In the winter of 1914/1915 the German Tenth and Eighth Armies were deployed along an approximately 200-kilometer front in the Masurian Lakes region of East Prussia. The Tenth Army, under the command of General Hermann von Eichhorn, was in the north along a front that stretched from the Niemen River 60 kilometers west of Kovno on the left (northern) flank to the Pregel River in the south. The Eighth Army under the command of General Otto von Below, was deployed from the Pregel River in the north to the town of Johannisburg in the south. Opposite the two German Armies was the Russian Tenth Army under the command of General Baron Sievers. The German commander in chief, General Paul von Hindenburg, planned a double envelopment of the Russian Tenth Army by the German Tenth and Eighth Armies. The German Ninth Army was to protect the right flank of the Eighth Army while the maneuver proceeded. To ensure surprise and distract attention from the main effort, the German Eighth and Ninth Armies made a feint against the newly-established Russian Twelfth Army, which was deployed south of the Russian Tenth Army, and north of Warsaw.

The main attack of the Eighth Army against the Russian Tenth Army's left (southern) flank began on 7 February during a blizzard. The German Tenth Army made its main attack a day later. The German attack achieved complete surprise. The Russians were forced to retreat, pursued closely by the Germans. Both Russian flanks were enveloped by the 14th, and the Russian Tenth Army was trapped in the Augustow Forest. By 21 February the Russian Tenth Army was almost completely destroyed, but remnants escaped to the east.

Significance: The battle was an impressive success for the Germans, but it produced no great strategic results. Russian reserves counterattacked on 22 February, halting German progress after an advance of almost 140 kilometers.

Sources: L.35; L.44.

WORLD WAR I (EASTERN FRONT, 1915)

Gorlice-Tarnow, 2-4 May 1915

General August von Mackensen's plan for his offensive against the Russian Third Army called for a frontal attack by the German Eleventh Army and the Austrian Fourth Army, with additional artillery support from the Austrian Third Army.

The attack, on 2 May, was preceded by a four-hour preparation, the most intense artillery concentration fired on the Eastern Front up to that time. When the German and Austrian infantry attacked, a significant number of the dazed Russian defenders panicked, and by 4 May the attackers had completely broken through the Russian defenses. By the end of the month the entire Russian line was withdrawing to the east, and the Third Army had been destroyed as a fighting force. The pursuit continued until the end of September.

Significance: By the end of September the Russians had withdrawn from their position west of Warsaw to a line approximately 560 kilometers to the east.

Sources: L.8.2; L.30.3; L.35.

1. IDENTIFICATION

War: World War I, Italian Front, 1915

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
First Isonzo, Austria	A 23Jun-7Jul 1915 D	Isonzo Front, 1915	It Second & Third Armies Aus Fifth Army	Gen. Cadorna Gen. Borojevic	15	29.0
Second Isonzo, Austria	A 18Jul-3Aug 1915 D	Isonzo Front, 1915	It Second & Third Armies Aus Fifth Army	Gen. Cadorna Gen. Borojevic	16	29.0
Third Isonzo, Austria	A 18Oct-4Nov 1915 D	Isonzo Front, 1915	It Second & Third Armies Aus Fifth Army	Gen. Cadorna Gen. Borojevic	18	29.0
Fourth Isonzo, Austria	A 10Nov-2Dec 1915 D	Isonzo Front, 1915	It Second & Third Armies Aus Fifth Army	Gen. Cadorna Gen. Borojevic	23	29.0

Turkish Fronts, 1915

First Dardanelles Landing, Turkey	A 25 Apr 1915 D	Gallipoli	Allied Army Tk Fifth Army	Gen. Hamilton Gen. Ian von Sanders	1	97.0
Suvla Bay, Turkey	A 7-10 Aug 1915 D	Gallipoli	Br 7th, 10th, 11th & 12th Divs Tk 7th & 12th Divs	Lt. Gen. Stopford Gen. Ian von Sanders	4	7.0
Kut-el-Amara, Mesopotamia	A 27-28 Sep 1915 D	Mesopotamia, 1915	Br Mes Fld Force Tk Army	MG Townshend Nur-ud-Din Pasha	2	16.0
Ctesiphon, Mesopotamia	A 22-24 Nov 1915 D	Mesopotamia, 1915	Br Mes Fld Force Tk Army	MG Townshend Nur-ud-Din Pasha	3	12.1

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Italian Front 1915

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
First Isonzo	A D FD	RgM	DST/WLT	ST	N	--	--	N
Second Isonzo	A D FD	RgM	DST/WLT	ST	N	--	--	N
Third Isonzo	A D FD	RgM	DSC/WLC	FT	N	--	--	N
Fourth Isonzo	A D FD	RgM	DSC/WLC	FT/MT	N	--	--	N

Turkish Fronts, 1915

First Dardanelles Landing	A D PD	RgB/RgM	DST	SPT	N	--	--	N
Suvla Bay	A D HD	RgB/RgM	DST	Y	X	Minor	Minor	N
Ant-el-Amara	A D FD	FB/FM	DST	FD	Y	X	Minor	N
Ctesiphon	A D F/PD	FM	DST	FD	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Italian Front, 1915

Engagement	Strength			Battle Casualties			Arty. Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	Arty. Pieces	Air Sorties	Total	t./Day	Armor Losses	Arty. Losses	t./Day	Total	t./Day	Aircraft Losses
First Isonzo	A 200,000 D 100,000	0 0	-- --	212 ?	?	14,947 9,958	0.5 0.7	0 0	-- --	?	-- --	-- --
Second Isonzo	A 200,000 D 128,500	0 0	-- --	?	?	41,866 46,640	1.3 2.3	0 0	-- --	?	-- --	-- --
Third Isonzo	A 356,000 D 157,000	0 0	-- --	1,200 ?	?	67,000 31,474	1.0 1.1	0 0	-- --	?	-- --	-- --
Fourth Isonzo	A 311,000 D 136,000	0 0	-- --	1,200 ?	?	48,967 40,217	0.7 1.3	0 0	-- --	?	-- --	-- --

Turkish Fronts, 1915

First Dardanelles Landing	A 78,000 D 90,000	0 0	-- --	?	0	8,000	10.3	0	-- --	?	-- --	0
Suvla Bay	A 25,000 D 15,800	0 0	-- --	56 20	0	9,000	9.0	0	-- --	?	-- --	0
Kut-el-Amarra	A 11,000 D 11,300	0 0	-- --	28 38	?	1,230 5,300	5.6 23.5	0	-- --	0	-- --	?
Ctesiphon	A 13,756 D 20,400	0 0	-- --	30 52	?	4,985 6,112	11.1 10.1	0	-- --	2	-- --	0

4. INFLUENCING FACTORS

5. OUTCOME

War: World War I, Italian Front, 1915

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
First Isonzo	A C D	C	C	C	N	N	N	C	X	X	0.0	3
Second Isonzo	A C D	C	C	C	N	N	N	C	N	X	0.0	6
Third Isonzo	A C D	C	C	C	N	N	N	C	N	X	0.0	3
Fourth Isonzo	A C A	C	C	C	N	N	N	C	N	X	0.0	6

Turkish Fronts, 1915

First Dardanelles Landing	A C D	C	C	C	N	N	N	C	N	X	2.5	5
Suvla Bay	A C D	O	C	C	N	N	N	C	O	X	1.0	4
Kut-el-Amara	A x D	x	x	C	O	N	N	C	X	X	10.0	5
Cresiphon	A x	C	C	C	O	N	N	C	N	X	0.5	3

6. FACTORS AFFECTING OUTCOME

War: World War I, Italian Front, 1915

Engagement	First Isonzo	A D	N	N	N	N	N	N	N	N	Depth
Second Isonzo	A D	N	N	N	N	N	N	X	X	X	Fortifi- cations
Third Isonzo	A D	N	N	N	N	N	N	N	N	N	Logistics
Fourth Isonzo	A D	N	N	N	N	N	N	N	N	N	Mess- engers,
											Surprise
											Planning
											Lead-er- ship
											Roads
											Terrain,
											Weather
											Prepon- derance
											Air Superiority
											Mobili-ty Superiority
											Reserves
											Force Quality

Turkish Fronts, 1915

First Dardanelles Landing	A D	N	N	N	N	N	N	N	N	N	N
Savla Bay	A D	N	N	N	N	N	N	N	N	N	N
Kut-el-Amarra	A D	X	N	N	N	N	N	N	N	O	N
Ctesiphon	A D	X	N	N	N	N	N	N	N	X	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT
War: World War I, Italian Front, 1915

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
First Isonzo	A D	F, RivC	--	R,S S
Second Isonzo	A D	F, RivC	--	R,S S
Third Isonzo	A D	F, RivC	--	R,S S
Fourth Isonzo	A D	F, RivC	--	R,S S

Turkish Fronts, 1915

First Dardanelles Landing	A D	F D/O, F	F, R, --	P,R,S S
Suvla Bay	A D	F D/O, F	--	P,R,S S
Kut-el-Amara	A D	E(LR), F D	F, FE --	B ND
Ctesiphon	A D	E(LF) D/O, F	F --	R, --

WORLD WAR I. (ITALIAN FRONT, 1915)

First Isonzo, 23 June-7 July 1915

The Italian objectives for the first four battles of the Isonzo were the same: to occupy the Upper Isonzo valley, the Gorizia area, and the Doberdo Plateau. In command of the Italian Second and Third Armies was General Count Luigi Cadorna; he was opposed by the Austrian Fifth Army, commanded by General Baron Svetozan Borojevic von Bojna.

The Italians began their first attack on 23 June and continued until 7 July. They made no appreciable gains, despite substantial losses. The primary reason for their failure was Austrian artillery situated on the heights overlooking and surrounding the attack zone. The problem was best expressed by Douglas Johnson in his Topography and Strategy in the War: "Boats and pontoon bridges are destroyed in this hurricane of cross-fire, and you begin to realize that you cannot cross the river until you capture the protecting mountains, and cannot reach the mountains until you have crossed the river." None of the objectives were reached by the Italians.

Significance: The heights were not taken by the Italians.

Sources: A.7; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1915)

Second Isonzo, 18 July-3 August 1915

As in the First Isonzo, the Italian objectives were the Upper Isonzo valley, the Gorizia area, and the Doberdo Plateau. Commanding the Italian Second and Third Armies was General Count Luigi Cadorna. The Austrian Fifth Army was commanded by General Baron Svetozan Borojevic von Bojna.

The Italians began their attack on 18 July and continued until 3 August but again failed to gain their objectives and sustained considerable losses. The Austrian losses were rather more severe considering that they were the defenders and were in fortified positions. Still, their artillery positions overlooking the Italian zone of advance continued to dominate the overall course and outcome of the battle.

Significance: The Italians failed once again to take the Austrian positions overlooking the river.

Sources: A.7; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1915)

Third Isonzo, 18 October-4 November 1915

The Italian objectives again were the Upper Isonzo Valley, the Gorizia area, and the Doberdo Plateau. Still commanding the Second and Third Armies (both reinforced considerably since the prior two Isonzo battles) was Count Luigi Cadorna. The Austrian Fifth Army (also reinforced over its initial deployment strength) was still commanded by General Baron Svetozan Borojevic von Bojna.

The Italians began their attack on 18 October and continued their renewed offensive until 4 November. Again, no significant gains were made, and the losses on both sides were considerable. The Austrian artillery continued to dominate the battleground from its strategically placed positions on the surrounding hills.

Significance: The Austrian positions overlooking the river still were not taken.

Sources: A.7; L.10; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1915)

Fourth Isonzo, 10 November-2 December 1915

The Italian objectives were again the Upper Isonzo valley, the Gorizia area, and the Doberdo Plateau. Commanding the Italian Second and Third Armies was Count Luigi Cadorna. The Austrian Fifth Army was commanded by General Baron Svetozan Borojevic von Bojna.

The Italians began their attack on 10 November and were forced to discontinue it on 2 December. Again, no significant gains were made but the losses on both sides were heavy. The Austrian artillery continued to dominate the battleground from its strategically placed positions on the surrounding hills.

Significance: The Austrian positions overlooking the river still were not taken.

Sources: A.7; L.10; L.32; L.35; L.51.

WORLD WAR II (TURKISH FRONTS, 1915)

First Dardanelles Landing, 25 April 1915

The British plan for the initial landing on the Gallipoli Peninsula was for the British 29th Division to land at Cape Helles, at the tip of the Peninsula, and for the Australian and New Zealand Army Corps (ANZAC) to land slightly north of Gaba Tepe. The French Colonial Division was to make a diversion against the Asiatic side of the Dardanelles at Kum Kale. The British and Empire troop landings were opposed by the Turkish 9th and 19th Divisions, and the French landing was opposed by the Turkish 3d and 11th Divisions. The Allied Forces were commanded by British General Sir Ian Hamilton, and the Turkish forces were under the overall command of General Otto Liman von Sanders.

The British 29th Division landed on five separate beaches in a semi-circle at the tip of the peninsula. The opposition at these beaches was mixed. Some units did not lose a man, while others were pinned down by machine gun fire and became entangled in barbed wire obstacles at the shore line. The 29th Division, after landing and consolidating its beachhead, moved towards the high ground of Achi Baba, but was stopped by a Turkish counterattack south of the town Krithia. The Anzac Corps managed to land without much opposition but was counterattacked in the afternoon and had to fight to defend the small arc of its landing site. The French diversion kept Turkish units occupied until the Colonial Division was withdrawn on 27 April.

Significance: The Allied forces landed successfully but did not accomplish their primary mission of securing the high ground beyond the beachheads before the Turkish forces could react adequately to the operation.

Sources: A.11.2; L.412; L.35.

WORLD WAR I (TURKISH FRONTS, 1915)

Suvla Bay, 7-10 August 1915

British troops had landed on the Gallipoli Peninsula in April 1915, but had made little headway beyond the beaches against determined Turkish resistance. As part of a major offensive designed to break the stalemate, a landing was planned at Suvla Bay, north of the British beachheads. British General Sir Frederick Stopford and two divisions landed at Suvla Bay on the Gallipoli Peninsula on 7 August, with the mission of taking the heights surrounding the Suvla Bay landing beaches. The Turkish forces in the area at the time of the landing were under the command of the German Major Willmer and consisted of three infantry battalions, of which two were gendarmerie.

The British spent the two days following the landing for the most part idling on the beaches and consolidating their beachhead. However, two British battalions of the 32d Brigade, acting on their own initiative, succeeded in securing the Scimitar Hill above the beach, on 8 August. The two battalions were then ordered back to the beachhead in order to take part in an offensive on the 9th against Kuchuk Anafarta, a hamlet on high ground. By the 9th, however, the Turkish 7th and 12th Divisions, under the overall command of German General Liman von Sanders, had arrived and counterattacked. The British 53d Territorial Division had also landed to reinforce the British troops, but by that time the Turks were firmly entrenched on the heights overlooking the bay, and repeated British attacks failed to dislodge them.

Significance: British procrastination caused the failure of the Suvla Bay mission.

Sources: L.48.

WORLD WAR I (TURKISH FRONTS, 1915)

Kut-el-Amara, 27-28 September, 1915

In August 1915 Major General Charles Townshend, commander of the British 6th Indian Division (reinforced) was ordered to advance up the Tigris River from Amara and take Kut-el-Amara at the confluence of the Tigris and Shatt-el-Hai rivers, in preparation for an advance on Baghdad. By 16 September Townshend's force was roughly 24 kilometers from the fortified positions of Nur-ud-Din Pasha's Turkish force at Kut. Townshend bivouacked until he received supplies. Then, on 24 September, Townshend moved out to attack the Turkish force at Kut.

On 26 September Townshend had one of his brigades make a demonstration on the south bank of the Tigris to pin down Turkish forces in that sector. Then this brigade crossed to the north bank under cover of darkness and launched a holding attack on the Turkish front on 27 September. Two other brigades of British infantry and one cavalry brigade then successfully enveloped the Turkish left. The Turks suffered heavy casualties, and Nur-ud-Din Pasha withdrew northward.

Significance: Townshend's brilliant plan was well executed. Although the British were now in position to advance on the Turkish Ctesiphon position and Baghdad, their lines of communication and supply were overextended and they had to delay their further advance.

Sources: A.7; L.35.

WORLD WAR I (TURKISH FRONTS, 1915)

Ctesiphon, 22-24 November 1915

Following the British victory at Kut-el-Amara (27-28 September 1915) Turkish forces defending Baghdad fell back to the Ctesiphon position, some 26 kilometers southeast of Baghdad, on the Tigris River. The British were unable to exploit their victory at Kut because of serious problems of communications, supply, and administration. The pursuit of the Turks was slow, but British forces reached Aziziya, about halfway between Kut and Ctesiphon, on 3 October. There, the advance was delayed for about six weeks while the British High Command debated the feasibility of an advance on Baghdad. The delay allowed the Turks time to strengthen their fortifications at Ctesiphon, reinforce their field force, and prepare to meet the renewed British offensive.

On 11 November the British decided to attack the Ctesiphon position and renewed their advance. On 20 November the British were at Lajj, below Ctesiphon, and made preparations to attack the Turks in their entrenchments. The British commander, Major General Charles Townshend, planned to envelop the Turkish left with the greater portion of his force (3½ brigades), while a smaller force made a holding attack against the entrenchments of the Turkish left and left-center. The British attack succeeded in taking the first line of the Turkish defenses but was stopped by fierce Turkish counterattacks. Since Townshend had committed every man he had to the attack, he was unable to renew it with fresh troops and was forced to assume the defensive. Both sides were severely depleted by heavy casualties in the first day of fighting, but the Turks were continually reinforced from Baghdad. The combat stabilized on the Turkish first line of defenses and continued for two more days. On the 26th Townshend decided to withdraw.

The British retreated to Kut. The Turks followed but did not seriously press the British withdrawal. At Kut, Townshend dug in to protect his forward logistical base. The Turks arrived before Kut on 3 December and began to invest the town. Ctesiphon was a serious defeat for the British; Baghdad was saved, and the initiative passed to the Turks.

WORLD WAR I (TURKISH FRONTS, 1915)

Ctesiphon, 22-24 November 1915 (Continued)

Significance: The Turks stopped the British drive on Baghdad. Townshend's force retreated almost 120 kilometers to Kut, where it assumed the defensive. On 3 December the Turks appeared before Kut and opened siege operations against the British force.

Sources: L.35; L.39.2.

1. IDENTIFICATION
War: World War I

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
First Somme, France	A 1 Jul-25 Nov 1916 D	Western Front, 1916	Br Fourth and Fr Sixth Armies Ger Second Army	Gens Rawlinson & Fayolle Gen Below	116	29.0
Somme, Fourth Army Attack, France	A 1 Jul 1916 D	Somme	Br Fourth Army Ger Second Army	Gen Rawlinson Gen Below	1	29.0
Somme, Ovillers, France	A 1 Jul 1916 D	Somme	Br 8th Div Ger 180th Inf Rgt	MG Hudson ?	1	1.4
Somme, Bazentin Ridge, France	A 14 Jul 1916 D	Somme	Br Fourth Army (-) Ger 3d Gd Div	Gen Rawlinson Gen Below	1	4.5
Somme, Flers-Courcelette, France	A 15 Sep 1916 D	Somme	Br Fourth Res Armies Ger First Army	Gen Haig Gen Below	1	3.2
Caucasus Winter Offensive, Turkey	A 10-16 Jan 1916 D	Caucasus, 1916	Russ Army Tk Third Army	Gen Yudenich Abdul Kerim Paisha	7	110.0
Lake Narotch, Russian Poland	A 18-26 Mar 1916 D	Eastern Front, 1916	Russ Second Army Ger Tenth Army	Gen Savinov Gen Eichhorn	9	20.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
First Somme	A D	FD	FM	MHT/DST	N	--	--	X
Somme, Fourth Army Attack	A D	FD	DST	ST	N	--	--	X
Somme, Ovillers	A D	FD	FM	DST	ST	--	--	X
Somme, Bazentin Ridge	A D	FD	FM	DST	Y	X	Substantial	X
Somme, Flers-Courcelette	A D	FD	FM	DST/WHT	PT	Y	Complete	X
Caucasus Winter Offensive	A D	FD	R&M	WIC	WT	Y	Complete	N
Lake Narotch	A D	PD	FM	DST	SPr	N	--	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I	Strength				Air				Battle				Arty				Aircraft Losses	
Engagement	Personnel Total	Armor Total	Artillery Lt.	NBT	Arty Pieces	Air Sorties	Total	\$/Day	Casualties	Armor Losses	Total	\$/Day	Total	\$/Day	Arty Lost	Pieces Lost	Total	Sorties/Day
First Somme	A 600,000	49	0	49	1,537	?	670,000	1.0	33	13.5*	?	--	?	--	?	--	--	
	D 300,000	0	--	--	400+	?	500,000	1.5	0	--	?	--	?	--	?	--	--	
Somme, Fourth Army Attack	A 290,000	0	--	--	1,537	?	57,450	19.8	0	--	?	--	?	--	?	--	--	
	D 95,000	0	--	--	?	?	8,000	8.4	0	--	20	?	?	--	?	--	--	
Somme, Ovillers	A 11,300	0	--	--	?	?	5,121	45.3	0	--	?	--	?	--	?	--	--	
	D 2,800	0	--	--	?	?	281	10.0	0	--	?	--	?	--	?	--	--	
Somme, Bazentin Ridge	A 45,000	0	--	--	?	?	9,000	20.0	0	--	?	--	?	--	?	--	--	
	D 15,000	0	--	--	?	?	4,000	26.7	0	--	?	--	?	--	?	--	--	
Somme, Flers-Courcelette	A 190,000	36	--	--	36	?	3,500	1.8	25	69.4	?	--	?	--	?	--	--	
	D 90,000	0	--	--	800	?	3,000	3.3	0	--	?	--	?	--	?	--	--	
Caucasus Winter Offensive	A 103,000	0	--	--	239	?	8,000	1.1	0	--	?	--	12	1.7	?	--	--	
	D 61,000	0	--	--	100	?	25,000	5.9	0	--	?	--	?	--	?	--	--	
Lake Narotch	A 350,000	0	--	--	887	?	100,000	3.2	0	--	?	--	?	--	?	--	--	
	D 180,000	0	--	--	440	?	20,000	1.2	0	--	?	--	?	--	?	--	--	

* Tank losses for five days of combat. Tanks first committed on 15 September.

4. INTANGIBLE FACTORS

War: World War I

5. OUTCOME

Engagement	TE	Leader-ship	Trainin-g/ Experi-ence	Morale	Logis-tics	Momen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
First Somme	C	C	C	C	N	N	N	X	N	X	6.1	4
Somme, Fourth Army Attack	A	C	C	C	N	X	N	C	X	X	1.5	3
Somme, Ovillers	A	C	C	C	N	X	N	C	N	X	N	7
Somme, Bapaume Ridge	A	C	C	C	N	X	N	C	X	X	1.4	5
Somme, Flers-Gouzelette	A	X	C	C	N	X	N	C	X	X	2.0	7
Caucasus Winter Offensive	A	C	X	C	C	X	N	C	X	X	11.0	8
Lake Narotch	A	D	X	C	C	C	N	C	N	X	0	4
												6

6. FACTORS AFFECTING OUTCOME

War: World War I

GREAT FORMS AND RESOLUTION OF COMBAT

No.: World War I

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
First Somme	A D	F D	-- --	P, R, S S
Somme, Fourth Army Attack	A D	F D	-- --	R, S S
Somme, Ovillers	A D	F D	-- --	R, S S
Somme, Bazentin Ridge	A D	F D	-- --	P, R, S S
Somme, Flers-Courcelette	A D	F D	-- --	P, S S
Caucasus Winter Offensive	A D	F, EE D	-- --	B, P, S MDL
Lake Narotch	A D	F D	-- --	R, S S

1. IDENTIFICATION
War: World War I (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
1916 Brusilov Offensive, Aus. Galicia	A 4 Jun-7 Jul D 1916	Eastern Front, 1916	Russ South West AC Aus Second, Fourth, Seventh, & Sud Armies	Gen Brusilov Gen Conrad	34	400.0
Fifth Isonzo, Austria	A 11-15 Mar 1916 D	Isonzo Front, 1916	It Second & Third Armies Aus Fifth Army	Gen Cadorna Gen Borojevic	5	29.0
Asiago, Austria and Italy	A 15 May-10 Jun D 1916	Austrian Trentino Offensive	Aus Third & Eleventh Armies It First Army	Gen Conrad	27	34.0
Trentino Counter-offensive, Austria and Italy	A 16 Jun-9 Jul D 1916	Trentino Counter-offensive	It Fifth Army Aus Third & Eleventh Armies	Gen Cadorna Gen Conrad	24	40.0
Sixth Isonzo, (Gorizia), Aus.	A 6-17 Aug 1916 D	Isonzo Front, 1916	It Second & Third Armies Aus Fifth Army	Gen Cadorna Gen Borojevic	12	13.0
Arras, France	A 9-24 Apr 1917 D	Western Front, 1917	Br First, Third and Fifth Armies Ger Sixth Army	PW Haig Gen Falkenhagen	15	32.0
Aisne II, France	A 16-30 Apr 1917 D	Western Front, 1917	Fr Fifth & Sixth Armies Ger First & Seventh Armies	Gen Nivelle Gens Boehn & Below	15	64.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
1916 Brusilov Offensive	A D	PD	RW	DST	Y	X	substantial	N
Fifth Isonzo	A D	FD	R&M	WHC	Spr	N	--	N
Asiago	A	R&M	DST/WLT	Spr	N	--	--	N
Trentino Counter-offensive	D	H/PD	R&B	DST/WLT	SIT	N	--	N
Sixth Isonzo (Gorizia)	A D	HD FD	R&M	DST/WLT	SIT	Y	minor	N
Arras	A	R&A	D	DST/WLT	Spr	Y	minor	X
Aisne II	A D	FD	RW	WLT/DST	Spr	N	--	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I (Continued)

Engagement	Strength				Battle Casualties				Arty Pieces Lost		Aircraft Losses	
	Personnel Total	Amt Inf.	Ltr.	MBT	Arty Pieces	Air Sorties	Total \$/Day	Armor Losses	Total \$/Day	Arty Pieces Lost	Total \$/Day	Aircraft Losses
1916 Brusilov Offensive	A 600,000 D 500,000	0 0	--	--	1,938 1,846	0	495,000 260,000	2.4 1.5	0 0	?	--	0 0
Fifth Isonzo	A 300,000 D 160,000	0 0	--	--	?	?	3,800 1,985	0.3 0.2	0 0	?	--	?
Asiago	A 213,000 D 118,000	0 0	--	--	2,000	?	41,264	0.7	0 0	?	--	?
Trentino Counter-offensive	A 200,000 D 172,000	0 0	--	--	623	?	74,887	2.4	0 0	?	--	?
Sixth Isonzo (Gorizia)	A 308,000 D 168,000	0 0	--	--	686 147	?	51,232 41,835	1.4 2.1	0 0	?	--	?
Arras	A 276,000 D 120,000	48 0	?	?	2,817 1,014	?	83,379 75,000	2.0 4.2	?	?	--	?
Aisne II	A 1,000,000 D 480,000	150 0	?	?	5,114 --	?	118,000 40,000	0.8 0.6	?	?	--	?
										150 227	1.0 ?	?

4. INTANGIBLE FACTORS
War: World War I (Continued)

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.
1916 Brusilov Offensive	A D	C C	C	C C	O N	N N	C C	C N	X X	X X	1.8 N	7 4
Fifth Isonzo	A D	C C	C	C C	N N	N N	C C	N X	X X	X X	N 0.7	3 5
Asiago	A D	C C	C	C C	N O	N N	C C	N X	X X	X X	0.7 0.5	5 6
Trentino Counteroffensive	A D	C C	C	C C	N O	N N	C C	N X	X X	X X	0.5 0.5	6 5
Sixth Isonzo (Gorizia)	A D	C C	C	C C	N N	N N	C C	N X	X X	X X	0.5 0.5	4 5
Arras	A D	C C	C	C C	N C	N N	C C	N X	X X	X X	0.5 0.3	5 3
Aisne II	A D	C C	C	C C	N N	N N	N X	N X	X X	X X	0.3 0.3	6 6

6. FACTORS AFFECTING OUTCOME
War: World War I (Continued)

Engagement	Force Quality	Reserves	Mobility Superiority	AIR Superiority	Force Preparation	Weather	Terrain, Roads	Leader-ship	Surprise	Maneuver, Mass., Near-front	Logistics	Fortifi-cations	Depth
1916 Eruisilov Offensive	A D	N A	X X	N N	N N	N N	X X	X N	N N	N N	N N	X X	X X
Fifth Isonzo	A D	N A	N X	N N	N N	N N	X X	X N	X X	X X	N N	X X	X X
Asiago	A D	N X	N N	N N	N N	N N	X X	X N	X X	X X	N N	O O	N N
Trentino Counteroffensive	A D	N A	N X	N N	N N	N N	X X	X N	N N	N N	N N	X X	X X
Sixth Isonzo (Gorizia)	A D	N A	X D	N N	N N	N N	X X	X N	N N	N N	N N	X X	X X
Arras	A D	X D	X X	N N	N N	N N	X X	X X	N N	N N	N N	X X	X X
Aisne II	A D	N A	N X	N N	N N	N N	X X	X X	N N	N N	N N	X X	X X

WORLD WAR I RESOLUTION OF COMBAT
World War I (Continued)

Element	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
				Secondary Attack		
1916 Brusilov Offensive	A D	F D	-- --	-- --	X	P, S WDL
Fifth Isonzo	A D	F D	-- --	-- --	X	R, S S
Asiago	A D	F D	-- --	-- --	X	P, S WD, S
Trentino Counteroffensive	A D	F D	-- --	-- --	X	P, S WD, S
Sixth Isonzo (Gorizia)	A D	F D	-- --	-- --	X	P, S S
Arras	A D	F D	-- --	-- --	X	R, S S
Aisne II	A D	F D	-- --	-- --	X	P, S S

1. IDENTIFICATION
War: World War I

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Messines, Belgium	A 7-14 Jun 1917 D	Flanders, 1917	Br Second Army Ger Fourth Army	Gen Plumer Gen Arnim	8	19.0
Ypres III, Belgium	A 31 Jul-7 Dec 1917 D	Flanders, 1917	Br Second & Fifth Armies Fr First Army Ger Fourth Army	Gen Haig Gen Arnim	130	24.0
Cambrai I, France	A 20-26 Nov 1917 D	Western Front, 1917	Br Third Army Ger Second Army	Gen Byng Gen Marwitz	7	16.0
Cambrai II, France	A 30 Nov-3 Dec 1917 D	Western Front, 1917	Ger Second Army Br Third Army	Gen Marwitz Gen Byng	4	22.0
Tenth Isonzo, Austria	A 12 May-5 Jun 1917 D	Isonzo Front, 1917	It Second & Third Armies Aus Fifth Army	Gen Cadorna Gen Borojevic	25	25.0
Eleventh Isonzo, Austria	A 18 Aug-15 Sep 1917 D	Isonzo Front, 1917	It Second & Third Armies Aus Fifth Army	Gen Cadorna Gen Borojevic	29	30.0
Caporetto, Austria and Italy	A 24 Oct-23 Nov 1917 D	Isonzo Front, 1917	Aus-Ger Fifth, Tenth, & Fourteenth Armies It Second, Third, & Fourth Armies	Gen Conrad Gen Cadorna	31	160.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Messines	A D	RgM FD	DST/MLT RM	ST	Y	X	substantial	X
Ypres III	A D	FD	DST/MHT	ST/FT	N	--	--	X
Cambrai I	A D	FD	RM	DST	FT	Y	substantial	N
Cambrai II	A D	PD	RM	DST	FT	X	minor	N
Tenth Isonzo	A D	FD	RgB	DST/MLT	SpT/ST	N	--	N
Eleventh Isonzo	A D	FD	RgB	DST/MLT	ST/FT	N	--	N
Caporetto	A D	FD	RgB/RgM	DST/MHT	FT	Y	minor	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I

Engagement	Strength			Battle Casualties			Arty Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	Lt.	Arty Pieces	Air Sorties	Total	\$/Day	Total	\$/Day	Total	\$/Day	Total
Messines	A 180,000 D 100,000	? ? ?	? ? ?	2,266 1,000	? ?	17,000 32,500	1.2 4.1	? ?	-- --	?	0.8	?
Ypres III	A 380,000 D 200,000	? ? ?	? ? ?	2,174 1,040	? ?	399,821 270,710	0.8 1.0	? ?	-- --	?	?	?
Cambray I	A 90,000 D 75,000	? ? ?	? ? ?	1,000 1,900	? ?	15,000 25,000	2.4 4.8	108 ? ?	4.8 --	?	?	?
Cambray II	A 130,000 D 90,000	? ? ?	? ? ?	1,200 1,000	? ?	28,000 29,000	5.4 8.1	? ?	-- --	138	2.2	?
Tenth Isonzo	A 280,000 D 165,000	0 0	-- --	2,200 1,400	? ?	157,000 75,700	2.2 1.8	0 0	-- --	?	?	?
Eleventh Isonzo	A 518,000 D 252,000	0 0	-- --	1,700 ?	? ?	166,000 85,000	1.1 1.2	0 0	-- --	?	?	?
Caporetto	A 602,000 D 574,000	0 0	-- --	4,000 3,600	? ?	20,000 305,000	0.1 1.7	0 0	-- --	?	?	?
										3,152	2.8	22

4. INTANGIBLE FACTORS
War: World War I

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.
Messines	A D	C C	C C	C C	N N	N N	X N	C C	X X	X X	0.6 0.6	7 4
Ypres III	A D	C C	C C	C C	N N	N N	N X	X X	X X	X X	0.6 1.2	5 6
Cambrai I	A D	C C	C C	C C	N N	N N	N X	C X	X X	X X	1.7 1.7	7 5
Cambrai II	A D	C C	C C	C C	N N	N N	N N	C C	X X	X X	0.1 0.1	5 3
Tenth Isonzo	A D	C C	C C	C C	N N	N N	N N	C C	N N	X X	0.3 4.2	5 8
Eleventh Isonzo	A D	C X	C X	C X	N N	N N	N N	C X	N X	X X	4.2 4.2	4 2
Caporetto	A D	O										

6. FACTORS AFFECTING OUTCOME

War: World War I

Engagement	Messines	A D	N X	Depth														
Ypres III	A D	N X	Portfli- cations															
Cambrai I	D A	N X	Logistics															
Cambrai II	D A	N X	Mercurer, Mass															
Tenth Isonzo	D A	N X	Surprise															
Eleventh Isonzo	D A	N X	Planning															
Caporetto	D A	N X	Leader- ship															
																		Depth

7. COMBAT FORCES AND RESOLUTION OF COMBAT

War: World War I

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Messines	A D	F D	--	x P, S S
Ypres III	A D	F D	--	P, S S
Cambrai I	A D	D	--	x P, S S
Cambrai II	A D	F D/O, F F, EE	--	x P, S WD, S
Tenth Isonzo	A D	F D/O, F	--	x P, S S
Eleventh Isonzo	A D	F D	--	x P, S WD, S
Caporetto	A D	F D	--	x B, Ps ML

WORLD WAR I (WESTERN FRONT, 1916)

First Somme, 1 July-25 November 1916

The offensive that resulted in the First Battle of the Somme had been planned by the Allies as early as the end of 1915. As it evolved its objectives were threefold: 1) to relieve German pressure on the French fortress of Verdun; 2) to prevent the further transfer of German troops to other theaters of war; and 3) to wear down the Germans by offensive action. The plan pitted the British Fourth Army under General Sir Henry Rawlinson (north of the Somme River) and the French Sixth Army under General Marie Emile Fayolle (south of the river) against the German Second Army under General Fritz von Below. The line of the attack stretched from Beaumont-Hamel in the north to about 12 kilometers southwest of Peronne in the south.

On 24 June 1916 Allied artillery began to pound the Germans lines. The preparation, the largest concentration of fire to that date in the war, lasted for six days. On 1 July the British infantry started their advance across no-man's land. The British XIII Corps, on the right, following a rolling barrage, was quite successful. Elsewhere, in the Fourth Army, however, infantry-artillery cooperation was poor, and British casualties were staggering. The Fourth Army on that first day of the battle lost 60,000 men, single-day casualties unparalleled in any British engagement before or since. French losses were lower, and success greater. The British renewed the offensive on 14 July, and came close to breakthrough, but by the 17th the Germans were reinforced. On 15 September the British launched another attack, in which they employed tanks for the first time in the war and gained about 1.5 kilometers on that day as a result. The battle dragged on until Haig called off the offensive after the weather changed in November.

Significance: The result of the battle in ground gained was slight: small advances were made relative to the enormous losses of men and consumption of material. The battle, however, reduced German morale, and forced them to shift reinforcements from the Verdun front.

Sources: L.35; L.38.

WORLD WAR I (WESTERN FRONT, 1916)

First Somme, British Fourth Army Attack, 1 July 1916

The Allies had been planning an offensive in the Somme area since late 1915, but, as French losses mounted at Verdun, it became increasingly urgent to take some of the pressure off the French, who were close to collapse. The plan was for General Sir Henry Rawlinson's British Fourth Army and the French Sixth Army under General E.M. Fayolle to attack the heavily fortified German position in the Peronne area held by the German Second Army commanded by General Fritz von Below. General Edmund Allenby's British Third Army, on the left of the Fourth, was to make a holding attack to draw German attention and reserves away from the main attack. The extreme right corps of the Third Army, the VII Corps, was also to participate in the attack. On 24 June the Allied artillery preparation, made by about 2,000 guns, began and lasted for six days. This was the heaviest concentration of fire in the war to that time. At 0730 hours 1 July the British infantry moved out and immediately came under German fire. The great artillery bombardment had been ineffective because the Germans had constructed deep dugouts in which they had taken shelter. By nightfall of the 1st, the XIII Corps on the right, which had followed the rolling barrage, had reached its objective. It was, however, the only corps to do so. To its left, the XV and the III Corps had made small gains only. On the far left the X, VIII and the VII Corps were repulsed. By the end of the day the British had suffered enormous casualties -- nearly 60,000 men. That evening, General Gough, commanding the British Reserve Army, was put in command of the left wing of the Fourth Army (the X and VIII Corps) with orders to reorganize it and to continue the attack.

Significance: The British attack on 1 July made insignificant gains. The casualties represented the largest one-day loss ever incurred by the British Army. In spite of this the British commanders refused to change their tactics for a less costly way of attacking.

Sources: L.4.3; L.9.1916.2; L.18; L.19; L.27; L.35.

WORLD WAR I (WESTERN FRONT, 1916)

First Somme, Ovillers, 1 July 1916

In the first day of the British Somme offensive the 8th Division of the British III Corps attacked the heavily fortified German position at Ovillers. The division was committed with its 70th Brigade on the left attacking north of Ovillers, the 25th Brigade in the center attacking Ovillers, and the 23d Brigade, on the right, attacking between La Boiselle and Ovillers. Opposed to the 8th Division was the German 180th Regiment of the 28th Reserve Division.

Following the pre-assault barrage the lead battalions moved out at 0730 on 1 July and immediately came under German fire. German artillery placed intense fire on No-Man's-Land and the British trenches causing heavy casualties. In spite of this fire, a few men reached the German trenches. Elements of the 23d Brigade fought their way to the second German trench, where they held for two hours before being driven out by German counterattacks. Elements of the 25th Brigade reached the first German trench in their sector only to be driven out by German counterattacks. The attack of the 70th Brigade was more successful. The Germans had concentrated fire on the 32d Division of the X Corps, and the 70th Brigade had advanced under relatively less intense artillery fire. This permitted the brigade to fight its way past the second German trench. However, support battalions trying to reinforce the lead battalions of the 70th Brigade suffered extreme casualties moving across No-Man's-Land, and later the 70th Brigade was also driven back to its own trenches by counterattacks. A new attack was planned to be launched at 1700 after a half-hour artillery preparation but was cancelled when it became apparent that there were too few men left to carry out such an attack.

Significance: The attack of the British 8th Division provides an example of what happened all along the British Fourth Army front on 1 July. The division lost nearly fifty percent of its men and made no appreciable gains.

Sources: L.4.3; L.9.1916.2; L.19.

WORLD WAR I (WESTERN FRONT, 1916)

First Somme, Bazentin Ridge, 14 July 1916

Two weeks into the Somme offensive, the right of the British Fourth Army had reached the German second line of defense on Bazentin Ridge. In earlier fighting the British had incurred heavy casualties and made small gains. However, the Fourth Army commander, General Rawlinson, had a plan that he hoped would change this. The plan was to assemble the attacking force under cover of darkness, as close as possible to the German lines, and to attack after a brief artillery preparation behind a rolling barrage. The attack was to be made by the 9th and 3d Divisions of the XIII Corps on the left, and on the right, the 7th and 21st Divisions of the XV Corps; the objective was the German position at Trones Wood. Once a breach had been made in the German defenses, three cavalry divisions were to exploit the breakthrough. Opposed to the British were the Bavarian 6th and 16th Regiments of the 3d Guard Division. The French holding the line to the right of the XV Corps refused to take part in the operation.

Soon after midnight on 14 July the British divisions began forming up for the attack; some units assembled within 500 yards of the German line without being detected. At 0325 the British artillery pounded the German positions with a brief (five-minute) and intense preparation. This was followed by a rolling barrage, which the infantry advanced behind. The British infantry stormed the German trenches and pushed on to take the towns of Basentin le Grand, Basentin le Petit and part of Longueval. A penetration was made and the cavalry of the 7th Dragoon Guards passed through the infantry to take High Wood. Elements of three German divisions arrived to plug the gap. These drove the dragoons out of High Wood and reestablished a solid defensive line.

Significance: Rawlinson's attack almost succeeded in effecting a complete breakthrough. The British had taken a substantial risk in forming in the open at night in front of the German lines, especially since many of the British troops were replacements with little combat experience. The Germans, by counterattacking, were able to stabilize the combat.

Sources: L.9.1916.2; L.16:

WORLD WAR I (WESTERN FRONT, 1916)

First Somme, Flers-Courcelette, 15 September 1916

The first use of tanks in history occurred during the September 1916 Somme offensive of the British Fourth and Reserve Armies. The British offensive was to be made between Morval and Le Sars. The British were deployed from left to right as follows: II, III, Canadian, XV, and XIV Corps. The Germans opposed to the British were the German XII Reserve Corps on the (German) right, II Bavarian Corps in the center, and Guard Reserve Corps on the left. Thirty-six tanks (of an original group of 50) were available for the attack, parcelled out to the five corps. These tanks immediately proved their worth. The British made great gains as the Germans fled from the new weapons. The XIV Corps took Gomble Trench and Leuze Wood before being stopped by German artillery. The XV Corps also was able to advance with the help of the tanks. The corps took the town of Flers and reached the outskirts of Queudecourt when darkness and German artillery fire forced them to stop for the day. In the III Corps sector, High Wood was taken, although with heavy casualties, and by 1700 the town of Martinpuich had also been taken, also with heavy losses. The Canadian Corps moved out under a rolling barrage and quickly took the German front trenches and then went on to capture the German position at the Sugar Factory south of Courcelette. Reinforcements were brought up and an assault was launched on Courcelette in the early evening with the Canadians taking the town easily.

Though the tanks contributed greatly to the British successes, they were mechanically unreliable. The effect of surprise soon wore off, and the Germans found ways of fighting the tanks. By the end of the first day most of the tanks had been lost, some to mechanical breakdown, others to enemy fire. The weather turned bad after the 15th, and the British made only small gains. German artillery played a very important role in limiting the British advance, and the attack was stopped on 22 September.

Significance: The tanks had a demoralizing effect on the Germans, but there were too few available for the British to achieve a breakthrough. However, warfare had taken on a new face with the use of tanks.

Sources: L.9.1916.2; L.18.

WORLD WAR I (TURKISH FRONTS, 1916)

Russian Winter Offensive in the Caucasus, 10-16 January 1916

On 10 January 1916 the Russian General Nicholas Yudenich launched a surprise offensive against the Turkish Third Army, commanded by Abdul Kerim Pasha, in the Transcaucasus region of Asia Minor. The Russians, who advanced from Kars on the Turkish lines covering the fortress of Erzerum, achieved complete surprise by their offensive, initiated in bitter winter weather in difficult, mountainous territory.

The Russians enjoyed a considerable numerical superiority and were well equipped with warm clothing. Their surprise drive was successful, and, by the 18th, the Turks, threatened with envelopment at Köprukoy, had begun a hurried retreat to the fortified Deva Boinu position covering their base and fortress of Erzerum.

Significance: Yudenich's victory, the result of excellent planning and surprise, completely upset Turkish strategic plans for 1916 and endangered the Turkish position in Transcaucasia. The Russians prepared to take Erzerum, the key to the region.

Sources: A.7; H.2.

WORLD WAR I (EASTERN FRONT, 1916)

Lake Narotch, 18-26 March 1916

In late February 1916, the French Government asked Russian Czar Nicholas II to help relieve German pressure on the French fortress of Verdun by mounting an offensive on the Eastern Front. In response the Russian Second Army, commanded by General Smirnov, planned to make an attack with its left wing, commanded by General Baluyev. Baluyev's command was deployed in the area between Lake Narotch and Lake Vishnevsky, east of Vilna. Opposed to the Russians in this area was the German Tenth Army under the command of General Hermann von Eichhorn.

The attack was preceded by a two-day artillery bombardment, the heaviest yet seen on the Eastern Front. On 18 March the Russian infantry began the attack, penetrating as far as the German second line of defenses before a series of misfortunes befell them. The spring thaw turned the battlefield into a muddy quagmire which slowed the pace of the advance. There was poor coordination between Russian infantry and artillery. German artillery fire, however, was most effective, and helped to repel the Russians. The Russians were forced back to their original positions.

Significance: The attack accomplished nothing and Russian morale suffered tremendously.

Sources: L.3.2; L.35; L.43.

WORLD WAR I (EASTERN FRONT, 1916)

The Brusilov Offensive, 4 June-7 July 1916

On 4 June 1916 Russian General Alexei Brusilov's Southwest Army Group held a line stretching from Pinsk in the north to the Rumanian northern border in the south. Since 24 May Brusilov had been preparing an offensive which was to be coordinated with offensives by two other Russian army groups to the north. These other army groups were not ready, however, to take the offensive on 4 June, and Brusilov started his offensive without their cooperation. Strict security measures helped to make the attack a surprise. There had been no massing of troops and little else to indicate to the Austrians, under the overall command of General Franz Conrad von Hotzendorf, the imminence of Brusilov's attack.

Brusilov's armies made substantial gains the first day, and the entire Austrian line was forced back. By 10 June the Russian Eighth Army on the right (northern) flank had penetrated about 32 kilometers and captured Lutsk. The Ninth Army in the south stopped only at the Carpathian Mountain barrier. Austrian losses were enormous, and only exhaustion, logistical problems, and the intervention of a German army group stopped Brusilov's progress. Ultimately, by the end of the offensive, the morale of the Austrian Army had been severely damaged, and the Eastern Front was unified under German command.

Significance: The Austrian Army as a force on the Eastern Front was severely reduced. The Russians proved that they could mount an offensive and make significant gains but continued to be plagued by intractable logistical problems. The Eastern Front was unified under German command and significant German reinforcements arrived to buttress the Austrian defenses. Rumania, encouraged by the Russian success, joined the Allied war effort -- with subsequent disastrous consequences.

Sources: L.35; L.43.

WORLD WAR I (ITALIAN FRONT, 1916)

Fifth Isonzo, 11-15 March 1916

The objective of the Italian attack was to prevent Austria from transferring troops to other fronts. Again the Italian Second and Third Armies, commanded by General Count Luigi Cadorna, attacked the Austrian Fifth Army commanded by General Baron Svetozan Borojevic von Bojna.

The Italians made little progress, and Cadorna called off the attack when intelligence reports confirmed that the Austrians were massing troops in the Trentino region.

Significance: The attack failed to prevent the Austrians from massing on another front. However, Italy could transfer troops much faster than Austria due to the terrain and road net.

Sources: A.7; L.10; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1916)

Asiago, 15 May-10 June 1916

The Austrian offensive plan was for the Eleventh and Third Armies to cross the Alps from the Trentino area and then descend on to the Piedmont plain, cutting off the Italian Second and Third Armies which were deployed along the Isonzo River. General Count Luigi Cadorna prepared for the Austrian attack by reinforcing his First Army with two divisions and forming a Fifth Army, from elements of the Second and Third Armies, behind the First Army.

The Austrians began their attack on 15 May and during the course of the battle pushed the Italians back. The precipitous terrain caused great difficulties for the Austrians, and slowed their rate of advance. By 10 June the Austrian attack had been spent. However the Italian Fifth Army was preparing to counterattack.

Significance: The Austrians gained ground but failed to reach the plains, their main objective.

Sources: L.10; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1916)

Trentino Counteroffensive, 16 June-9 July 1916

Italian General Count Luigi Cadorna announced that the Austrian Trentino offensive had failed on 3 June 1916. Cadorna began a counterattack on 16 June with the Italian Fifth Army. General Franz Conrad von Hotzendorf, in overall command of the Austrian Eleventh and Third Armies, found that his logistics were strained for two reasons: supply was difficult over the rugged mountain passes, and the Russian Brusilov offensive began on 4 June with disastrous results for the Austrian defenders in Galicia, causing the Austrian high command to concentrate its efforts and attention to the east, at the expense of the Italian front.

As a result of both the Brusilov Offensive and the Italian counterattack, Conrad was forced to withdraw his lines on 25 June. By 9 July the Austrian line was only eight kilometers south of where it had been originally on 15 May.

Significance: The Italian offensive in the Trentino area and the Russian offensive in Galicia severely depleted Austrian manpower and materiel.

Sources: L.10; L.32; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1916)

Sixth Isonzo, 6-17 August 1916

When the Italian Trentino counteroffensive came to a close, Italian General Count Luigi Cadorna rapidly transferred troops from that front to the Second and Third Armies on the Isonzo front. By August Cadorna had massed a total of twenty-two divisions on the Isonzo front. Austrian overall commander General Franz Conrad von Hotzendorf had not expected the Italians to prepare themselves so quickly and consequently the Austrian Fifth Army under the command of General Baron Svetozan Borojevic von Bojna was surprised when the attack began on 6 August.

By 8 August the strongly fortified town of Gorizia had been captured from the Austrians. This boosted Italian morale and greatly improved their tactical position. The Italian attack continued, but little additional ground was gained. On 17 August Cadorna called off the attack and began to consolidate the newly-won positions.

Significance: The capture of Gorizia improved Italian morale and finally established the Italian army in positions on the east bank of the Isonzo River.

Sources: L.10; L.35; L.51.

WORLD WAR I (WESTERN FRONT, 1917)

Arras, 9-24 April 1917

As a preliminary to Nivelle's planned Aisne Offensive. On 9 April the British First and Third Armies attacked the German Sixth Army near Arras, following a heavy bombardment and gas attack.

The Canadians Corps took almost all the important high ground of Vimy Ridge on the first day, while the XVII Corps advanced over three miles. The weather turned bad the following day, and the British advance was slower.

On 11 April, general Allenby, commanding the Third Army, thinking that the Germans were in retreat, ordered an infantry and cavalry pursuit. It was promptly stopped by the arrival of German reserves. To the south, the British Fifth Army attacked on the same day, but was repulsed. These setbacks might have induced General Sir Douglas Haig, the commander in chief of British forces in France, to call off the offensive, but Haig decided to prolong the attack in order to support Nivelle's offensive along the Aisne. A new attack at Arras was ordered for 23 April, but the Germans had constructed strong new defenses in that sector, and the attack was repulsed.

Significance: The British made the largest one-day gain since 1914, but were unable to achieve a breakthrough.

Sources: A.7; A.11.2; L.7; L.8.3; L.16; L.17.

WORLD WAR I (WESTERN FRONT, 1917)

Aisne II, 16-30 April 1917

The attack of the French Fifth and Sixth Armies in the spring of 1917 in the region between Soissons and Reims was preceded by ten days of intense artillery bombardment. The French plan called for the Fifth Army to break through the German line between Reims and Craonne. Once this had been accomplished, the French Tenth Army (in reserve) was to advance through the gap to exploit. The French, inspired by their new commander in chief, General Robert Nivelle, were confident of success.

The day of the attack was cold and wet, and the French were unable to employ their tanks. The attack went well at first. The French succeeded in capturing 20,000 men and about 130 guns. Soon, however, the attack bogged down and became a battle of attrition, with disastrous results for French morale and the career of General Nivelle. The battle dragged on for another month.

Significance: Nivelle had promised the government that his offensive would not be another battle of attrition like the Battle of Somme. He had pledged that his plan would force the Germans to retreat across the Meuse River. When this did not happen, the morale of the French armies plummetted, and Nivelle was relieved of his command and replaced by General Henri Petain. After the battle some 200,000 French troops mutinied, seriously threatening the Allied effort. The mutiny was quelled by Petain's prompt and sober actions.

Sources: A.2.4; L.35.

WORLD WAR I (WESTERN FRONT, 1917)

Messines, 7-14 June 1917

As a preliminary to a planned offensive at Ypres, the British high command believed it was necessary to take the German fortified positions on Messines Ridge. The task of taking Messines Ridge was given to General Sir Herbert Plumer's British Second Army. A preliminary bombardment was begun on 21 May and continued until 7 June, the scheduled date of the attack. Meanwhile, the British had been tunneling under the German positions and had created 19 mines full of TNT. Early on the 7th a million pounds of explosives under the German positions was detonated. The British infantry moved into the destroyed German positions and easily secured the ridge with light casualties. In the next few weeks the British advanced about four kilometers more. The attack was brought to halt eventually by German reserves.

Significance: With the Germans cleared from the important Messines Ridge, it was now possible for the British to go ahead with their offensive at Ypres.

Sources: A.11.2; L.313; L.8.3; L.16; L.17.

WORLD WAR I (WESTERN FRONT, 1917)

Ypres III, 31 July-7 December 1917

With Messines Ridge in British hands, Haig could concentrate on the main offensive in Flanders. He also felt it was important to put as much pressure as possible on the Germans since, as a result of the failure of the Nivelle Offensive, there were widespread mutinies in the French Army, and the French portion of the front was extremely vulnerable. The British Fifth Army was to make the main effort against the German Sixth Army, with the French First Army acting as pivot for the offensive on the left, and the British Second Army serving as a covering force on the right. Following an intense bombardment, the British made some early gains, but the attack was halted by stiff German resistance and exceptionally deep mud. After these setbacks, Haig put General Plumer in charge of the operation. Plumer carried out several well-planned small-scale attacks with good results. The British took much of Passchendaele Ridge, but were stopped by severe rains in late September. In spite of bad weather conditions and stiff German resistance, Haig continued the attacks to capture Passchendaele, which he considered necessary for a satisfactory winter defensive position. By early December Canadian troops had secured the town of Passchendaele and most of Passchendaele Ridge, after suffering heavy casualties.

Significance: The British offensive brought small gains at the cost of very heavy casualties but did keep the Germans occupied at a time when there was widespread mutiny in the French Army.

Sources: L.8.3; L.21; L.22; L.45.

WORLD WAR I (WESTERN FRONT, 1917)

Cambrai I, 20-26 November 1917

As the British offensive at Ypres was winding down, British Field Marshal Sir Douglas Haig launched his Third Army against the German Second Army at Cambrai. At dawn on 20 November 1917 the artillery preparation and ground attack were made simultaneously. The infantry attack was supported by over 300 tanks. The surprised and outnumbered Germans fell back with heavy losses as the British broke into the depth of the defensive area. The tanks incurred heavy losses from mechanical breakdowns as well as from enemy fire. The British were unable to exploit their success because of lack of reserves, and the attack slowed down, and then was halted as German reserves were committed.

Significance: Cambrai represented the first use of massed tanks in support of an offensive. The British achieved significant gains initially but were unable to exploit their success.

Sources: A.11.2; L.4.4; L.5; L.6; L.8.3; L.26.

WORLD WAR I (WESTERN FRONT, 1917)

Cambrai II, 30 November-3 December 1917

With the British Cambrai offensive halted, the reinforced Germans decided to take the initiative and attack the British salient at Cambrai on 30 November 1917. For the first time on the Western Front, the Germans used specially trained assault groups to infiltrate the British positions. The determined German attacks caused British Field Marshal Sir Douglas Haig to order a partial withdrawal on 3 December. By this time the British had taken heavy losses and lost most of their gains from the first week of the offensive. The Germans, in fact, captured some of the positions held by the British prior to the Cambrai offensive.

Significance: The Germans succeeded in restoring their position at Cambrai. The battles at Cambrai ended significant military operations on the Western Front during 1917.

Sources: A.11.2; L.4.4; L.5; L.6; L.8.3; L.26.

WORLD WAR I (ITALIAN FRONT, 1917)

Tenth Isonzo, 12 May-5 June 1917

Italian General Count Luigi Cadorna had planned for the battle, part of a general Allied offensive on all fronts in Europe, to start on 7 May. However, it was delayed because of bad weather. The plan called for the forces in the Gorizia Zone to take Mount Kuk and for the Italian Third Army to capture Mount Hermada.

On 12 May the Italian artillery preparation began, and on the 14th the forces in the Gorizia Zone began their attack. The Third jumped off on the 23d. Mount Kuk was captured but Mount Hermada was not. During the Italian offensive, the Austrian forces managed to delay the Italians with local counterattacks.

Significance: The Italian armies gained commanding ground by the capture of Mount Kuk.

Sources: L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1917)

Eleventh Isonzo, 18 August-15 September 1917

The objectives of the Italians for the Eleventh Battle of the Isonzo were to capture the Bainsizza Plateau for the Second Army and to exploit earlier gains made on the Carso for the Third Army.

General Count Luigi Cadorna, the overall commander of the Italian Second and Third Armies, began the attack on 18 August. The fighting was bitter and losses were severe. By mid-September the Austrians had lost the Bainsizza Plateau but had held on to the Carso Plateau.

Significance: The Austrian setback in this battle prompted Germany to send German divisions to help the Austrians in offensive operations in Italy.

Sources: L.10; L.35; L.51.

WORLD WAR I (ITALIAN FRONT, 1917)

Caporetto (12th Isonzo), 24 October-23 November 1917

Austrian forces in the Italian theater were close to exhaustion after the Eleventh Battle of the Isonzo. A request by the Austrian Emperor to the German High Command for German troops to bolster the Austrian line was granted conditionally. Crack German units would aid the Austrians only to participate in an Austrian offensive that would put an end to Italy's will to wage war. The condition was accepted and the Austro-German Fourteenth Army was formed with seven German divisions and eight Austrian divisions under the command of General Otto von Below. It was deployed behind the Tolmino-Caporetto-Pleizza zone, opposite the Second Italian army.

On 24 October the Austro-German forces began an intense bombardment of the Italian lines. Using the newly developed "Hutier tactics", recently tested at Riga, the Fourteenth Army achieved large advances against the Italian Second Army, which was deployed poorly and was experiencing morale problems. The Austrian Tenth and Fifth Armies, on the right and left respectively of the Fourteenth Army, supported the main effort. The Italian Second Army virtually disintegrated under the assault. The Italian Third Army managed to withdraw along the coast, but the Italian Carnic Force was cut off in the Alps. The Italian Fourth Army fell back in good order to a new line along the Piave River. By 12 November the Italian commander General Count Luigi Cadorna had stabilized his defense from Mount Pasubia on the left and then along the Piave to the Gulf of Venice on the right. The Austro-German forces were stopped at this line by 23 November.

Significance: This Italian defeat, which almost knocked Italy out of the war, stimulated the Allies to take measures to create a unified high command.

Sources: A.7; L.10; L.41; L.51.

1. IDENTIFICATION
War: World War I
War: Turkish Fronts, 1917

Engagement	Date(s)	Campaign	Forces	Commander's	Duration (days)	Width of Front (Km)
Tigris Crossing, Mesopotamia	A 22-24 Feb 1917 D	Mesopotamia, 1917	Br I, III Corps, 4 Cav Div Tk U/I Task Force	Gen Maude Gen Nur-ud-Din Pasha	3	40.0
Gaza I, Palestine	A 26-28 Mar 1917	Palestine, 1917	Br Army of Egypt Tk Eighth Army	Gen Murray Gen Kress von Kressenstein	3	10.0
Gaza II, Palestine	A 17-19 Apr 1917 D	Palestine, 1917	Br Army of Egypt Tk Army of Palestine	Gen Murray Gen Kress von Kressenstein	3	39.0
Gaza III, Palestine	A 31 Oct-6 Nov 1917 D	Palestine, 1917	Br Army of Egypt The Seventh & Eighth Armies	Gen Allenby Gen Kress von Kressenstein	6	48.0
Junction Station, Palestine	A 13-14 Nov 1917 D	Palestine, 1917	Br Army of Egypt Tk Eighth Army	Gen Allenby Gen Kress von Kressenstein	2	42.0
World War I, Western Front, 1918						
Second Somme: Phase I (Somme-Perronne), France	A 21-26 Mar 1918 D	German Spring Offensives	Ger Second, Seventeenth & Eighteenth Armies Br First (-), Third & Fifth(Fourth) Armies	Gen Ludendorff FM Haig	6	97.0
Second Somme: Phase II (Somme-Montdidier) France	A 27 Mar-9 Apr 1918 D	German Spring Offensives	Ger Second, Seventeenth & Eighteenth Armies Br First (-), Third & Fifth(Fourth) Armies	Gen Ludendorff FM Haig	14	140.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Turkish Fronts, 1917

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Tigris Crossing	A D	FB PD	DST	WT	N	--	--	x
Gaza I	A D	RM PD	DST	SPT	N	--	--	x
Gaza II	A D	FM FD	DST	SPT	N	--	--	x
Gaza III	A D	FM FD	DST	FT	Y	x	Complete	x
Junction Station	A D	FM PD	DST	FT	N	--	--	x

World War I, Western Front, 1918

Second Somme; Phase I	A D	FM FD	WT	SPT	X	X	Substantial	x
Second Somme; Phase II	A D	FM F/PD	WT	SPT	N	--	--	x

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Turkish Fronts, 1917

Engagement	Strength				Arty Pieces	Air Sorties	Battle Casualties	Armor Losses	Arty Pieces Lost	Total Sorties/Day	Aircraft Losses
	Person- nel Total	Total	Armor Lt.	NBT							
Tigris Crossing -	A 46,000 D 10,500	0 0	-- --	-- --	174 91	? ?	2,750 4,300	2.0 13.7	0 0	-- --	? ?
Gaza I	A 25,000 D 26,000	0 0	-- --	-- --	? ?	0 0	4,000 2,450	5.3 4.1	0 0	-- --	0 0
Gaza II	A 25,000 D 20,000	? ?	? ?	? ?	?	0 0	6,400 2,000	8.5 3.3	? ?	-- --	0 0
Gaza III	A 72,000 D 34,400	? ?	- -	-- --	392 260	? ?	2,696 2,950	0.6 1.4	? ?	-- --	? ?
Junction Station	A 85,000 D 15,500	0 0	-- --	-- --	0 ?	0 0	4,000 4,800	2.4 15.5	0 0	-- --	0 0

World War I, Western Front, 1918

Second Somme: I	A 800,000	9	?	6,473	?	70,000	1.5	?	--	?	--
	D 400,000	252	?	2,500	?	120,000	5.0	30	2.0	330	2.2
Second Somme: II	A 700,000	?	?	6,400	?	133,000	1.4	?	--	?	--
	D 600,000	200	?	4,000	?	140,000	1.7	70	2.5	770	1.4

4. INTANGIBLE FACTORS

War: World War I, Turkish Fronts, 1917

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.
Tigris Crossing A	x	C	C	C	N	x	N	C	N	x	2.7	8
Gaza I	A	C	C	C	N	x	N	C	x	x	0.0	4
Gaza II	A	C	C	C	N	N	C	N	x	x	0.0	8
Gaza III	A	x	x	C	N	N	C	x	x	x	2.0	3
Junction Sta.	A	x	x	C	x	N	x	N	x	x	20.0	10
												2

World War I, Western Front, 1917

Second Somme I	A	x	C	C	C	0	N	N	N	x	8.1	7
Second Somme II	A	x	C	C	C	0	x	N	N	x	2.0	3
												5

6. FACTORS AFFECTING OUTCOME

War: World War I, Turkish Fronts, 1917

Engagement	Tigris Crossing	Gaza I	Gaza II	Gaza III	Junction Station
Force Quality	A D	N	N	N	A D
Reserves	X	N	N	N	X
Mobility	X	N	N	X	N
Air Superiority	X	X	X	X	X
Force Preparation	X	N	N	N	X
Weather	N	N	N	N	N
Roads	N	N	N	N	N
Terrain	N	N	N	N	N
Leader-ship	X	N	O	X	X
Planning	X	X	O	O	X
Surprise	N	N	N	N	N
Maneuver, Mass	X	N	N	N	X
Logistics	N	N	N	N	N
Fortifications	X	X	X	X	X
Depth	N	N	N	N	N

World War I, Western Front, 1918

7. COMBAT FORMS AND RESOLUTION OF COMBAT
War: World War I, Turkish Fronts, 1917

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	A	D	F	D	X	P WDL
Tigris Crossing	A D	F D	--	--	X	R, WD --
Gaza I	A D	F D	FE --	--	X	R, WD --
Gaza II	A D	F D	--	--	X	R, WD
Gaza III	A D	F, E(LR) D	FE --	--	X	P, Ps WDL
Junction Station	A D	F, E(RF) D	--	--	X	B WDL
World War I, Western Front, 1918						
Second Somme: Phase I	A D	F D	--	--	X	P WD
Second Somme: Phase II	A D	F D	--	--	X	P, R, S S

1. IDENTIFICATION
War: World War I, Western Front, 1918 (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Lys, France	A 9-30 Apr 1918 D	German Spring Offensives	Ger Raith & Sixth Armies Fr First & Second Armies FM Haig	Cen. Ludendorff Maj. Grothe	22 1	19.3 ?
Yvonne & Odette Positions, Sector Toulon, Verdun, France	A 13/14 Apr 1918 D	Verdun Sector	Ser Spec Asslt Gp "von Grothe," 272d Res Inf Rgt	US Cos. I & I of 3d Bn Col. Upton		
Chemin des Dames, Aisne, France	A 27 May-3 Jun 1918 D	German Spring Offensives	Ger First & Seventh Armies Fr Sixth Army	Gen. Douchene	8	56.3
Cantigny, France	A 28 May 1918 D	German Spring Offensives	US 1st Div, 28th Inf Rgt Col. Ely Ger 82d Res Div, 1st Bn, 272d Res Inf Rgt	Col. Fredericks	1	1.5
Belleau Wood, France	A 6 Jun 1918 D	Belleau Wood	US 4th Bde (+) Ger IV Res Corps (-)	BC Harbord Gen. Conta	1	4.4
Hill 142, France	A 6 Jun 1918 D	Belleau Wood	US 5th Mar Rgt (-) Ger 2/273d Rgt (+)	Maj. Turrill ?	1	0.3
West Wood I, France	A 6 Jun 1918 D	Belleau Wood	US 3/5th Mar Rgt (-) Ger 1/461st Rgt	Maj. Berry Maj. Hartlieb	1	0.8
Bouresches I, France	A 6 Jun 1918 D	Belleau Wood	US 6th Mar Rgt (-) Ger 2/461st Rgt	Maj. Sibley Maj. Bischoff	1	0.7
Hill 192, France	A 6/7 Jun 1918 D	Belleau Wood	US 23d Inf Rgt Ger 1/47th Inf Rgt (+)	Col. Malone Lt. Col. Rotenbacher	1	1.6

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Lys	A D FD	RW/RM	WHT	Spt	X	X	Minor	X
Yonne & Odette Positions	A D FD	RW	DST	Spt	Y	X	Substantial	N
Chemin des Dames	A D FD	RGM, RM	DST	Spt	Y	X	Substantial	X
Cantigny	A D FD	RW	DOT	Spt	Y	X	Substantial	X
Belleau Wood	A D H/PD	Rgw, RW	DST	ST	N	--	--	N
Hill 142	A D PD	RW/Rgw/Rgt	DOT/DST	ST	N	--	--	N
West Wood I	A D PD	RW/Rgw	DST	ST	N	--	--	N
Bouresches I	A D PD	Rgw	DST	ST	N	--	--	N
Hill 192	A D PD	RW/RW	DOT/DST	ST	N	--	--	N

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918

Engagement	Strength				Battle Casualties				Arty Pieces Lost				Aircraft Losses	
	Personnel Total	Total Art.	Armor Lit.	MBT	Arty Pieces	Air Sorties Total	\$/Day	Armor Losses	Arty Pieces Lost Total	\$/Day	Aircraft Losses Total	\$/Sorties/Day		
Lys	A 500,000 D 400,000	9 ? 180	? ?	?	?	?	1.6 ?	?	?	-- --	?	?	-- --	
Yvonne & Odette Positions	A 3,072 D 650	0 0	-- --	--	36 24	0 0	1.7 ?	?	?	-- --	0	0	-- --	
Chemin des Dames	A 500,000 D 300,000	? ?	-- --	--	3,719 ?	?	118,000 40,000	3.0 1.7	?	-- --	?	?	-- --	
Cantigny	A 8,679 D 725	12 0	?	?	346 ?	0	30 36	3.5 53.2	6	50.0 --	0	0	-- --	
Belleau Wood	A 9,437 D 6,436	0 0	0 0	0	36 24	?	1,087 1,730	11.5 11.3	0	0 0	?	?	-- --	
Hill 142	A 2,913 D 2,458	0 0	0 0	0	32 24	?	383 471	13.1 19.2	0	0 0	?	?	-- --	
West Wood I	A 1,740 D 1,121	0 0	0 0	0	18 10	?	36 54	20.7 4.8	0	0 0	?	?	-- --	
Bouresches I	A 2,733 D 1,352	0 0	0 0	0	18 14	?	343 188	12.6 13.8	0	0 0	?	?	-- --	
Hill 192	A 3,608 D 3,955	0 0	0 0	0	56 20	?	349 87	9.4 2.2	0	0 0	?	?	-- --	

4. INTANGIBLE FACTORS

War: World War I, Western Front, 1918 (Continued)

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Lys	A D	x C	C	C	0	x	N	N	x	x	1.0	7
Yonne & Odette Positions	A X	x x	x	N	N	x	C	x	x	x	0	6
	D	A C	C	C	N	x	N	N	x	x	6.0	4
Chemin des Dames	D A N	x D N	x	x	N	N	C	C	x	x	0.5	3
Cantigny	A D	N x	x	x	N	N	N	N	x	x	1.6	5
Belleau Wood	A D	C x	C x	x	N	N	C	C	x	x	0.9	4
Hill 142	A D	C x	C x	x	N	N	N	N	x	x	0	2
West Wo. I	A D	C x	x	x	N	N	N	N	x	x	1.0	7
Bouresches I	A D	x x	x x	x	N	N	C	C	x	x	0.8	6
Hill 192	A D	x x	x x	x	N	N	C	C	x	x	0.8	3
												7

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1918 (Continued)

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War I, Western Front, 1918 (Continued)

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Lys	A F D D/O	-- -- -- --	X X	P,R,S S
Yvonne & Odette Positions	A F	-- --	X X	P,R,S
Chemin des Dames	A F D D/O	-- -- -- --	X X	R,S S
Cantigny	A F D D	-- --	X X	P WD
Belleau Wood	A F D D/O	-- --	X X	R,S S
Hill 142	A F D D/O, F	-- --	X X	B WDL
West Wood I	A F D D	-- --	X	R, WDL --
Bouresches I	A F D D	-- --	X X	R,S S
Hill 192	A F, E(RF) D D/O	-- --	X	R, WDL --

1. IDENTIFICATION
War: World War I, Western Front, 1918 (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
West Wood II, France	A 11 Jun 1918 D	Belleau Wood	US 2/5th Mar Rgt (+) Ger 1/461st Rgt (+)	Maj Wise Maj Hartlieb	1	0.8
North Wood I, "Hunting Lodge", France	A 12 Jun 1918 D	Belleau Wood	US 2/5th Mar Rgt	Maj Wise	1	0.8
Bouresches II, France	A 13 Jun 1918 D	Belleau Wood	Ger 2/110th Gren Rgt	Maj Hartlieb		1.6
North Wood II, France	A 21 Jun 1918 D	Belleau Wood	Ger 109th Rgt (-) (+) US 3/5th Mar Rgt (+)	Maj Shearer	1	
North Wood III, France	A 23 Jun 1918 D	Belleau Wood	US 1/7th Inf Rgt Ger 3/347th Rgt (+)	Lt Col Adams ?	1	1.2
North Wood IV, France	A 25/26 Jun 1918 D	Belleau Wood	US 3/5th Mar Rgt Ger 1/347th Rgt	Maj Shearer Capt Karlberg	1	1.2
Vaux, France	A 1/2 Jul 1918 D	Belleau Wood	US 3d Bde, 2d Inf Div Ger 201st Inf Div (-)	Maj Shearer Capt Karlberg	1	1.2
La Roche Wood East, France	A 1/2 Jul 1918 D	Belleau Wood	US 2/9th Inf Rgt Ger 1/402d Inf Rgt (-)	Maj Bouton ?	1	0.7
La Roche Wood West, France	A 1/2 Jul 1918 D	Belleau Wood	US 3/23d Inf Rgt Ger 2/402d Inf Rgt (+)	Maj Elliot ?	1	0.7
Noyon-Montdidier, France	A 9-13 Jun 1918 D	Belleau Wood	Ger Eighteenth & Seventh Armies Pr Third & Tenth Armies Gen Franchet d'Esperey	Cr Pr Wilhelm S	5	43.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918 (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
West Wood II	A D	Rgw/RM Rgw	MLT DOT	ST ST	N N	-- --	-- --	N N
North Wood I, "Hunting Lodge"	A D	Rgw	DOT	ST	Y	x	-- minor	x
Bouresches II	A D	RM/Rgw Rgw	Nt Atk DOT	ST ST	N N	-- --	-- x	x
North Wood II	A D	FD	Rgw	DOT	ST	N	-- --	x
North Wood III	A D	FD	Rgw	DOT	ST	N	-- --	x
North Wood IV (Final Assault)	A D	FD	Rgw	DST	ST	N	-- --	x
Vaux	A D	FD	RM/Urban	DST	ST	N	-- --	x
La Roche Wood East	A D	FD	RM/Urban	DST	ST	N	-- --	x
La Roche Wood West	A D	FD	RM/Urban	DST	SpT	N	-- --	x
Noyon-Montdidier	A D	FD	RM					

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918 (Continued)

Engagement	Strength				Air Sorties	Battle Casualties	Arty Pieces Lost	Arty Pieces Total	Aircraft Losses
	Personnel Total	Total	Armor Lt.	M.E.T.					
West Wood II	A 3,343 D 1,798	0 0	0 0	48 28	? ?	279 541	8.3 30.1	0 0	? ?
North Wood I, "Hunting Lodge"	A 1,747 D 1,952	0 0	0 0	18 20	? ?	167 293	9.6 15.0	0 0	? ?
Bouresches II	A 3,690 D 2,629	0 0	0 0	48 24	? ?	138 107	3.7 4.1	0 0	? ?
North Wood II	A 1,697 D 1,428	0 0	0 0	12 20	? ?	192 18	11.3 1.3	0 0	? ?
North Wood III	A 1,256 D 1,565	0 0	0 0	0 20	? ?	133 19	10.6 1.2	0 0	? ?
North Wood IV (Final Assault)	A 4,453 D 1,546	0 0	0 0	48 20	? ?	273 437	6.1 28.3	0 0	? ?
Vaux	A 12,812 D 10,358	? --	-- --	138 144	? ?	336 1,074	2.6 10.4	? --	? ?
La Roche Wood East	A 4,515 D 5,182	? --	-- --	54 72	? ?	94 568	2.1 11.0	0 0	? ?
La Roche Wood West	A 4,508 D 5,177	? --	-- --	69 54	? ?	223 506	4.9 9.8	? --	? ?
Noyon-Montdidier	A 275,000 D 300,000	? --	-- --	5,000 3,000	? ?	80,000 35,466	5.8 2.4	72 10.0	? ?

4. INTANGIBLE FACTORS

War: World War I, Western Front, 1918 (Continued)

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.
West Wood II	A	C	x	x	N	N	C	x	x	x	1.6	6
North Wood I	A	C	x	x	N	N	C	x	x	x	0.8	5
Bouresches II	A	N	x	x	N	N	C	x	x	x	0	7
North Wood II	A	N	x	x	N	N	C	N	x	x	0	2
North Wood III	A	N	C	x	N	N	C	x	x	x	0	6
North Wood IV	A	N	C	x	N	N	C	x	x	x	0.7	3
Vaux	A	C	C	x	N	N	C	x	x	x	1.5	5
La Roche East	Wood A	C	x	x	N	N	C	x	x	x	1.5	6
La Roche West	Wood A	D	C	x	N	N	C	x	x	x	1.5	4
Noyon-Montdier	A	C	C	C	C	N	C	x	x	x	2.3	4
	D											6

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1918 (Continued)

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Preference	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Mass, Narrow Front	Logistics	Fortifi-cations	Depth
West Wood II	A D	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
North Wood I, "Hunting Lodge" A	D	A D	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
Bouresches II	A D	D A	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
North Wood III	D	A D	x x	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
North Wood III	A D	A D	x x	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N
North Wood IV (Final Assault)	A D	D A	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	x x
Vaux	D	A D	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	
La Roche Wood East	A D	N D	N A	N D	N A	N N	N N	N N	N N	N N	N N	N N	N N	
La Roche Wood West	A D	N A	N A	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	
Noyon-Montdidier	A D	N D	N A	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 CONFLICT
War: World War I, Western Front, 1918 (Continued)

Engagement	Main Attack and Scheme of Defense		Secondary Attack	Success	Resolution
	Plan and Maneuver	Scheme of Defense			
West Wood II	A D	F D/O	--	x	P WD
North Wood I, "Hunting Lodge"	A D	F D/O, E(IR)	--	x	F WDL
Bourches II	A D	F D	--	x	R, WD, S
North Wood II	A D	F D	--	x	R, WDL, S
North Wood III	A D	F D	--	x	R, WDL, S
North Wood IV (Final Assault)	A D	F D/O, F	--	x	R, WDL
Vaux	A D	F D/O, F	--	x	B R, WDL
La Roche Wood East	A D	F D/O, F	--	x	B R, WDL
La Roche Wood West	A D	F, E(RF) D/O, F	--	x	B R, WDL
Noyon-Montdidier	A D	F D	--	x	P, R, S

1. IDENTIFICATION
War: World War I, Western Front, 1918 (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Champagne-Marne, France	A 15-17 Jul 1918 D	German Spring Offensive, 1918	Ger Seventh, First & Third Armies Fr Sixth, Ninth, Fifth & Fourth Armies	Cr Pr Wilhelm Franchet d'Esperey	3	105.0
Aisne-Marne I, France	A 18-19 Jul 1918 D	Aisne-Marne	Fr Tenth Army (+) Ger Ninth Army	Gen Mangin Gen Eben	2	130.0
Missy aux Bois Ravine, France	A 18 Jul 1918 D	Soissons	US 26th Inf Rgt (+) Ger 13th Bav Res Inf Rgt (+)	Col Smith	1	0.7
Breuil, France	A 18 Jul 1918 D	Soissons	US 28th Inf Rgt (+) Ger 22d Bav Inf Rgt (+)	Lt Gen Kneussi Col Babcock Col Carl	1	0.8
St. Amand Farm, France	A 18 Jul 1918 D	Soissons	US 2/28th Inf Rgt (+) Ger 2/396th Inf Rgt	Maj Haebner Lt Gen Kneussi	1	0.3
Beaurepaire Farm, France	A 18 Jul 1918 D	Soissons	US 2/23d Inf Rgt (+) Ger 3/219 Res Inf Rgt	Maj Waddill Capt Stockmar	1	1.3
Cravanccon Ferme-Chaudun, France	A 18 Jul 1918 D	Soissons	US 1st Inf Bde (+) Ger 3d Bav Inf Rgt (+)	BG Hines Col Stengel	1	1.5
Chaudun, France	A 18 Jul 1918 D	Soissons	US 3/18th Inf Rgt (+) Ger 2/169th B Gren Rgt (+)	Col Parker Col Buchholtz	1	0.6
Aisne-Marne II, France	A 20 Jul-1 Aug 1918 D	Aisne-Marne	Fr Fifth, Sixth, Ninth, Tenth Armies Ger Seventh & Ninth Armies	Cr Pr Wilhelm Foch	13	128.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918 (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Champagne-Marne	A D	RW FD	DST	ST	N	--	--	x
Aisne-Marne I	A D	RW FD	NOT/DST	ST	Y	x	Minor	x
Missy aux Bois Ravine	A D	RW/RGM FD	NOT/DST	ST	Y	x	Substantial	x
Brenil	A D	RW FD	NOT/DST	ST	Y	x	Substantial	x
St. Asand Farm	A D	RW FD	NOT	ST	Y	x	Substantial	x
Beaurepaire Farm	A D	RW FD	NOT	ST	x	x	Substantial	x
Cravoncon Ferme-Chaudun	A D	RW FD	NOT/DST	ST	Y	x	Substantial	x
Graudun	A D	RW FD	NOT	ST	Y	x	Minor	x
Aisne-Marne II	A D	RWM FD/Del	DST	ST	N	N	--	x

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918 (Continued)

Engagement	Strength			Battle Casualties			Arty Pieces Lost			Aircraft Losses		
	Personnel Total	Armor Total	Art'y Pieces	Air Sorties	Air Total	%/Day	Total	%/Day	Total	%/Day	Total	%/Sorties/Day
Champagne-Marne	A 400,000 D 450,000	20 ?	1 ?	4,500 4,500	?	100,000 40,000	8.3 3.0	20	33.3 --	?	-- 4.4	?
Aisne-Marne I	A 750,000 D 450,000	350 0	150 0	200 0	7,000 4,000	?	55,000 50,000	3.7 5.6	?	-- 300	?	3.8
Missy aux Bois Ravine	A 5,004 D 3,013	10 0	0 0	10 27	29 ?	?	393 1,853	7.9 61.5	?	-- 0	?	--
Breuil	A 5,039 D 2,663	8 0	8 0	29 48	?	?	448 1,243	8.9 46.7	5	62.5 0	?	--
St. Amand Farm	A 1,150 D 400	5 0	0 0	5 0	0 ?	?	120 400	10.4 100.0	0	0 0	?	--
Beaurainville Farm	A 4,480 D 565	12 0	12 0	0	36 0	?	125 181	2.8 32.0	0	0 0	?	--
Cravanccon Ferme-Chaudun	A 10,345 D 2,420	30 0	30 0	0	58 30	?	895 1,610	8.7 66.5	?	0 0	?	--
Chaudun	A 1,611 D 800	0 0	0 0	0	14 24	?	130 500	8.1 62.5	0	0 0	?	--
Aisne-Marne II	A 725,000 D 400,000	350 ?	?	?	7,000 --	?	195,000 3,700	2.1 ?	?	-- 170,000	?	1.0
											500	?

4. INFLUENCING FACTORS

War: World War I, Western Front, 1918 (Continued)

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accom-p.
Champagne-Marne	A	C	C	C	N	X	N	C	X	2.7	4
	B	D	C	C	X	N	N	C	X	6	6
Aisne-Marne I	A	C	C	C	X	N	N	C	X	5.5	7
	B	D	C	C	X	N	N	C	X	5	5
Missy aux Bois Ravine	A	C	C	C	X	N	N	C	X	4.5	7
	B	D	O	C	X	N	N	C	X	3	3
Breuil	A	C	C	C	X	N	N	C	X	4.4	7
	B	D	O	C	X	N	N	C	X	3	3
St. Amand Farm	A	C	C	C	X	N	X	C	X	2.0	8
	B	D	O	C	X	N	N	C	X	2	2
Beaurepaire Farm	A	C	C	C	X	N	N	C	X	2.3	8
	B	D	O	C	X	N	N	C	X	2	2
Cravancourt Ferme Chaudun	A	C	C	C	X	N	N	C	X	6.0	8
	B	D	O	C	X	N	N	C	X	2	2
Chaudun	A	C	C	C	X	N	N	C	X	3.5	8
	B	D	O	C	X	N	N	C	X	2	2
Aisne-Marne II	A	C	C	C	O	N	N	C	X	2.0	7
	B	D	O	C	O	N	N	C	X	6	6

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1918 (Continued)

Engagement	Aisne-Marne	Champagne-Marne	Missy aux Bois Ravine	Breuil	St. Amand Farm	Beaurepaire Farm	Cravancon Ferme-Chautun	Chaudun	Aisne-Marne II
Force Quality	A N	D X	A D	A D	A D	A D	A D	A D	A D
Reserves	Mobility Superiority	Force Prepon-derance	Air Superiority	Leader-ship	Train, Roads	Nearrow Front	Logistics	Frontline Castions	Depth
Force Prepon-derance	Weather	Roads	Surprise	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Air Superiority	Weather	Surprise	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Mobility Superiority	Roads	Surprise	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Force Prepon-derance	Weather	Surprise	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Leader-ship	Roads	Surprise	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Train, Roads	Weather	Surprise	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Nearrow Front	Surprise	Planning	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Logistics	Surprise	Planning	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Frontline Castions	Surprise	Planning	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth
Depth	Surprise	Planning	Planning	Mass, Narrow Front	Logistics	Frontline Castions	Depth	Frontline Castions	Depth

7. COMBAT FORCES AND RESOLUTION OF COMBAT
 Mar: World War I, Western Front, 1918 (Continued)

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Champagne-Marne	A	EE	--	--	x	S
	D	D				
Aisne-Marne I	A	F	--	--	x	P MDL
	D	D				
Missy aux Bois Ravine	A	F	--	--	x	P MDL
	D	D				
Breuil	A	F	--	--	x	P MDL
	D	D				
St. Amand Farm	A	F	--	--	x	P A
	D	D				
Beaurepaire Farm	A	F	--	--	x	P MDL
	D	D				
Cravoncon Ferme-Chaudun	A	F	--	--	x	P MDL
	D	D				
Chaudun	A	F	--	--	x	P MDL
	D	D				
Aisne-Marne II	A	F	--	--	x	P MD
	D	D				

1. IDENTIFICATION
War: World War I, Western Front, 1918

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Berzy le Sec, France	A 21 Jul 1918 D	Aisne-Marne II	US 28th Inf Rgt (-) (+) Ger 109th Inf Rgt (-) (+)	Gen. Summerall Baron von Toll	1	1.0
Buzancy Ridge, France	A 21 Jul 1918 D	Aisne-Marne II	US 18th Inf Rgt (-) (+) Ger 2/52d Jgr Rgt	Gen. Summerall Col. Otto	1	1.0
Picardy 1918, I, France	A 8-11 Aug 1918 D	Amiens Offensive	Br First, Third&Fourth Armies Cr Second & Eighteenth Armies	FM Haig Cr Pr Rupprecht	4	70.0
Picardy 1918, II, France	A 21 Aug-4 Sep 1918 D	Amiens Offensive	Br First Army (+); Fr First Army (+) Ger Second, Ninth, Seventeenth Armies (+)	FM Haig Cr Pr Rupprecht	15	150.0
St. Mihiel, France	A 12-15 Sep 1918 D	St. Mihiel	US First Army Ger Army Det C	Gen. Pershing Gen. Puchs	3	72.0
Lahayville-Bois de Lamarche, France	A 12 Sep 1918 D	St. Mihiel	US 2d Inf Bde (+) Ger 47th Inf Rgt (-)	BG Bamford Capt. Gerlach	1	1.2-2.0
Meuse-Argonne I, France	A 26 Sep-30 Oct 1918 D	Meuse-Argonne	US First Army (+) Ger Third Army (+)	Gen. Pershing Gen. Einen	8	53.0
Blanc Mont I, France	A 3-6 Oct 1918 D	Meuse-Argonne (Champagne)	US 2d Div (+) Ger XII Saxon Army Corps (-)	MC Lejeune Gen Nidda	4	6.4
Medeath Farm, France	A 3 Oct 1918 D	Meuse-Argonne (Champagne)	US 2/9th Inf Rgt Ger 1/235th Res Inf Rgt	Lt. Col. Arnold Maj. Doerstling	1	0.9

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918 (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Berzy le Sec	A D	R M FD	WLT	ST	N	N	--	X
Buzancy Ridge	A D	R M FD	WLT	ST	N	N	--	X
Picard, 1918, I	A D	R M FD	WLT	ST	Y	X	Substantial	X
Picardy 1918, II	A D	R M FD	DST	ST	N	N	--	X
St. Mihiel	A D	R M FD/Del	WOT	FT	N	--	--	X
Lahayville-Bois de Lamarche	A D	R M/RW FD/Del	WHT	FT	Y	X	Minor	X
Meuse-Argonne I	A D	Rgw/RM FD	DOT/WLT	FT	N	--	--	X
Blanc Mont I	A D	R M FD	DST	FT	N	--	--	X
Medeath Farm	A D	R M FD	DST	FT	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918 (Continued)

Engagement	Strength				Battle Casualties				Arty. Pieces Lost				Aircraft Losses	
	Personnel Total	Total	Armor	NBT	Air Sorties	Total	Armor Losses	\$/Day	Total	\$/Day	Arty. Pieces Lost	Total	Sorties/Day	
Berzy le Sec	A 4,000 D 350	? ? ? -	-- --	NBT	36 11	? ?	210 116	5.3 33.1	? --	-- --	? 6	54.5 100.0	? ?	
Buzancy Ridge	A 5,300 D 554	? ? ? -	-- --	NBT	36 6	? ?	350 276	6.6 49.8	? --	-- --	? 6	54.5 100.0	? ?	
Picardy 1918, I	A 225,000 D 170,000	462 ?	96 --	366 1,500	2,000 ?	?	10,000 30,000	1.1 4.4	? --	-- --	400 400	6.6 6.6	? ?	
Picardy 1918, II	A 300,000 D 200,000	? ? - -	-- --	NBT	? ?	--	35,000 80,000	0.7 2.7	? ?	-- --	? 100	?	?	
St. Mihiel	A 400,000 D 100,000	267 0	0 0	3,010 1,000	800 ?	?	7,000 20,000	0.6 6.7	? --	-- --	? 100	?	?	
Lahayville-Bois de Lamarche	A 13,208 D 2,090	0 0	0 0	76 10	?	?	185 1,076	1.4 51.1	0 0	0 0	?	?	?	
Meuse-Argonne I	A 300,000 D 190,000	189 ?	188 ?	0 ?	2,700 ?	?	821 21,448	22,128 1.1	? ?	-- --	?	?	?	
Blanc Mont I	A 26,000 D 13,000	72 0	72 0	0 0	192 202	?	4,700 4,000	4.5 7.7	?	-- 0	?	25	3.1	
Medeau Farm	A 1,921 D 155	3 0	3 0	0 0	12 50	?	247 83	12.9 53.1	0 0	0 0	0 0	0 6.0	?	

4. INTANGIBLE FACTORS

War: World War I, Western Front, 1918 (Continued)

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.
Berzy le Sec	A	C	C	C	x	N	C	N	x	x	3.5	8
	D	C	C	C	0	N	N	N	x	x	2	2
Buzancy Ridge	A	C	C	C	x	N	x	x	x	x	1.5	8
	D	C	C	C	0	N	x	x	x	x	2	2
Picardy, 1918, I	A	C	C	C	x	N	x	x	x	x	4.5	9
	D	C	C	C	0	N	x	x	x	x	3	3
Picardy 1918, II	A	C	C	C	x	C	x	x	x	x	4.1	9
	D	C	C	C	0	N	x	x	x	x	5	5
St. Mihiel	A	N	C	C	x	N	N	N	C	x	7.5	8
	D	N	C	C	x	N	N	N	C	x	5	5
Lahayville- Bois de Lamarche	A	N	C	C	x	N	N	N	C	x	8.5	8
	D	N	C	C	x	N	N	N	C	x	2	2
Meuse-Argonne 1A	A	C	C	C	x	N	N	N	N	x	1.9	7
	D	N	C	C	x	N	N	N	C	x	4	4
Blanc Mont I	A	N	C	C	x	N	N	N	C	x	1.3	6
	D	N	C	C	x	N	N	N	C	x	5	5
Medeath Farm	A	N	C	C	x	N	N	N	C	x	3.1	8
	D	N	C	C	x	N	N	N	C	x	2	2

6. FACTORS AFFECTING OUTCOME
War: World War I, Western Front, 1918 (Continued)

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Narrow Front	Mass, Narrow Front	Logistics	Portefei- cations	Depth
Berzy le Sec	A D	N X	X X	X X	X X	N N	N N	N N	N X	X X	X X	X X	X X	X X	X X
Buzancy Ridge	A D	N X	X X	X X	X X	N N	N N	N N	N X	X X	X X	X X	X X	X X	X X
Picardy 1918, I	A A	X X	X X	X X	X X	N N	N N	N N	N X	X X	X X	X X	X X	X X	X X
Picardy 1918, II	D	X X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X
St. Mihiel	A D	N X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X
Lahayville-Bois de Laarsche	A D	N X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X
Meuse-Argonne I	A D	N X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X
Blanc Mont I	A D	N X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X
Medeath Farm	A D	N X	X X	X X	X X	N X	N X	N N	N X	X X	X X	X X	X X	X X	X X

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War I, Western Front, 1918 (Continued)

Engagement	Plan and Maneuver			Success	Resolution
	Main Attack and Scheme of Defense		Secondary Attack		
Berzy le Sec	A D	F D	-- --	X	P WDL
Buzancy Ridge	A D	F D	-- --	X	P WDL
Picardy 1918, I	A D	F D	-- --	X	B, PS WDL
Picardy 1918, II	A D	F D	-- --	X	P WDL
St. Mihiel	A D	F D	-- --	X	P, PS WDL
Lahayville-Bois de Lamarche A	A D	F D	-- --	X	B, PS WDL
Meuse-Argonne I	A D	F D	-- --	X	P, S S
Blanc Mont I	A D	F D/O	-- --	X	P, S S
Medeath Farm	A D	F D	-- --	X	P WDL

1. IDENTIFICATION

War: World War I, Western Front, 1918 (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Essen Hook, France	A D 3 Oct 1918	Meuse-Argonne (Champagne)	US 1/5th Mar Rgt (-) Ger 2d Co, 2d Cologne Landstrum Bn	Col. Hunt Maj. Webendoerfer	1	0.8
Blanc Mont Ridge, France	A D 3 Oct 1918	Meuse-Argonne (Champagne)	US 2/6th Mar Rgt Ger 2/149th Inf Rgt (+)	Col. Lee Maj. Grundell	1	1.3
Sommeepy Wood, France	A D 3 Oct 1918	Meuse-Argonne (Champagne)	US 2/6th Mar Rgt Ger 2/235th Res Inf Rgt	Col. Lee Maj. Doerstling	1	2.5
Blanc Mont II, France	A D 8 Oct 1918	Meuse-Argonne (Champagne)	US 36th Div (-) (+) Ger 213th Inf Div	MG Smith MG Hammerstein	1	4.0
Meuse-Argonne II, France	A D 4-31 Oct 1918	Meuse-Argonne, Phase II	Fr Fourth Army (+) Ger Third Army (+)	Gen. Foch Gen. Ludendorff	28	104.0
Exermont- Montrefagney, France	A D 4 Oct 1918	Meuse-Argonne II	US 18th Inf Rgt (+) Ger 3d Gd Ft Rgt (+)	Col. Hunt Col. Schonstadt	1	0.9
Mayache Ravine, France	A D 4 Oct 1918	Meuse-Argonne II	US 26th Inf Rgt (+) Ger 2d Bn, 170th Inf Rgt (+)	Col. Erickson Capt. Kaesbach	1	1.0
La Neuville le Comte Ferme, France	A D 4 Oct 1918	Meuse-Argonne II	US 28th Inf Rgt (+) Ger 1/111th Inf. Rgt (+)	Col. Barnhardt Capt. Gackenholz	1	1.0
Ferme des Granges-A Fleville, France	A D 4 Oct 1918	Meuse-Argonne II	US 16th Inf Rgt (+) Ger 3d Gd Gren Rgt (+)	Lt. Col. Coppock Maj. Plehwe	1	1.0
Hill 212, France	A D 5 Oct 1918	Meuse-Argonne II	US 26th Inf Rgt (+) Ger 170th Inf Rgt (+)	Col. Erickson Lt. Col. Ihlenfeld	1	0.8

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918 (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Esen Hook	A D	RM FD	DST	FT	Y	X	Substantial	X
Blanc Mont Ridge	A D	RM FD	DST	FT	N	--	--	X
Somepy Wood	A D	RM FD	DST	FT	X	X	Substantial	X
Blanc Mont II	A D	RM FD	DST	FT	N	--	--	X
Muse-Argonne II	A D	RM/RGM FD	DOT/WLT	FT	N	--	--	X
Excentric-Montrefagne	A D	RM/RGM FD	DOT/WLT	FT	N	--	--	X
Mayache Ravine	A D	RM/RGM FD	DOT/WLT	FT	N	--	--	X
La Neuville le Conte Ferme	A D	RM/RGM FD	DOT/WLT	FT	N	--	--	X
Ferme des Granges- Fleville	A D	RM/RGM FD	DOT/LST	FT	N	--	--	X
Hill 212	A D	RM/RGM FD	DOT/LST	FT	N	--	--	X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918 (Continued)

Engagement	Personnel Total	Total Lt.	MST	Armor	Arty Pieces	Air Sorties	Battle Casualties			Arty Pieces Lost			Aircraft Losses		
							Total	Lt.	MST	Total	Day	Total	Day	Total	Day
Essem Hook	A 1,420 D 216	3 0	3 0	0 0	17 8	?	140 120	1.0 55.6	0 0	0 0	0 8	0 100.0	?	?	--
Blanc Mont Ridge	A 7,800 D 670	12 0	12 0	0 0	96 20	?	308 450	3.9 67.2	0 0	0 0	0 4	0 20.0	?	?	--
Somme Wood	A 9,230 D 458	24 0	24 0	0 0	96 28	?	149 241	1.6 52.6	0 0	0 0	?	?	?	?	--
Blanc Mont III	A 18,000 D 10,000	?	?	?	144 0	?	1,589 500	8.8 5.0	?	?	?	?	2	7.1	?
Meuse-Argonne II	A 500,000 D 300,000	?	?	?	?	?	77,448 75,068	0.6 0.9	?	?	?	?	--	?	--
Exermont-Montresigne	A 5,336 D 1,899	11 0	11 0	0 0	36 35	?	352 196	6.0 6.0	?	?	?	?	?	?	--
Mayache Ravine	A 5,427 D 1,899	13 0	13 0	0 0	36 18	?	376 114	6.9 6.0	?	?	?	?	?	?	--
La Neuville le Comte Ferme	A 5,365 D 1,940	13 0	13 0	0 0	36 20	?	340 61	6.7 3.2	?	0	?	?	?	?	--
Ferme des Granges-Fleville	A 5,461 D 2,587	10 0	10 0	0 0	36 33	?	244 230	4.7 9.7	?	?	?	?	--	?	--
Hill 212	A 5,022 D 3,335	3 0	3 0	0 0	32 36	?	301 173	6.9 5.2	?	0	?	?	--	?	--

4. INTANGIBLE FACTORS

War: World War I, Western Front, 1918 (Continued)

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.
Issen Hook	A D	N C	x	x	N	N	C	x	x	x	0.1	8 4
Blanc Mont Ridge	A D	N C	x	x	N	N	C	x	x	x	3.0	7 3
Sommey Wood	A D	C C	x	x	N	N	C	x	x	x	3.0	8 2
Blanc Mont II	A D	C C	x	x	N	N	C	x	x	x	0.3	6 6
Meuse-Argonne II	A D	C C	x	x	N	N	C	x	x	x	0.6	7 5
Exermon- Montrefagne	A D	C C	x	x	0	0	N	x	x	x	2.1	5 5
Mayache Ravine	A D	C C	x	x	0	0	N	x	x	x	1.3	5 5
La Neuville le Comte Ferme	A D	C C	x	x	0	0	N	x	x	x	1.6	6 5
Ferme des Gran- ges-Fleville	A D	C C	x	x	0	0	N	x	x	x	4.0	7 4
Hill 212	A D	C C	x	x	0	0	N	x	x	x	2.5	6 5

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1918 (Continued)

Engagement	Essen Hook	Blanc Mont Ridge	Somepy Wood	Blanc Mont II	Muse-Argonne II	Ercmont-Montrefagne	Mayache Ravine	La Neuville le Comte Ferme	Ferme des Granges-Fleville	Hill 212
Air	N	N	X	X	X	X	X	N	N	X
Mobility	N	N	X	X	X	X	X	X	X	X
Superiority	N	N	N	N	N	N	N	N	N	N
Resources	N	N	X	X	X	X	X	N	N	X
Force Quality	D	N	D	N	D	D	X	X	X	X
Air Superiority	N	N	N	N	N	N	N	N	N	N
Force Preposition-deterrence	N	N	X	X	N	N	N	N	N	N
Weather	N	N	N	N	N	N	N	N	N	N
Terrain Roads	N	N	N	N	N	N	N	X	X	X
Planning Surprise	N	N	N	N	N	N	N	N	N	N
Leadership	N	N	N	N	N	N	N	N	N	N
Mess, Narrow Front	N	X	X	X	X	X	X	N	N	N
Logistics	N	N	N	N	N	N	N	N	N	N
Portfolios	X	X	X	X	X	X	X	X	X	X
Depth	X	X	X	X	X	X	X	X	X	X

7. COMBAT FORMS AND RESOLUTION OF COMBAT
War: World War I, Western Front, 1918 (continued)

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Essex Hook	A D	E(LF) D	-- --	X X
Blanc Mont Ridge	A D	F D	-- --	P ML
Sommeby Wood	A D	F D	-- --	P ML
Blanc Mont II	A D	F D/O	-- --	R,S S
Meuse-Argonne II	A D	F D/O	-- --	P,S MD,S
Exermont-Montrefaque	A D	F D/O	-- --	P MD
Mayache Ravine	A D	F D	-- --	P,S S
La Neuville le Comte Fense A	A D	F D	-- --	P,S MD
Fense des Granges-Fleville	A D	F D	-- --	P MD
Hill 212	A D	F D	-- --	P MD

1. IDENTIFICATION
War: World War I, Western Front, 1918 (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Bois de Boyon-Montrefagnie, France	A 5 Oct 1918 D	Meuse-Argonne II	US 18th Inf Rgt (+) Ger 150th Inf Rgt (-) (+)	Col. Hunt Maj. Bruns	1	0.9
Hill 272, France	A 9 Oct 1918 D	Meuse-Argonne II	US 1/16th Inf Rgt (+) Ger 147th Inf Rgt (+)	Maj. Ryder Maj. Krause	1	
Meuse-Argonne III, France	A 1-11 Nov 1918 D	Meuse-Argonne III	Pr Fourth Army (+) Ger Third Army (+)	Gen. Pershing Gen. Gallwitz	11	169.0
Reilly-Aillicourt, France	A 6/7 Nov 1918 D	Meuse-Argonne III	US 1/16th Inf Rgt Ger 6th Res Jgr Bn (+)	Maj. Ryder Lt. Gen. Lewinski	1	0.5
Hill 252-Pont Maugis, France	A 7 Nov 1918 D	Meuse-Argonne III	US 16th Inf Rgt (-) (+) Ger 14th Res Div (-)	Col. Harrel Gen. Hanstein	1	1.1

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I, Western Front, 1918 (Continued)

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
Bois de Royon-Montrefigne A	D FD	RM/Rgh	DOT/DST	FT	N	--	--	x
Hill 272	A D	RM/Rgh	DOT	FT	N	--	--	x
Meuse-Argonne III	A D	RM	DOT/WHT	FT	N	--	--	x
Reuilly-Aillicourt	A D	PD/De1	RM	WHT	FT	N	--	x
Hill 252-Pont Maugis	A D	PD/De1	RM	WLT	FT	N	--	x

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I, Western Front, 1918 (Continued)

Engagement	Strength				Battle Casualties				Arty Pieces Lost				Aircraft Losses			
	Personnel Total	Total Lt.	Armor	Arty Pieces	Air Sorties	Total	\$/Day	Armed Losses	Arty Losses	Total	\$/Day	Armed Losses	Arty Losses	Total	Sorties/Day	
Bois de Boyon-Montrefagne	A 4,778 D 2,925	0 0	0 0	32 22	? ?	132 126	2.8 4.3	0 0	0 0	-- --	-- --	?	?	-- --	-- --	
Hill 272	A 2,950 D 2,563	0 0	0 0	32 31	? ?	109 250	3.7 9.8	0 0	0 0	-- --	-- --	?	?	-- --	-- --	
Meuse-Argonne III	A 600,000 D 380,140	? ?	? ?	? ?	? ?	30,426 29,491	0.5 0.7	? ?	? ?	-- --	-- --	?	?	-- --	-- --	
Renilly-Aillicourt	A 1,210 D 296	0 0	0 0	0 0	0 0	25 30	2.1 10.1	0 0	0 0	-- --	-- --	0 0	0 0	-- --	-- --	
Hill 252-Pont Maugis	A 1,989 D 1,655	0 0	0 0	0 0	24 ?	110 182	5.5 11.0	0 0	0 0	-- --	-- --	0 0	0 0	-- --	-- --	

4. INTANGIBLE FACTORS

War: World War I, Western Front, 1918 (Continued)

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logis- tics	Momen- tum	Intelli- gence	Technol- ogy	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Bois de Boyon- Montrefrage	A D	C C	x	x 0	N	N	C	x	x	x	1.3	5 5
Hill 272	A D	C C	x	x 0	N	N	C	x	x	x	0.8	7 4
Meuse-Argonne, III	A D	C C	x	x 0	N	N	C	x	x	x	1.5	6 4
Remilly- Aillicourt	A D	C C	x	x 0	N	x	N	x	x	x	1.0	8 4
Hill 252-Pont Maugis	A D	C C	x	x 0	N	x	N	x	x	x	2.9	6 4

6. FACTORS AFFECTING OUTCOME

War: World War I, Western Front, 1918 (Continued)

Engagement	Force Quality	Reserves	Mobility Superiority	Air Superiority	Force Prepon-dérance	Weather	Terrain, Roads	Leader-ship	Surprise	Mass, Narrow Front	Logistics	Fortifi-cations	Depth
Bois de Boyon-Montrefagné	A D	X	X	N	N	N	X	N	N	N	N	X	X
Hill 272	A D	X	X	N	N	N	X	N	N	N	N	X	X
Meuse-Argonne III	A D	X	X	X	N	X	N	N	N	N	N	X	X
Remilly-Aillicourt	A D	X	X	X	N	N	N	N	N	N	N	X	X
Hill 252-Pont Maugis	A D	X	X	X	N	N	N	N	N	N	N	X	X

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: World War I, Western Front, 1918 (Continued)

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Bois de Boyon-Montrefagne	A D	F, E(RF) D	-- --	P WD
Hill 272	A D	F, EB D	-- --	P WD
Meuse-Argonne III	A D	F D	-- --	P WD
Remilly-Aillicourt	A D	F D	-- --	P WD
Hill 252-Pont Maugis	A D	F D	F --	P WD

WORLD WAR I (TURKISH FRONTS, 1917)

The Crossing of the Tigris, 22-24 February 1917

After the original British Mesopotamia Expeditionary Force surrendered to the Turks at Kut in the spring of 1916, another force was organized by the British to attack the Turks in Mesopotamia. This force was commanded by General Sir Frederick S. Maude. By 21 February this force had driven the Turkish Forces to the north bank of the Tigris River at Kut. There, under the command of Nur-ud Din Pasha, the Turkish forces were entrenched on a 40-kilometer front from Sannaiyat on their left to the oxbow at Shumran.

On 22 February the British began operations to effect an assault crossing of the Tigris and destroy the Turkish force on the north bank. By the end of the first day of the attack in the Sannaiyat sector, the British I Corps had succeeded in capturing the first two lines of the Turkish position. By the end of the second day they had captured the third and fourth lines. On the 24th the Turks at Sannaiyat withdrew. The British made their main effort against the Turkish position at Shumran Bend on the 23d. By the morning of the 24th they had succeeded in capturing the commanding Dahra Ridge but failed to advance any further. By the next morning the Turks had withdrawn.

Significance: The British succeeded in crossing the river and capturing Kut but they failed to interfere seriously with the Turkish withdrawal.

Source: L.49.

WORLD WAR I (TURKISH FRONTS, 1917)

Gaza I, 26-28 March 1917

Having secured the Suez Canal by driving Turkish forces out of the Sinai Peninsula, British forces of General Archibald Murray advanced into Palestine in February 1917. Murray's task was to tie down Turkish forces to prevent their transfer to European fronts. His cavalry launched a successful attack on Khan Yunis on 28 February. Aerial intelligence revealed that the main Turkish force had withdrawn to strong positions at Gaza.

Murray entrusted the task of directing the attack on Gaza to Major General Charles M. Dobell. He deployed his cavalry in a screen to the north and east of the town, while his infantry frontally attacked the Turkish positions from the south. The infantry made good progress and captured several strongpoints south of the town. But coordination of the scattered British contingents was poor, particularly on the 27th. The cavalry suddenly withdrew, under the impression that the attack had failed. Confusion spread, and then the infantry withdrew. The British renewed the attack the morning of the 28th, but withdrew because the German commander of the Turkish forces, General Kress von Kressenstein, sent troops to envelop the British right and threaten their line of communications.

Significance: Defective staff work and poor communications spoiled any chance of a successful British attack. The ill effects of the assault on Gaza were exacerbated when Murray reported that he had been victorious. He was ordered to advance without delay and take Jerusalem.

Sources: A.7; L.8.5; L.35.

WORLD WAR I (TURKISH FRONTS, 1917)

Gaza II, 17-19 April 1917

On 17 April British Major General Charles Dobell launched his second attack on the Turkish positions at Gaza. By that time General Kress von Kressenstein, German commander of the Turkish forces at Gaza, had seen to it that his men had dug trenches along the Gaza-Beersheba road to prevent the British cavalry from breaking through. With naval support fire from a French warship, Dobell sent three infantry divisions to assault the right of the Turkish line from the southwest, while his cavalry covered the British right flank. The British were successful in the first phase of the attack, but as the British infantry advanced up the long slope toward Gaza on the 19th they were met by devastating fire from the Turks, who repulsed the attack.

Significance: The second British attempt to break the Turkish line at Gaza failed. Dobell's commanding officer, General Archibald Murray, sent an optimistic report to London but removed Dobell from command. An exasperated War Office removed Murray from the Middle East command in June 1917.

Sources: A.7; L.8.5; L.35.

WORLD WAR I (TURKISH FRONTS, 1917)

Gaza III, 31 October-6 November 1917

Assuming command of British forces in Palestine, Major General Edmund Allenby made the third attempt to capture heavily fortified Gaza and the strong positions of the Turkish Seventh Army along a 51-kilometer front inland to Beersheba. His plan -- which depended upon deception for success -- was to take Beersheba, then swing around behind Gaza and take it from the rear. While three British divisions demonstrated in front of Gaza, and artillery and naval gunfire pounded the positions for four days, Allenby secretly concentrated his XX Corps in front of Beersheba from the southwest, and the Desert Mounted Corps swung around and hit the city from the east. The battle continued all day, until an Australian cavalry brigade penetrated into the city and seized the vital water supply.

On the night of 1/2 November, Allenby launched his other corps, the XXI, in a frontal assault of Gaza on the Turkish left, suffering heavy casualties. The envelopment of the Turkish rear was stymied by determined Turkish defense of the hills north of Beersheba. Finally the XX Corps pushed through and on 6 November struck the left flank of the Gaza defenses. The whole Turkish line withdrew. The British XXI Corps occupied Gaza on the morning of 7 November.

Significance: Allenby's plan for envelopment of the strong defense system was brilliantly conceived, and the first stage of the plan, the envelopment of Beersheba, was flawlessly executed. It is a credit to the defenders that they were able to recover sufficiently to slow the British XX Corps envelopment of Gaza from the rear. The British capture of Gaza and Beersheba gave them water supplies and positions that were crucial to the continuation of their offensive.

Sources: A.7; L.8.5; L.35.

WORLD WAR I (TURKISH FRONTS, 1917)

Junction Station, 13-14 November 1917

After General Edmund Allenby's British force had taken Gaza, Allenby pursued the Seventh and Eighth Turkish armies with three mounted divisions and two infantry divisions, staying near the coast in order to be supplied by ship. The Turkish Eighth Army had retreated up the coastal plain while the Seventh Army had withdrawn further inland to the Judean Hills. In order to protect his right flank from possible counterattack by the Seventh Army, Allenby deployed one of his cavalry division to the east. The Turkish Eighth Army dug itself in front of Junction Station, where the railroad branched, with one line going to Jerusalem and the other to Beersheba. Without waiting for his artillery to be brought up from Gaza, Allenby struck the Eighth Army's right flank with his two infantry and two cavalry divisions. After two days of fighting, the British were masters of the Junction.

Significance: Control of the railroad junction would enable the British to keep open their long lines of communication; moreover, the capture of the team-driven water pumping plant assured the British of an unlimited water supply.

Sources: A.7; L.8.S; L.35.

WORLD WAR I (WESTERN FRONT, 1918)

Second Somme: Phase I (Somme-Peronne), 21-26 March 1918

Following a five-hour bombardment by more than 6,000 guns, the German Seventeenth, Second, and Eighteenth Armies attacked the British Fifth and Third Armies on a 60-mile front. Specially trained German shock units swarmed over the British positions as the Fifth Army fell apart. As the Fifth Army collapsed, the Third Army was forced to withdraw, but being better organized in depth, the Third Army held the German Seventeenth and Second Armies to limited gains. As the Fifth Army retreated, the German Eighteenth Army followed closely behind, capturing the Somme River bridges. On 25 March, the Germans came close to a breakthrough that would have completely separated the British and French armies. The Fifth Army continued to retreat, and French reinforcements to the threatened area were aimed only at protecting Paris. On the 26th the Fifth Army was still in retreat, but the Germans were beginning to show signs of fatigue as the offensive lost momentum.

Significance: The British were beaten but not destroyed. The Germans had achieved great gains but were continually hampered by tough British resistance, and by their own logistical problems.

Sources: A.11.2; L.11; L.14; L.16; L.22; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Second Somme: Phase II (Somme-Montdidier), 27 March-9 April 1918

The German Eighteenth Army took Montdidier on 27 March, cutting an important rail line to Paris, but reinforcements were stiffening British resistance and the Germans were too tired to follow up their gains aggressively. The next day, Ludendorff shifted the weight of the offensive north, thrusting toward Arras. The German Seventeenth Army attacked the British Third Army near Arras, but was repulsed. The attack was called off the same day it began, and the weight was shifted back to the Eighteenth Army and its drive to seize Amiens. The Germans were becoming increasingly tired as Allied resistance grew stronger. On 4 April the Germans failed in a final attempt to reach Amiens, and on 5 April an attack on the Third Army front was decisively repulsed. The German offensive in Picardy was then called off.

Significance: The Allies had suffered a severe morale blow, but their armies were still intact. The Germans had failed in their breakthrough attempt. The most important result of the offensive was the long-delayed establishment of a unified Allied command.

Sources: A.11.2; L.11; L.14; L.16; L.22; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Lys, 9-30 April 1918

With the Germans' Somme offensive halted, their effort was shifted north to Flanders. The German Sixth Army attacked on 9 April, destroying a Portuguese division and advancing three miles, and the following day the German Tenth Army attacked to the north and broke through the British lines. By 12 April the British, reinforced by five French divisions and supported by the Royal Air Force, were limiting the Germans to small gains. On 17 and 18 April the German Fourth Army tried to take the high ground of the Mont des Cats and Mont Kemmel Ridge, but was repulsed. On 25 April, at Mont Kemmel Ridge, a German surprise attack routed a French division not used to the intense preliminary bombardments preceding German assaults. The Germans took the ridge and then repulsed Allied counterattacks. On 29 April, still hoping for a strategic breakthrough, the Germans attacked again, with air support, to the southwest of Ypres, but this time the reinforced Allies were ready, and the small gains the Germans made were lost to Allied counterattacks. Ludendorff then stopped the offensive.

Significance: The German attempt to take the channel ports was stopped. Ludendorff's specially trained shock troops had taken many casualties that could never be replaced.

Sources: A.11.2; L.7; L.8.8; L.11; L.14.

WORLD WAR I (WESTERN FRONT, 1918)

Yvonne and Odette Positions, Sector Toulon, Verdun, 13/14 April 1918

The US 2d Division took up positions in the front line for the first time in March 1918 in the quiet Verdun sector, the scene of heavy fighting in 1916. The division's front was divided into regimental sectors, the 9th Infantry dubbing theirs "Sector Toulon". The sector included a series of strongpoints, two of which were assigned to the 3d Battalion and nicknamed "Yvonne" and "Odette". These were held by companies "I" and "L" respectively.

On 10 April the German artillery became very active along the 2d Division front, especially in the 9th and 23d infantry sectors. On the night of 13/14 April the German artillery laid a box barrage around the Yvonne and Odette positions, effectively cutting the communications of the strongpoints. The barrage was followed by an assault by German storm-troopers, troops specially trained for night actions and raids. When the Americans emerged from their shelters the Germans were already in the trenches. The fighting that ensued was hand-to-hand and continued for several hours before the Germans withdrew with prisoners, evacuating their wounded as they went.

The American artillery shelled the German withdrawal effectively, causing serious delays, and facilitating the escape of many of the captured Americans.

The German force accomplished its mission, having captured several Americans, but the Americans demonstrated their fighting ability by vigorously repelling the assault.

Significance: The engagement gave the troops of the US 2d Division valuable combat experience. Further, the repulse of the German raid attracted a great deal of press coverage in France and in the United States; it was cited as an example of American participation in the war effort, and it boosted Allied morale during a period of German successes.

Sources: M.19; M.20; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Chemin des Dames, 27 May-3 June 1918

Ludendorff's third offensive was planned as diversion against the French preparatory to a final assault against the British in Flanders. On 27 May the German First and Seventh Armies attacked the French Sixth Army in the Aisne River area, along the series of rocky ridges called the Chemin des Dames. The French front-line infantry were closely packed in their trenches when the German artillery preparation began, and suffered heavily. The Germans found the whole front had collapsed in front of them, and by evening they had crossed the Aisne and Vesle Rivers, advancing over ten miles. The French desperately rushed reinforcements to the area as the German drive threatened Paris. General John Pershing sent the US 2d and 3d Divisions, and they were immediately thrown in front of the German spearheads. The 2d Division relieved the French XXI Corps in the sector between the towns of Vaux and Belleau, and halted the German drive just south of Belleau Wood. The 3d Division was sent east of Belleau to Chateau-Thierry, where it held the bridges over the Marne against repeated German attacks, and then, with the help of nearby French troops, counterattacked. Ludendorff called off the offensive on 4 June.

Significance: Had the French used defense in depth, they might have stopped the Germans. The front-line trenches held most of the defending infantry and could not withstand the German artillery barrage. The Chemin des Dames offensive also demonstrated American fighting capability.

Sources: L.8.8; L.14; L.20; L.26; L.36.

WORLD WAR I (WESTERN FRONT, 1918)

Cantigny, 28 May 1918

The third of a series of five major German offensives in 1918 was in progress along the Aisne River when the first US offensive of the war took place at Cantigny, approximately 50 miles north of the major fighting. The village was a strongly fortified German observation post. The 1st Division's 28th Infantry Regiment launched the attack shortly after dawn, following an intense artillery preparation that forced the defenders, in large part, to seek refuge in cellars and deep underground trenches. The US infantry went into the village immediately after the bombardment stopped, capturing most of the garrison, and pushed forward to the other side of the town. The operation was performed too rapidly for the German artillery to respond effectively.

Cantigny was only a minor success, but it came at a time when the Allied forces were heavily pressed elsewhere, and it was welcome news to the defenders along the Aisne.

Significance: This was the first US offensive success of the war. Much overstated in the press in terms of its significance, it nonetheless gave a substantial boost to the Allied cause.

Sources: M.1; M.7; M.9; M.11; M.17; N.2; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, 6 June 1918

As the German Chemin des Dames offensive pushed closer to Paris, the US 2d Division was committed to help stop the German drive. The 2d Division took up a position just south of Belleau Wood and helped halt the German spearheads in heavy fighting of 3-4 June. A counterattack was planned for 6 June. The division was deployed with the 4th Marine Brigade on the left and the 3d Brigade on the right. On the division's left flank was the French 167th Division; on its right was the French 10th Colonial Division. The first objective of the 4th Marine Brigade was to secure Hill 142, which was defended by the 2d Battalion, 273d Infantry of the German 197th Division on the right and 3d Battalion, 460th Infantry of the 237th Division on the left. The 1st Battalion of the 5th Marines, Major Julius Turrill, commanding, was assigned the mission of taking the hill. The assault began at 0345, and the Marines took the hill with a bayonet attack. The battalion was later reinforced and repulsed repeated German counterattacks. The 4th Marine Brigade attack on Belleau Wood was made by the 3d Battalion, 5th Marines, on the left, attacking eastward, and, on the right, the 3d Battalion, 6th Marines attacked the southern end of the wood. After an ineffective artillery preparation, the attack began at 1700, with the 3/5th Marines advancing against the German 461st Regiment of the 237th Division which was defending the wood. The attack was repulsed, and the Marines suffered heavy casualties. On the right, the 3/6th Marines made better progress, fighting its way to the southern edge of the wood before being stopped. The 2d Battalion, 6th Marines, on the right of the 3/6th Marines, was acting as the link between the 4th and 3d Brigades, and advanced three companies with the 3/6th Marine's right flank. However, the left-hand companies of the 2d Battalion, 6th Marines were hit by intense machine gun fire and scattered. Remnants of these companies nonetheless pushed ahead and took the town of Bouresches, which was lightly held by the Germans. The small force of Marines occupied the town and waited for reinforcements and an expected German counterattack.

Significance: The 6 June attack of the Marines was costly but resulted in the capture of Hill 142 and Bouresches.

Sources: M.19; M.20; N.4; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, Hill 142, 6 June 1918

The Aisne Offensive, third of the great German 1918 offensives, began on 27 May 1918, in a drive threatening Paris. By early June the German Seventh Army had driven the French Sixth Army back nearly 50 kilometers and had reached the Marne River west of Epernay, only about 80 kilometers east of Paris. Among reserves committed to bolster the French, and to prevent a German breakthrough, was the US 2d Division of the American Expeditionary Forces (AEF), which had not previously been committed to active combat. The 2d Division entered the line about 10 kilometers west of Chateau Thierry on 1 June with the 3d Brigade on the right and the 4th Marine Brigade on the left. On its left was the French 167th Division, on its right the French 10th Colonial Division. The German offensive was halted and the line stabilized in desperate defensive fighting on 3-4 June. The 2d Division planned a counterattack for 6 June.

On the 4th Brigade's left the 5th Marine Regiment was given the mission of capturing Hill 142, a dominate terrain feature west of Belleau Wood. The divisional boundary of the German 237th and 197th Divisions was located on Hill 142 and was strongly defended by elements of both divisions. On the German left was the reinforced 3d Battalion of the 460th Regiment of the 237th Division. On the right was the 2d Battalion of the 197th Division's 273d Regiment. Belleau Wood was defended mainly by the 237th Division's 461st Regiment. Prior to the 4th Brigade's attack on Belleau Wood, the 1st Battalion of the 5th Marines, commanded by Major Julius Turrill, was assigned the mission to take Hill 142.

Although Turrill's battalion was to be reinforced by a company of engineers and an extra machine gun company, the reinforcements and two of Turrill's own rifle companies were not on hand at the time set for the assault: 0345. Turrill attacked with what was available. His troops came under intense and effective German machine gun fire, and were halted. A company commander, Captain George Hamilton, led a successful bayonet charge at the German positions. The momentum of this charge took the Marines to the crest of Hill 142 and beyond. Hamilton and his men fell back and

WORLD WAR I (WESTERN FRONT, 1918)

Bealleau Wood, Hill 142, 6 June 1918. (Continued)

organized a defensive line on Hill 142. A German counterattack was repulsed before Turrill's two missing rifle companies, and the attached machine gun company, arrived and were quickly put into position on the hill. Meanwhile, to the right, the 3d Battalion of the 5th Marines had failed to keep up, exposing the flank of the 1st Battalion. While repulsing two more counterattacks, Turrill requested reinforcements. Finally a company from brigade reserve arrived, enabling Turrill to consolidate his position, and drive off another German counterattack.

Significance: Despite heavy casualties the 1st Battalion of the 5th Marines had captured an important German position and had successfully held it against repeated counterattacks. The Germans, as well as neighboring French units, were much impressed by this performance of previously untested troops.

Sources: M.19; M.20; N.3; N.4; N.10; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, West Wood I, 6 June 1918

On the afternoon of 6 June the 4th Marine Brigade was to attack strong German defensive positions in Belleau Wood and in the vicinity of Bouresches to the east of the wood. Belleau Wood was defended by the 237th German Division's 461st Regiment. German positions in and around Bouresches were defended by the 398th Regiment of the 10th Division. The 4th Brigade's objective was to drive the Germans from the wood and Bouresches. To accomplish the first part of this mission, the 3d Battalion, 5th Marines, to the right of the 1st Battalion, 5th Marines, on Hill 142, was to attack the west face of the wood while the 3d Battalion, 6th Marines, was to attack the southwest rim of the wood. The attack on Bouresches was to be made by the 3d Battalion, 6th Marines, after it had cleared the southern wood of German defenders and advanced to the upper corner of the southeastern face of the wood. Three companies of the 2d Battalion, 6th Marines, would advance on the right and act as a pivot for the attack, while a fourth on the right would stand and maintain contact with the 3d Brigade.

Unfortunately poor intelligence and equally poor timing as well as a well-prepared defense foiled the attack. As the 3d Battalion, 5th Marines, advanced on the west wood they quickly came under intense and accurate machine gun and mortar fire. Major Berry, the commanding officer was hit almost immediately and had to be evacuated. The Marines continued to attack but were repulsed with severe casualties, and forced to withdraw to their original positions.

Significance: The failed assault demonstrated the importance of well prepared positions in naturally strong areas such as rugged, wooded, terrain. Although the attack was a tactical failure, German records reveal that this attack and the successful assault on Hill 142 shook the confidence of the defenders and prepared the way for the more successful attacks later in the campaign.

Sources: M.19; M.20; N.3; N.4; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, Bouresches I, 6 June 1918

In the planned 2d Division attack of 6 June, the 4th Marine Brigade, on the division's left, was to drive the Germans from Belleau Wood and Bouresches. Major Berry's 3d Battalion of the 5th Marines was to attack the western face of the wood. To Berry's right Major Sibley's 3d Battalion, 6th Marines, was to attack the southwestern rim of the Wood and drive the German defenders from the southern portion of the wood and then advance east to attack Bouresches. To his right the 2d Battalion, 6th Marines, was to advance its left with the 3d Battalion 5th Marines while one company on its right was to maintain contact with the 23d Infantry Regiment, the leftmost unit of the 3d Brigade.

Sibley's attack began at 1700 on 6 June. The Marines at once came under intense machine gun fire from the 2d Battalion of the 461st Regiment of the 237th Division. They drove ahead, despite heavy casualties, and elements of the battalion did penetrate the outer rim of the German defense perimeter on the southern edge of the woods. On Sibley's right two companies of the 2d Battalion, 6th Marines, suffered heavy casualties but remnants of these companies pushed ahead to Bouresches and by early evening had overcome light resistance from a company of the 398th Regiment to win control of the town.

Significance: Despite severe casualties, the 6th Marines reached the southern rim of Belleau Wood and captured Bouresches to the east. The aggressiveness and gallantry of this and the other two Marine Corps attacks on 6 June dismayed the Germans and proved a psychological boost to the Allied war effort. (It should be noted, however, that the Marine actions were only partial successes but were treated as great victories by the Allied press.)

Sources: M.19; M.20; N.3; N.4; N.10; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, Hill 192, 6/7 June 1918

On 6 June the 2d Division's 23d Infantry regiment of the 3d Brigade was in line southeast of Belleau Wood, to the right of Major Holcomb's 2d Battalion, 6th Marines, easternmost battalion of the 4th Marine Brigade. At 1515, in compliance with the 3d Brigade's mission of anchoring the 4th Brigade's attack on Belleau Wood and Bouresches, 3d Brigade commanding officer, Brigadier General E.M. Lewis, sent an order to Colonel Malone, the commanding officer of the 23d Infantry Regiment, instructing him to have his regiment maintain tactical liaison with Holcomb's Marine battalion. Lewis's order stated that Malone was to advance his left battalion (the 1st Battalion) where necessary to prevent a German counterattack at the boundary between the 3d and 4th Brigades. Malone took this order to mean that he should advance both battalions he had in line to keep pace with the Marine Brigade's attack and thereby prevent any chance for a counterattack. Without consulting Lewis he ordered his right-hand battalion, Major Elliott's 3d Battalion, to advance against the German positions fronting them on Hill 192, located about 1.8 kilometers east of Bouresches. Apparently thinking he was conforming to Lewis's order, Malone ordered Major Waddill's 1st Battalion not to advance until the Marines to his left did so. But, unknown to Malone, the company from Holcomb's battalion had been ordered to stay put in order to keep contact with the 3d Brigade.

Because of Malone's orders Major Elliott's 3d Battalion attacked without support on its left. The battalion came under intense machine gun fire from troops of the German 47th and 398th Regiments of the 10th Division dug in behind a railroad east of Bouresches. Then machine gun fire from front and right inflicted heavy casualties, but Elliott's infantrymen continued their advance to Hill 192. Upon reaching the Hill the 3d Battalion overcame the defenders, troops from the 398th Regiment, and prepared to meet counterattacks. Meanwhile, when Waddill noticed that Elliott's force had advanced, he too moved his battalion forward until it was on line with Elliott's battalion. By 2030, however, German counterattacks forced Waddill to withdraw to his original position. At 0100 another German counterattack in Elliott's sector also forced him to withdraw to his original position.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, Hill 192, 6/7 June 1918 (Continued)

Significance: This engagement demonstrates the importance of effective orders and communications in warfare. Had Malone understood his orders from General E.M. Lewis, he would have realized that his mission was to support, not to attack.

Sources: M.19; M.20; N.3; N.4; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, West Wood II, 11 June 1918

Following the unsuccessful assault on Belleau Wood made by the 4th Marine Brigade on 6 June two of the battered Marine battalions were relieved. Major Wise's 2d Battalion, 5th Marines, relieved the 3d Battalion, 5th Marines. Wise's battalion took up the 3d Battalion's position west of Belleau Wood and to the right of Hill 142. Also relieved was the 3d Battalion, 6th Marines, which had gained a foothold on the southern rim of the wood. Major Hughes 1st Battalion, 6th Marines, took over in this sector on 8 June. After rest and reorganization, the 3d Battalion, 5th Marines, now commanded by Major Shearer, relieved the 2d Battalion, 6th Marines, on the 4th Brigade's right on 9 June. On the morning of 11 June, Wise's battalion was to attack from the west and move through the wood along a broad front toward the northeast corner of the wood and reduce the positions of the reinforced 1st Battalion, German 461st Regiment, that dominated the wood. On Wise's right a company of Major Hughes 1st Battalion, 6th Marines, was to advance in conformity with Wise's attack, to secure the hinge between the two Marine battalions. Partly because of faulty maps and partly because of intense machine gun fire, the Marines lost their way and struck directly east rather than northeast. As German machine gun fire inflicted heavy casualties, Wise lost contact with his companies and they with each other. Seeing the predicament of Wise's right hand companies, Lieutenant Overton, commanding officer of the rifle company from Hughes battalion on Wise's flank, boldly led an attack on the German machine gun positions that were raking Wise's flank. Thus the Marines were able to continue their blind advance eastward, and quite by accident were able to strike the boundary between the 1st Battalion, 461st Regiment, and the 2d Battalion of the 28th Division's 40th Fusilier Regiment (which had relieved the 10th Division regiments defending that sector). Wise's Marines surrounded and destroyed two German companies. Major Hartlieb, commanding officer of the 1st Battalion, 461st Regiment, requested reinforcements from the 28th Division. As the reinforcements from the 1st Battalion, 461st Fusiliers, made their way to the wood they were hit by artillery fire from American 155mm guns and suffered heavy casualties.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, West Wood II, 11 June 1918 (Continued)

Significance: Luck, initiative, and accurate artillery fire enabled the Americans to inflict heavy casualties on the German defenders and drive them from the southern part of the wood. Nonetheless, the 461st Regiment's 1st Battalion still held the northern half of the Wood.

Sources: (M.19; M.20; N.3; N.4; N.10; N.11; N.14; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, North Wood I, "The Hunting Lodge", 12 June 1918

Having failed in the attempt to drive the 1st Battalion, 461st Infantry, from Belleau Wood on 11 June, Major Wise, commanding officer of the 2d Battalion, 5th Marines, was determined to launch another attack on the afternoon of 12 June. The Commanding General, 4th Brigade, Brigadier General James Harbord, concurred. At 1730 three of Wise's four companies advanced against the German defenses directly north of their own positions. The main German position, which was the Marines' final objective, was some 800 meters north. The 1st Battalion of the 461st Infantry, charged with the defense of the wood, was reinforced with units from the 109th and 110th Regiments of the neighboring 28th Division. The Marines overran German outposts, but then encountered fierce resistance; the Marine assaults broke down into a series of pell-mell bayonet charges. On the defender's left the troops of the 109th and 110th Grenadiers were driven from the wood into Belleau. On the defenders' right the Marines drove the 1st Battalion, 461st Regiment, temporarily out of the northwest corner of the wood after a bloody bayonet duel at a hunting lodge known as the Pavillion. But the German commander, Major Hartlieb, CO of the 1st Battalion, 461st Regiment, organized troops in Belleau to counterattack. The Germans reentered the woods and enveloped the rear of the Marine positions at the Hunting Lodge while simultaneously advancing to the north. German machine gun fire from the rear forced the 2d Battalion, 5th Marines to withdraw from the Hunting Lodge to a position about 100 meters to the south.

Significance: The 2d Battalion, 5th Marines, attack had gained about 700 meters of heavily wooded area and had inflicted heavy casualties on the defenders. But, in doing so, the battalion had suffered considerable casualties itself. Moreover, through tactical skill Hartlieb's forces had regained the northernmost part of the wood, an area that would take US forces another two weeks to conquer.

Sources: M. 19; M.20; N.3; N.4; N.11; N.14; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, Bouresches II, 13 June 1918

Following the bloody assault on the German positions in northern Belleau Wood on 12 June, the US 4th Marines Brigade expected a German counterattack on the new position of the 2d Battalion, 5th Marines, in Belleau Wood. Preceded by an intense artillery preparation the counterattack came at 0300, but the 1st Battalion, 461st Regiment, did not strike at Major Wise's battalion as expected, but instead elements of the 28th Division attacked Major Shearer's 3d Battalion, 5th Marines, in Bouresches and Major John Hughes' 1st Battalion, 6th Marines, positioned on the south edge of the wood between Shearer's and Wise's battalions. Despite heavy pressure, Shearer held Bouresches. Fierce combat also took place in Hughes's sector, but his battalion also repulsed the German onslaught. It suffered heavy casualties for its efforts. By dawn the German attacks had been repulsed in both sectors.

Significance: Repulse of the German counterattacks on Bouresches and the southern edge of Belleau Wood prevented the Germans from cutting off Wise's battalion in the north wood and from forcing Wise's withdrawal southward. The 4th Marines Brigade could consolidate its positions and thus was in a position to drive the Germans from Belleau Wood.

Sources: M.19; M.20; N.3; N.4; N.10; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, North Wood II, 21 June 1918

On the morning of 20 June 4th Brigade commanding general, Brigadier General James Harbord, ordered Lieutenant Colonel Adams to launch his 1st Battalion, 7th Infantry Regiment, in a predawn assault on the German 3d Battalion, 347th Regiment's positions in northern Belleau Wood. The 347th regiment was part of the 87th Division which had relieved the 237th Division and was responsible for its sector as well as part of the 28th Division's sector on 15 June. This was a difficult mission, especially when one considers that the Germans rated the 87th Division as inferior. Adams's battalion, however, was ill-chosen for the task of attacking the strong German defensive position in the north wood. The battalion was inexperienced and had only relieved the 2d Battalion, 5th Marines, five days earlier; moreover, two of its companies had just been severely mauled the preceding evening in an unsuccessful assault of the 3d Battalion, 347th Regiment's positions. Harbord, however, mistakenly believed that there were only some 50 Germans and a few machine guns remaining in the wood and that it would be a relatively easy task to eliminate them. He wanted to give Adams the opportunity to make up for the previous setback before his battalion was relieved by the 3d Battalion, 5th Marines. Despite Adams's confidential warning that his battalion was not up to the task, Harbord stuck to his plan.

After a limited and ineffective artillery preparation Adams's battalion moved out at 0315 the next morning. His left-hand lead company got lost in the thick woods and made its way west to the edge of the wood and never engaged the enemy. His other lead company was halted by German artillery fire and then scattered as machine gun fire raked its flanks. As a third company made its way to assist, it too wilted under fire and was dispersed. Germans dressed in American uniforms added to the havoc by infiltrating the American lines.. The battered 1st Battalion was not able to reform at its old position until 0730.

Significance: Faulty intelligence and poor command decisions resulted in a bloody defeat. The 1st Battalion, 7th Infantry, was not up to the task of driving the German defenders from the wood. The German defense also demonstrated the importance of fortifications and superior firepower in war. By German standards the 3d Battalion, 347th Regiment, charged with defending the wood, was anything but a quality unit, but they were able to use their strong position and superior firepower to repulse the attack easily.

Sources: M.19; M.20; N.3; N.4; N.11; N.14; N.15.

WORLD WAR II (WESTERN FRONT, 1918)

Belleau Wood, North Wood III, 23 June 1918

On the night of 21 June Major Maurice Shearer's 3d Battalion, 5th Marines, relieved the 1st Battalion, 7th Infantry, in Belleau Wood. Despite evidence to the contrary, 4th Marine Brigade commanding general, Brigadier General James Harbord, continued to believe that the remaining German troops in Belleau Wood could be defeated easily. Thus he ordered Shearer's battalion to launch an attack without artillery support on the evening of 23 June. With heavy machine guns providing support fire, the Marines attacked at 1930. They faced the 1st Battalion, 347th Regiment, which had relieved the 3d Battalion, 347th Regiment. After taking three forward machine gun positions, intense machine gun fire brought the advance to a halt, and the Marines began withdrawing. The attack was called off at 2320.

Significance: As in the assault of 21 June, Harbord's errors in judgment led to tactical failure. This engagement demonstrates the importance of both field fortifications and superior firepower. Because the German 1st Battalion, 347th Infantry, had an advantage in both of these factors they were able to beat the attacking Marines with ease.

Sources: M.19; M.20; N.3; N.4; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Belleau Wood, North Wood IV (Final Assault), 25/26 June 1918

After the attack of 23 June had failed, 4th Brigade commanding general, Brigadier General James Harbord, changed tactics. The next attack scheduled for the afternoon of 25 June was to be preceded by a massive and sustained day-long artillery preparation. At 1700 Major Maurice Shearer's 3d Battalion, 5th Marines, advanced, three companies in line. Although German artillery fire inflicted considerable casualties, the damage done by machine guns was minimal. The US artillery preparation had suppressed or neutralized the German machine guns. The Marines' advance on the right was slow, but as the 3d Battalion pushed on the center and German right, resistance collapsed. Large numbers of Germans surrendered. Shearer reinforced his center and right with two platoons from Major Sibley's 3d Battalion, 6th Marines. The German commanding officer of the 1st Battalion, 347 Regiment, Captain Kaulbers, requested reinforcements, but his request was denied until it was too late to hold on to positions in the wood. By midnight Kaulbers withdrew the units he still had contact with and established a new defense line north of Belleau Wood on the Torcy-Belleau Road. There reinforcements joined his shattered battalion. Meanwhile, hand-to-hand combat continued in the wood until daybreak, although many German soldiers surrendered as soon as they confronted the attacking Marines. Others stumbled out of the wood to Kaulbers' new defense line.

Significance: Although the courageous effort of the 3d Battalion, 5th Marines, cannot be denied, it was the huge artillery preparation that silenced most of the machine guns and facilitated the Marines' task. The successful conclusion of the Marine Brigade's counteroffensive against German units in Belleau Wood helped to wrest the initiative from the Germans.

Sources: M.19; M.20; N.3; N.4; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Vaux, 1/2 July 1918

With Belleau Wood secured on 26 June 1918, the US 2d Division was assigned the mission of reducing the German stronghold of Vaux and German positions west of Vaux in La Roche Wood and on Hill 192. The German defenses in the Vaux sector were manned by the 402d Regiment of the 201st Division. The regiment's 1st Battalion was deployed in Vaux and west to the eastern part of La Roche Wood. The 2d Battalion was to the 1st Battalion's right in La Roche Wood and on Hill 192 to the wood's right. The regiment had one battalion in reserve. The US 2d Division's 3d Brigade, whose task it was to take Vaux, La Roche Wood, and Hill 192, had its 23d Infantry Regiment on the left, and its 9th Infantry Regiment on the right. The attack on the position of the 402d Regiment was to be carried out by two battalions, the 23d Infantry's 3d Battalion and the 9th Infantry's 2d Battalion. On the right of the 3d Brigade was the 153d Regiment of the French 39th Division. While the Americans attacked Vaux, the 153d Regiment was to attack another German strongpoint, Hill 204, to the east of Vaux.

Early on 1 July the French and American artillery began a day-long preparation which culminated in a rolling barrage begun at 1757. At 1800 the infantry moved out. The artillery had done its work, severely damaging the German positions and enabling the 2d Battalion, 23d Infantry to take Vaux easily. The 3d Battalion, 23d Infantry met strong resistance but, by 2030, had reached its objective in La Roche Wood and had established contact with the 9th Infantry on its right. At 0315 the 204d Regiment's reinforced 3d Battalion made a counterattack but this was repulsed.

Significance: The 3d Brigade's victory at Vaux was instrumental in eliminating the German Marne salient.

Sources: M.19; M.20; N.4.

WORLD WAR I (WESTERN FRONT, 1918)

Vaux, La Roche Wood East, 1/2 July 1918

After three weeks of defensive trench warfare the 2d Division's 3d Brigade got its chance to take the offensive. The 3d Brigade was to be on the left of an attack on the German 201st Division's positions at Vaux and La Roche Wood. The sector extended from Hill 192 near Bouresches in the west, to the east of Vaux at Hill 204. The 201st Division had assumed the defense of these positions on 15 June. The 3d Brigade's mission was to attack the strong German positions at Vaux and La Roche Wood as well as Hill 192, the scene of the 23d Infantry's repulse on 6-7 June. At 1800 on 1 July, following a massive 12-hour artillery preparation, the 3d Brigade's infantrymen moved out. On the brigade's right Major Bouton's 2d Battalion, 9th Infantry, moved on Vaux and toward the eastern face of La Roche Wood to the left of Vaux. On the left the 3d Battalion, 23d Infantry, moved against the western face of La Roche Wood and Hill 192. When Bouton's right-hand company reached Vaux it met only minimal resistance. The US artillery fire had been so accurate that it had destroyed the defenders' communications with their rear and had driven the German soldiers into cellars where they cowered. After taking Vaux this company moved west and launched a grenade assault to overcome a strongly-defended German position in the La Roche Wood. Although the Americans suffered heavy casualties in action, they were then able to push through the wood and tie in with the company on the battalion's left flank on the northern face of the wood. On the brigade left the 3d Battalion, 23d Infantry, had overcome stiff opposition and had reached La Roche by 1920 to link the two battalions. Having reached their objective the Americans began digging in for the expected German counterattack. Meanwhile, a third company of Elliott's battalion moved into Vaux and made similar preparations. The expected counterattack came at 0125, but the American infantrymen with the aid of accurate artillery and heavy machine gun fire, repulsed the attack with ease, while inflicting heavy casualties on the attackers.

Significance: The attack on Vaux and the eastern La Roche Wood and the subsequent repulse of the German counterattack deprived the Germans of important strongholds in the salient they had forged near the Marne. The 2d Division had done its part in straightening the Allied line and driving the Germans back from the Marne. This action shows the importance of effective artillery support to infantry assaults.

Sources: M.19; M.20; N.3; N.4.

WORLD WAR I (WESTERN FRONT, 1918)

Vaux, La Roche Wood West, 1/2 July 1918

On 2 July as part of the 3d Brigade's push on German position's east of Belleau Wood in the area of Vaux, Major Elliot's 3d Battalion, 23d Infantry, attacked German positions on Hill 192 and near the western face of La Roche Wood. The Battalion's left-hand company overcame light resistance to take Hill 192. But in the center and on the right the American infantrymen encountered fierce resistance. The center company overcame determined resistance to reach its objective. On the right the company charged with taking the German strongpoints in western La Roche Wood had a tougher time. Their advance was first slowed by artillery fire and then by heavy machine gun fire which inflicted heavy casualties. Infantrymen stormed the position and overcame the defenders. The advance resumed only to be halted by machine gun fire from another strongpoint. An hour later, at 1930, detachments from Elliot's other companies arrived to help reduce the position. By 2030 Elliot's Battalion had reached its objective on the north face of La Roche Wood and was able to link with Major Bouton's 2d Battalion, 9th Infantry, on the right. The battalion dug in and prepared for a German counterattack which came at 0215. The attack was poorly organized, and the German troops were committed piecemeal. Hence it was easily repulsed.

Significance: Although elements of the 3d Battalion had a more difficult time than the 2d, the attack was nonetheless well prepared and well executed as was demonstrated by the speed with which the right-hand company approaching La Roche Wood was aided by detachments from the other companies. Coordination between the attacking battalions was also excellent. The battalions were able to overcome resistance and link with each other less than three hours after their assaults had begun.

Sources: M.19; M.20; N.3; N.4.

WORLD WAR I (WESTERN FRONT, 1918)

Noyon-Montdidier, 9-13 June 1918

Ludendorff hoped to improve the position of his newly-acquired Amiens and Aisne salients by conducting operations to join them. This would shorten the front and conserve manpower. The Germans planned a two-pronged attack, one by the Eighteenth Army southwest from Montdidier, the other by the Seventh Army west from Soissons. The French, alert to the threat of attack, began a counterpreparation against the concentrating German infantry and artillery. The Germans, nevertheless, continued with their preparations. Their shock troops jumped off on 9 June following a heavy artillery preparation. The German Eighteenth Army advanced seven miles into the French defenses by late morning and by the end of the day reached the north bank of the Matz River. On the 10th the Germans crossed the Matz, but newly-arrived French reinforcements stopped the German drive. On the same day the German Seventh Army launched its attack but was halted after making slight gains. Following a lull on the 11th the Seventh Army attacked again, but it was stopped by French artillery fire and counterattacks by the Tenth Army. Ludendorff called off the attack on the 13th.

Significance: The attack accomplished little. The already depleted German shock units suffered large losses.

Sources: A.11.2; L.8.7; L.26.

WORLD WAR I (WESTERN FRONT, 1918)

Champagne-Marne, 15-17 July 1918

Ludendorff's fifth offensive, designed to pinch out the Reims salient, was carefully planned, but because of Allied reconnaissance and information gained from German deserters, the Germans were unable to effect surprise. As the German infantry moved into its concentration areas, the French Fourth Army, east of Reims, began a counterpreparation which greatly weakened the attack. The German Seventh Army, on the right, attacked to the southeast against the French Sixth Army, while the First and Third German Armies attacked southward against the French Fourth Army and the right flank of the Fifth Army. On the right, the French, well prepared and deployed in depth, stopped the First and Third Armies after the Germans had made small gains. The German Seventh Army, on the left, was more successful. The French defenses there were not echeloned in great depth, and two Italian divisions collapsed as the Germans drove several miles into the defensive zone. The Germans crossed the Marne River and established a bridgehead four miles deep south of the river. However, the US 3d division at Chateau Thierry prevented the Germans from crossing there and frustrated German hopes of achieving a complete breakthrough. The German attacks continued on the 16th as both sides rushed reinforcements to the area. Ludendorff held up the advance units of the Seventh Army, because of the stiff resistance of the US 3d Division at Chateau-Thierry. This pause allowed the Allied defense to harden west of Reims and the attack was called off by Ludendorff.

Significance: In spite of lack of surprise, the German Seventh Army was initially fairly successful. The US 3d Division, however, prevented a complete breakthrough. This was Ludendorff's last offensive. The initiative shifted to the Allies.

Sources: A.11.2; L.8.7; L.14; L.21; L.26; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Aisne-Marne, Phase I, 18-19 July 1918

As the German Champagne-Marne offensive ended, French Marshal Ferdinand Foch planned to counterattack the salient which had been created in May and June by the German Aisne offensive, in the region between the Aisne and Marne rivers, northeast of Paris. The counterattack was to be carried out by the French Tenth, Sixth, Ninth, and Fifth Armies (as they were deployed in the line facing the salient from left to right). The main effort was to be made by the Tenth Army against the western face of the salient in the region east of the forest of Villers Cotterets. This attack was to be spearheaded by the US 1st and 2d Divisions. The Germans defending in the salient were the Ninth and Seventh Armies, which belonged to an army group commanded by Prussian Crown Prince Wilhelm.

The Allied offensive, launched on 18 July, achieved great gains over the first two days. The Germans, surprised, and attacked from three sides by a strong Allied force which included over 350 tanks, fell back all along the front of the salient.

Significance: The Allies achieved great gains and seized the initiative--which they would retain until the end of the war.

Sources: A.11.2; L.4.4; L.8.8; L.14; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Missy aux Bois Ravine, 18 July 1918

The US 26th Infantry Regiment, assaulting with the 2d Battalion, the 3d Battalion in column in support, and the 1st Battalion in reserve, attacked on schedule with the rest of the 1st Division. Achieving substantial surprise, the regiment advanced behind a rolling artillery barrage quickly and without serious losses through rolling wheat fields east of the line of departure. The rapidity of the advance was facilitated both by the French tanks attached to the regiment and the rolling barrage, as well as by morning fog which obscured the visibility of artillery observers and infantry of the 13th Bavarian Reserve Regiment. By midmorning, however, German artillery fire, combined with machine gun fire from defiladed positions in the Missy aux Bois Ravine brought the regiment's attack to a standstill. After a brief pause, the regiment, in coordination with the 28th Infantry to the left, cleared the southern end of the ravine capturing many German artillery pieces and prisoners. At the end of the day, the 26th Infantry was in position on the eastern edge of the ravine, a little less than one kilometer short of its first day's objective. Casualties for the regiment were high but the ground covered, and the heavy losses inflicted on the 13th Bavarian Infantry made the attack an overwhelming success.

Significance: The 26th Infantry, along with other units of the 1st Division, succeeded in taking most of its objectives and making a large penetration in the German lines southwest of Soissons. This success was instrumental in regaining the initiative from the Germans, an initiative the Allies would not lose for the remainder of the war.

Sources: M.3; M.7; M.9; M.11; M.12; M.14; M.17; N.1; N.2; N.6; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Breuil, 18 July 1918

The 28th Infantry Regiment, on the far left of the 1st Division, moved out on schedule at 0435 18 July. The 2d Battalion led and was supported by the 3d Battalion with the 1st Battalion in reserve. A German strongpoint at St. Amand Ferme, on the regiment's left flank and in the zone of the French 153d Infantry Division, had to be taken by direct assault by 28th Infantry units. Reaching the western edge of the Missy aux Bois Ravine, the regiment encountered heavy fire from numerous machine gun and artillery emplacements located in defiladed positions in the ravine and manned by the 22d Bavarian Regiment. On the regiment's left, the French 153d Division was held up and the 28th Regiment's left flank was open. Flanking fire from strongpoints around Breuil and Saconcin et Breuil in the Missy Ravine necessitated an attack by 28th Infantry troops north of the 1st Division's attack zone boundary. Cooperating with French troops and the 26th Infantry, the regiment attacked the Missy Ravine south of Breuil and captured many German artillery pieces and prisoners. By the end of the day the regiment had consolidated positions on the eastern edge of the Missy Ravine about one kilometer short of its first day's final objective. Losses were high, but the German line had been penetrated, and the remnants of the 22d Bavarian Infantry, battered by the attack, were withdrawn on 19 July as other German units moved into the line.

Significance: Along with the rest of the US 1st Division, the 28th Regiment succeeded in taking most of its first day's objectives, despite heavy German resistance, and making a large penetration of German lines southwest of Soissons.

Sources: M.3; M.7; M.9; M.11; N.12; M.14; M.15; M.17; N.1; N.2; N.6; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Aisne-Marne, St. Amand Farm, 18 July 1918

The Allied Aisne-Marne Offensive commenced on 18 July 1918 as the last of the great German offensives of 1918 was concluding. The US 1st Division, part of the US III Corps, was assigned the mission of attacking the west face of the German salient, just southwest of Soissons. Opposing the 1st Division were the German 11th Bavarian Division and the 42d Division. The 28th Infantry of the 2d Brigade was on the left of the division sector, and liaison with the French 152d Infantry Division to the left. St. Amand Farm stood at the hinge between the French and American units and was a strongpoint of machine guns in the German first line of resistance.

The regiment attacked at 0435 on 18 July, with no artillery preparation. The 18th Infantry in column of battalions, with the 2d Battalion leading, advanced behind a rolling barrage, against elements of the 21st Bavarian Brigade in the vicinity of St. Amand. Surprise at St. Amand was complete, and after a very sharp but brief engagement, much of the 2d Battalion, 396th Infantry, was encircled and surrendered.

After the fall of St. Amand, the remainder of the German front line was untenable, and the 11th Division pulled back. The French and Americans pushed on to the second line, where they halted, after having advanced more than eight kilometers for the day.

Significance: This important strongpoint located on the left flank of the 1st US Division zone fell in the first phase of the attack, allowing the offensive in the zone to move forward.

Sources: M.3; M.7; M.11; M.13; N.1; N.2; N.6; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Beaurepaire Farm, 18 July 1918

The German May 1918 offensive south and west of Rheims failed to take that rail center. The 40 German divisions in the salient were thus dependent on a single rail line through Soissons for supply. The Allied forces began a general counteroffensive on 18 July. The US 2d Division, the 1st Division, and the 1st Moroccan Division, composed the French XX Corps, attacking the west face of the salient, southwest of Soissons. The corps attacked with its three divisions abreast, the 2d Division on the right, the Moroccans in the center, and the 1st Division on the left.

Beaurepaire Farm, a German strongpoint which its defenders had made into a veritable fortress, lay in the southern portion of the sector assigned to the 2d Division. During the night of 17 July, the 2d Battalion, 23d Infantry Regiment, carried out a forced march through a driving rain over muddy roads to reach its jump-off point, on the extreme right of the division. The battalion's mission was to seize Beaurepaire Farm. The battalion attacked at 0435 on 18 July, supported by French tanks and following a rolling barrage. The Germans were surprised, and the advance was more rapid than anticipated. Several batteries of German artillery were deployed in the wheatfields around Beaurepaire Farm and did not have time to displace before the American infantry reached them. They fired pointblank at the advancing infantrymen and tanks, causing substantial casualties and destroying or disabling several tanks. The 2d Battalion, however, overran the guns and seized Beaurepaire Farm in the early morning, capturing over 100 prisoners.

Significance: The seizure of Beaurepaire Farm removed a significant obstacle to the advance of the 2d Division.

Sources: M.19; M.20; N.3; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Cravoncon Ferme-Chaudun, 18 July 1918

On 18 July 1918 the US 1st Division with the 1st Moroccan and US 2d Divisions on its right (all part of the XX French Corps) attacked against the western part of the Marne Salient just southwest of Soissons. On the night preceding the attack the 1st Division's four infantry regiments were aligned from right to left in the order 18th, 16th, 26th, and 28th. The objective for the first day's attack was a line running due north from Chaudun to the intersection of Route Nationale No. 2 at the northern divisional boundary. French tanks were attached to the division; to assure surprise no artillery preparation was to precede the attack. Defending opposite the 1st Division was the 11th Bavarian Division and elements of the two divisions to its flanks. The 11th Bavarian Division was below a reduced field strength of 750 men per battalion and in need of rest and training.

The 1st Infantry Brigade, composed of the 16th and 18th Infantry Regiments, attacked at 0435 on 18 July. Defending in this sector of the front was the 3d Bavarian Infantry Regiment of the 11th Bavarian Division and elements of other German units on the left on the 3d Bavarian Infantry. The brigade achieved substantial surprise and quickly advanced over rolling wheatfields and through the first German line of defense. Resistance stiffened as the brigade outdistanced the 26th Infantry Regiment on its left and came under flanking fire from that direction. On the brigade's right boundary an old French trench occupied by the Germans and parallel to the axis of the attack, allowed the defenders to pour flanking fire into the brigade's right flank. Heavy casualties were incurred but the advance continued. At the village of Chaudun, near the brigade's final objective line, hand-to-hand fighting was required to clear the town. By the end of the day the brigade had taken all of its objectives and, with its left flank refused to cover the ground which the 26th Infantry had been unable to seize, consolidated its position for the night.

Significance: The 1st Brigade's casualties had been high, but the 3d Bavarian Regiment had been virtually destroyed on 18 July. A 3d Bavarian Regiment report described the 18 July attack as "an unfortunate action...in which almost the entire regiment fell into the hands of the enemy either dead or alive." In taking all of its first day's objectives

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Cravancon Ferme-Chaudun, 18 July 1918 (Continued)

the 1st Brigade helped to penetrate the German line southwest of Soissons and initiate the momentum of Allied offensives that would continue to the end of the war.

Sources: M.3; M.7; M.9; M.11; M.12; M.13; M.15; M.17; N.1; N.2; N.6; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Chaudun, 18 July 1918

On the morning of 18 July 1918 the US 1st Division attacked as part of the Allied counteroffensive against the western part of the Marne Salient just south of Soissons. The 1st Infantry Brigade was on the division's right and in the brigade sector the 16th Infantry was on the left and the 18th Infantry on the right. Defending opposite the 1st Brigade was the 3d Bavarian Infantry Regiment of the 11th Bavarian Division with other units on the 3d Bavarian Infantry's left.

At 0435 on 18 July the 18th Infantry moved out with the 3d Battalion leading. Attacking without an artillery preparation, the regiment achieved substantial surprise and moved swiftly over rolling wheatfields through the first German line of defense. As the attack progressed, German artillery fire from gun positions around the town of Chaudun, on the 18th Infantry's right flank, inflicted heavy casualties on both regiments of the 1st Brigade. Although out of the division's sector, the 3d Battalion of the 18th Infantry attacked the town, which was occupied by the 2d Battalion of the German 109th Body Grenadier Regiment and elements of the 17th Infantry Regiment. Supported by intense artillery fire, the 3d Battalion, 18th Infantry, cleared the town in hand-to-hand fighting. The US troops then immediately pursued the withdrawing defenders to the east of the town and dispersed them before they could reorganize. In this final assault numerous German prisoners were taken. On the evening of 18 July the 3d Battalion consolidated its positions along with the rest of the 18th Infantry.

Significance: By capturing Chaudun the 3d Battalion, 18th Infantry, helped the 1st Brigade reach its first day's objectives and aided in the penetration of the German defensive line southwest of Soissons.

Sources: M.3; M.9; M.11; M.13; N.1; N.2; N.13; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Aisne-Marne, Phase II, 20 July- 1 August 1918

In the second phase of the Aisne-Marne battle the Germans recovered from the initial surprise, stiffened their defense, and limited the Allies to small gains. A German withdrawal was ordered as Allied pressure continued on the salient. The Germans, using a skillful defense, kept the Allies in check and formed a new line in the vicinity of Fere en Tardenois on the 27th. An Allied attack against the new German position was repulsed on the 28th. On the 30th the US I Corps spearheaded another attack but made small gains. On the 31st the Allies kept up the pressure, and the German defense appeared to be weakening. On 2 August the Allies lost contact with the Germans, who had withdrawn to a new position behind the Vesle River. When the Allies regained contact, the Germans were strongly entrenched behind the Vesle.

Significance: The Marne salient was eliminated. German morale continued to drop. Ludendorff's planned Flanders offensive was postponed again.

Sources: A.11.2; L.4.4; L.8.8; L.14; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Berzy le Sec, 21 July 1918

On 18 July 1918 the Allied counteroffensive against the Aisne-Marne salient began. By 21 July, the US 1st Division, in the Tenth Army zone, had pushed the German forces in its sector to the Soissons-Chateau Thierry road. Seizure of Berzy le Sec and Buzancy Ridge would mean a severing of this important road link and force the withdrawal of many of the 40-odd German divisions located in the salient. The 28th Infantry, on the division's left, was ordered to seize Berzy le Sec.

American artillery started to shell Berzy le Sec at 0530 and continued a high rate of fire on the town until 0830. The concentrations then lifted before the advancing infantry of the 28th Regiment, who carried out a frontal assault in column of battalions, the 1st Battalion leading. The troops moved through Berzy le Sec and captured a battery of 77mm guns that had been firing on them during most of the advance. The remnants of the town's defenders surrendered. By 0915 the regiment had seized its objective, just beyond the town, and had linked up with the rest of the 2d Brigade, to its right.

Significance: The seizure of Berzy le Sec, along with the seizure of Buzancy Ridge, cut the important road between Soissons and Chateau-Thierry, making inevitable a German withdrawal from much of the salient.

Sources: M.3; M.9; M.11; M.13; N.1; N.2; N.13; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Soissons, Buzancy Ridge, 21 July 1918

On 18 July 1918 the Allied counteroffensive against the Aisne-Marne salient began. By 21 July, the US 1st Division, in the Tenth Army zone, had pushed the German forces in its sector to the Soissons-Chateau Thierry road. Seizure of Berzy le Sec and Buzancy Ridge would mean a severing of this important road link and force the withdrawal of many of the 40-odd German divisions located in the salient.

On 21 July 1918, a major obstacle standing between the 1st Division and the German line of communications from Chateau Thierry to Soissons was the heavily fortified natural obstacle called Buzancy Ridge. The 18th Infantry, with the 1st and 2d Battalions abreast, assaulted the ridge at 0530, with no artillery preparation, moving behind a rolling barrage. Crossing the Crise Ravine and the Soissons-Chateau-Thierry Road, the assaulting troops suffered heavy casualties, mostly to machine-gun fire, but captured the heights of Buzancy. At the Chateau de Buzancy, which crowned the heights, approximately 200 prisoners were captured.

Significance: The battle at Buzancy Ridge broke the German line of communications between Soissons and Chateau Thierry. The Germans were forced to withdraw from the Marne; Soissons was liberated on 2 August.

Sources: M.3; M.9; M.11; M.13; N.1; N.2; N.13; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Picardy, 1918, Phase I, 8-11 August 1918

In conjunction with the French Aisne-Marne offensive, the British Fourth Army and the French First Army attacked the German Eighteenth and Second Armies with the objective of reducing the Peronne-Montdidier salient the Germans carved out in their March offensive. The Germans expected an attack further north, in Flanders, and were caught off guard by this strong, surprise assault. The Canadian Corps and the Australian Corps attacked without an artillery preparation but were heavily supported by tanks. The French attacked soon afterward, following a preliminary bombardment. Many German units collapsed, and the British and French advanced 19 kilometers. Some 11,000 German troops and 200 guns were captured by H + 2. The French Third Army, on the right of the First Army, entered the battle on the 10th. The Germans then withdrew from Montdidier. On the 11th the attackers paused to regroup.

Significance: The British made unprecedented one day gains. For the first time in the war, entire German units collapsed and fled.

Sources: A.11.2; L.4.4; L.5; L.8.8; L.14; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Picardy, 1918, Phase II, 21 August-4 September 1918

The second phase of the Allied Amiens offensive began on 21 August when the French Third Army and the British Third Army resumed the attack after a week's rest. On the 22nd the British Fourth Army attacked and on the 26th the British First Army attacked. The Germans ordered a general withdrawal from the Amiens sector and the Lys salient in Flanders. The Australians crossed the Somme River and took Peronne on 30-31 August, while the Canadians, shifted to the north flank, broke through near Queant on 2 September. As the German situation worsened, it became necessary to withdraw to the final position at the Hindenberg Line. The British, however, had exhausted their reserves by this point, making it impossible to exploit the victory.

Significance: As the Germans were faced with continuous heavy pressure from the Allies, their fighting effectiveness and morale declined significantly. It was becoming increasingly obvious that the German Army could not survive much longer against the attacks.

Sources: 'A.11.2; L.4.4; L.5; L.8.8; L.14; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

St. Mihiel, 12-15 September 1918

The first operation to be undertaken by the newly-established US First Army was the reduction of the German-held St. Mihiel salient. The Germans realized their dangerous position in the weakened and exposed salient, and were in the process of withdrawing from it. The plan was for the US I and IV Corps to make the main effort on the southern (right) face of the salient, while the US V Corps attacked on the left (west) face and the French II Colonial Corps made a holding attack in the center at the apex of the salient. A four-hour artillery preparation was begun at 0100 hours 12 September. At 0500 hours infantry and tanks began the assault, advancing behind a rolling barrage. The Germans hastened their withdrawal, and the Allies made large advances and sustained only light casualties. The US I and IV Corps linked up on 13 September, and by the 16th the salient was cleared of Germans. The Allied air forces maintained air superiority during the operation, supporting the ground units and contributing substantially to the success of the operation. Having achieved its objectives, the offensive was halted. The US First Army then moved west of the Meuse River to take part in a planned offensive in the Argonne Forest area.

Significance: St. Mihiel was the largest US military operation mounted since the Civil War. American troops proved themselves by clearing the salient in a few days.

Sources: A.11.2; L.8.8; L.35.

WORLD WAR I (WESTERN FRONT, 1918)

St. Mihiel, Lahayville-Bois de Lamarche, 12 September 1918

In September 1918, the US 1st Division moved into position on the southern flank of the St. Mihiel Salient in preparation for a US offensive to eliminate the salient, which projected into Allied territory between Verdun and Metz. The basic operational plan of the newly established US First Army called for two converging attacks, one from the west by the US V Corps and another from the south by the US I and IV Corps in line from east to west. Between these two attacks the French II Colonial Corps was to contain the German units between the two US attacks and to drive in the tip of the salient. Located on the extreme left of the US IV Corps, the 1st Division had the double mission of covering the corps's left flank and driving northward through the town of Nonsard to penetrate the deep German line of defense.

For the Germans, possession of the St. Mihiel Salient protected the vital Briey iron basin northeast of Verdun and disrupted traffic on the Paris-Nancy railroad used by the Allies. However, four years of war had reduced Germany's manpower reserve, and the formidable fortifications of the salient were now weakly manned. In fact, in the early morning of 12 September, the 47th Infantry Regiment of the German 10th Infantry Division, which defended the line between Richecourt and St. Bausant -- a distance almost equivalent to the 1st Division's attack frontage -- was in the process of withdrawing to a shorter line in what was formerly the German artillery protective position. German intelligence had revealed the imminence of an American attack, but its exact timing remained unknown. As a result, when the 1st Division's attack commenced, the widely dispersed infantry and supporting artillery of the 47th Regiment were in the open, vulnerable, and without the protection of fortifications.

The 2d Infantry Brigade of the 1st Division attacked on the right wing of the division, with the 28th and 26th Regiments in line from left to right. A four-hour artillery preparation preceded the infantry attack, which jumped off behind a rolling barrage at 0500 on 12 September. Defending against the 2d Brigade was approximately one-half of the German 47th Infantry Regiment, which was in the process of withdrawing at the beginning of the artillery preparation and was consequently taken by surprise. The 2d Brigade advanced swiftly and, sustaining light casualties, reached its first day's final objective north of the Madine River near Nonsard by early afternoon. While

WORLD WAR I (WESTERN FRONT, 1918)

St. Mihiel, Lahayville-Bois de Lamarche, 12 September 1918 (Continued)

the 1st Brigade, reinforced by light tanks, covered the division's left flank, the 2d Brigade was ordered to continue its attack to the second day's initial objective, which it did by early evening. In darkness the brigade reached the line of the Decauville narrow-gauge railroad in the Bois de Lamarche, with advance elements located as far north as the east-west Vigneulles-St. Benoit road.

Significance: Casualties were surprisingly light for the 1st Division, due largely to the confusion of the defenders, who were spread out and withdrawing to a more easily defended line at the time of attack. However, the German 47th Infantry Regiment was nearly annihilated by the attack, and all along the southern flank of the St. Mihiel Salient deep penetrations were made in the German defenses. The 2d Brigade continued its advance northward on 13 September and on 14 September, having successfully completed its mission, went into reserve along with the rest of the 1st Division.

Sources: M.5; M.8; M.9; M.12; M.14; M.15; N.1; N.6; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne: Phase I, 26 September-3 October 1918

The US First Army, having cleared the St. Mihiel salient, was shifted 60 miles north to the area of the Meuse Valley and the Argonne Forest, to take part in Foch's final offensive. However, most of the US divisions actually used in the first phase of the offensive were made up of inexperienced troops who had not fought at St. Mihiel. The offensive was to be launched against the Argonne Forest, where the Germans had taken advantage of the rugged and densely wooded terrain to create a strongly fortified defense line. The assault began on 26 September, with the French Fourth army moving out with the US First Army on its right against the German Third and Fifth Armies. The Germans, not expecting an attack from the Americans so soon after St. Mihiel, were caught by surprise, and were driven back three miles on the first day. On the 27th the First Army advanced another four miles, taking Montfaucon, but the momentum was slowing as the First Army continued to fight its way through the difficult terrain and tough defenses of the forest. The Germans rushed reinforcements to the sector, and the offensive was temporarily stopped.

Significance: German reserves which were badly needed elsewhere were sent to the Argonne because of the great amount of pressure the Americans were putting on that sector.

Sources: A.11.2; L.8.8; L.16; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Blanc Mont, Phase I, 3-6 October 1918

In early October 1918, the French Fourth Army, taking part in Marshal Ferdinand Foch's final offensive, was attacking northward, east of Rheims and west of the Argonne Forest. On 1 October the US 2d Division was assigned to the Fourth Army to assist it in taking the German strongpoints at Blanc Mont and Medeah Farm. The division attacked on 3 October with its 4th Marine Brigade on the left, its 3d Brigade on the right. Each brigade attacked in column of regiments; the regiments attacked in column of battalions. In the 4th Brigade the 6th Regiment assaulted, with the 5th Marine Regiment following and at the same time supporting the left flank of the 6th Marines. In the 3d Brigade, to the right of the 4th Brigade, the 9th Infantry Regiment attacked with the 23d Regiment following. French artillery, tanks, and an air squadron supported the American attack.

The German sector being attacked by the 2d Division, just east of Blanc Mont, was held by the 51st Reserve Division and the 203d Division, both of the XII Saxon Corps.

The Division attack plan was unusual; there was a gap of 3,000 meters between the two brigades, which had converging axes of advance. The right and left flank boundaries of the brigades met about 3,000 meters behind the German front, forming a triangular area of German positions, to be mopped up later.

The US 2d Division jumped off at 0550. The first day was very successful. The 3d Brigade destroyed the German 410th Infantry of the 203d Division and by 0840 took Medeah Farm without serious loss. On the left, the 4th Brigade pushed aside the right flank of the 235th Regiment of the 51st Reserve Division and captured the east side of Blanc Mont before being stopped by German fire coming from the left flank. The initial advance of the 2d Division was too fast for the French 21st Division on the left and the 170th Division on the right. Thus, the American flanks were exposed and the division was taking fire from three sides. The division halted, waiting for the French to catch up. The next morning, the 4th, elements of the 15th Bavarian Division (which had replaced the 203d Division) counterattacked the American salient but were repulsed after slight gains. Several other small German counterattacks were unsuccessful. The French 73d Division (which had taken over on the division's right) could not advance. To the left, the French 22d Division relieved the

WORLD WAR I (WESTERN FRONT, 1918)

Blanc Mont, Phase I, 3-6 October 1918 (Continued)

21st. The 6th Marines and the 22d Division attacked Blanc Mont that afternoon, against the German 149th Regiment of the 213th Division. The attack was repulsed with severe losses due to poor artillery support. At 0615 on the 5th, the attack on Blanc Mont was renewed with better artillery support and the position fell by 0900. The 4th Brigade and the French 22d Division kept up the pressure on the German 149th Regiment and the 368th Regiment of the 213th Division. By evening of the 5th, French patrols reached the outskirts of St. Etienne, but German resistance was strong. On the 6th, the Americans attacked to eliminate the German positions holding up the advance southeast of St. Etienne. This was taken after a heavy artillery barrage and severe fighting. That night the US 36th Division began to relieve the exhausted 2d Division, the 71st Brigade moving into line. The 23d Infantry and the 5th Marines were withdrawn, while the 9th Infantry and the 6th Marines stayed with the newly-arrived brigade. The sector remained under the command of the commanding general 2d Division until the relief was complete.

Significance: With the capture of the German strongpoint at Blanc Mont, the Germans were forced to fall back all along the front as far as Rheims.

Sources: L.29; L.35; N.3; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Medeah Farm, Meuse Argonne (Blanc Mont), 3 October 1918

The initial mission of the US 2d Division at Blanc Mont was to seize Blanc Mont Ridge on the left flank of the division sector and to take the Schliesser Hill facing the division's right flank. Beyond Schliesser Hill (called Pylone by the Allies) was Medeah Farm, which was initially in the sector of the French 170th Division, the unit on the 2d Division's right. The US plan envisioned a converging attack by two brigades on the Pylone position, which was approximately 4.5 kilometers inside the German lines. Each brigade was to be led by one regiment. At the point where the two converging wings met, the following regiments of each brigade were to pass through the lead regiments and press forward to the second objective, St. Etienne.

The 3d Brigade, led by the 9th Infantry Regiment, was on the right. Its mission was to take Schliesser Hill. The French attack did not progress as rapidly as that of the US 2d Division, and the right flank of the US 3d Brigade became vulnerable to German fire at Medeah Farm.

The farm was strongly fortified and held garrisoned by the 1st Battalion, 235th Reserve Infantry Regiment. In order to protect his flank, the commander of the 9th Infantry Regiment, Colonel G.W. Stuart, detached his 2d Battalion to assault the strongpoint. With support from three French light tanks, this unit seized the position before 0900.

Significance: Seizure of Medeah Farm, a major strongpoint in the depth of the German defensive position, permitted the advancing US 2d Division to continue its advance.

Sources: M.19; M.20; N.3; N.14; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Essen Hook, Meuse Argonne (Blanc Mont), 3 October 1918

On the left of the US 4th Marine Brigade sector, in the US 2d Division's Blanc Mont operation, was a German strongpoint the Allies called the Essen Hook. The Germans called it Hellenen Hill. The position was in the sector of the French 21st Division, on the left of the 2d Division. The Germans defending the position were the 2d Company of the 2d Cologne Landsturm Battalion.

At dawn on 3 October the French advanced against the position but progressed less than 200 yards. The troops in the Essen Hook pinned them down with heavy machine gun fire. As the Marines advanced on the French right, heavy fire from the Essen Hook struck their left flank. A company of Marines supported by three French light tanks and artillery was detached to take the Essen Hook.

The Marine assault against the flank of the Essen Hook position was a complete surprise to the defenders, whose attention was occupied largely by the French units to their front. The assault was over in a few minutes, and the Marines handed the captured position over to the French.

Significance: The surprise attack on the flank of the enemy position removed an obstacle to the advance of the US 4th Marine Brigade.

Sources: M.19; M.20; N.3; N.14; N.15.

WORLD WAR I: SMALL UNIT ENGAGEMENTS

Blanc Mont Ridge, Meuse Argonne (Blanc Mont), 3 October 1918

Dominating the 3.2-kilometer front of the US 2d Division was the ridge of Blanc Mont, an imposing, naturally strong, position that was occupied by a well dug in force of Germans, mostly from the 149th Infantry Regiment. The Blanc Mont Ridge was on the extreme left of the division's sector. This, and the Pylone Hill to the east, was the first objective for the division in its attack on 3 October 1918.

The task of seizing the height was given to the 6th Marine Regiment, which attacked in a column of battalions led by its 2d Battalion. Massive artillery support was provided for the assault, including almost 100 light and medium guns.

The attack was a frontal assault over broken ground against positions defended by troops with numerous heavy machine guns. The 12 French light tanks attached to the 2d Battalion for the operation were particularly helpful in neutralizing enemy machine gun fire.

The 200-foot-high ridge was seized by the Marines by mid-morning and was quickly organized for defense against counterattacks.

Significance: M.19; M.20; N.3; N.14; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Sommeepy Wood, Meuse Argonne, (Blanc Mont) 3 October 1918

Two battalions of the German 235th Reserve Infantry Regiment were deployed in the Sommeepy Wood facing the US 4th Marine Brigade. The Germans were reinforced by a company of pioneers (engineers) from the 51st Reserve Division, the parent unit of the infantry regiment. The mission of these forces was to hold an advanced position along the fringe of the wood. Reduced from the fighting during the latter part of September, the German regiment held a front approximately 3,000 meters wide with fewer than 500 men. Additionally, since it was deployed forward, the regiment was not closely supported on either flank.

The assault of the 4th Marine Brigade began at dawn, 3 October. The impact of almost 3,000 men supported by tanks and artillery was decisive. Once the initial rush on the defending machine gun positions was accomplished, the entire position was overrun, and the remnants of the German units were driven north and east toward Mont Blanc and the advancing 3d US Brigade.

Significance: The assault on the Sommeepy Wood pushed out the German defenders and opened the way to the German main line of resistance along the line Blanc Mont Ridge -- Pylone -- Medeah Farm.

Sources: M.19; M.20; N.3; N.14; N.15.

WORLD WAR I (WESTERN FRONT, 1918)

Bianc Mont, Phase II, 8 October 1918

An attack by the 2d Division (to which a brigade of the 36th Division was now attached) was planned for 8 October. The 141st and 142d Regiments of the 71st Brigade were to make the main effort. A battalion of the 9th Infantry on the right and one of the 6th Marines on the left protected the flanks of the 71st Brigade. Following a heavy artillery preparation, the 71st Brigade, with its support battalions of the 2d Division, moved out and immediately ran into German fire. On the left, the 142d fought its way into St. Etienne, after suffering heavy casualties. Late in the afternoon the German 159th Regiment of the 14th Reserve Division (which moved into the area on the 4th) counterattacked the exposed right flank of the 142d Regiment, forcing it back to Medeah Road. However, the regiment retained its position in St. Etienne, on the left.

Significance: The continuing American pressure in this area contributed to the advance of the French Fourth Army.

Sources: L.29; L.35; N.3; N.11; N.14.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, 4-31 October 1918

After replacing several divisions with veteran divisions from the St. Mihiel operation, Pershing continued the First Army offensive through and to the east of the Argonne Forest. The advance was slow, and the frontal assaults costly. By 12 October Pershing was able to widen his front eastward to include the east bank and Heights of the Meuse. He regrouped his expanded forces into the US First and Second Armies, with the AFF headquarters becoming an army group headquarters. By the end of October the Argonne Forest was cleared, making easier the advance to the Aisne by the French Fourth Army, on the left.

Significance: German reserves were drawn from other fronts, and morale became increasingly low, as the Americans continued their slow advance through the Argonne Forest.

Sources: A.11.2; L.8.8; L.16; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse Argonne, Phase II, Exermont-Montrefagne, 4 October 1918

On the early morning of 4 October 1918 the 18th Infantry Regiment of the US 1st Division attacked as part of a renewed US offensive between the Argonne Forest on the west and the Meuse River on the east. The 18th Infantry was flanked by the 16th and 28th Regiments to the right and left respectively. Moving out behind a rolling barrage, the regiment was supported by light tanks manned by US crews. The 3d Battalion led the assault supported by the 2d Battalion; the 1st Battalion was in brigade reserve. South of the town of Exermont in and around the Montrebeau Woods, the 3d Guard Foot Regiment of the German 5th Guard Division manned defenses opposite the 18th Infantry. Heavily engaged in earlier battles in 1918, the 5th Guard Division was in need of rest and replacements, and its combat effectiveness on 4 October was low.

Under the cover of fog the 18th Infantry advanced quickly to Exermont, which was located at the bottom of a ravine of the same name. From Hill 240 (Montrefagne) on the north side of the ravine the defenders had excellent fields of fire for their machine guns with which they poured heavy fire into the ranks of the 18th Infantry. Under heavy machine gun and artillery fire, the leading elements of the regiment drove up the north side of the ravine and then the south slope of Montrefagne to the summit of the hill. In the mid-afternoon elements of the 150th and 151st Infantry Regiments of the German 37th Infantry Division counterattacked and drove the 18th Infantry troops from the top of Montrefagne. Two more attempts by the regiment to retake the hill-top during the late evening failed. Both times US troops infiltrating through the woods were detected by the Germans and driven back. That night both sides consolidated their positions, and the Germans retained possession of Montrefagne.

Significance: The 18th Regiment's success in taking Exermont relieved pressure on the left flank of the 28th Infantry which in turn captured La Neuville-le-Comte Ferme and eliminated German fire that had harrassed the 26th Infantry on the 1st Division's extreme right. Although the 18th Infantry failed to take Montrefagne, the regiment had penetrated the German defenses around Exermont and was able to prepare for a continuation on the next day.

Sources: M.6; M.7; M.8; M.12; M.13; M.15; N.1; N.2; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Mayache Ravine, 4 October 1918

On the morning of 4 October 1918 the 26th Infantry Regiment on the far right of the US 1st Division attacked with the 28th Infantry Regiment on the left and the US 32d Division on the right. Like the division's other regiments, the 26th Infantry was supported by light tanks and moved out behind a rolling barrage with an assault battalion (the 1st) in the lead, followed by a support battalion (the 2d). The 3d Battalion, constituting one half of the divisional reserve, was located behind the support battalion. Under cover of a dense fog the regiment advanced north around and through the Mayache Ravine toward the section of the Exermont Ravine south of Hill 200. German artillery and machine gun fire were intense from the start and, by the time the 2d Battalion passed through the 1st Battalion and took the lead, the regiment had outdistanced 32d Division elements on its right and was hit by flanking machine gun fire from that direction. As the regiment's leading elements approached the Exermont Ravine, fighting became particularly intense. Intense machine gun fire from both flanks and from dominating terrain to the north stopped the regiment's attack. At the end of the day, after heavy fighting and the capture of La Neuville le Comte Ferme by the 28th Infantry, the 26th Infantry was in possession of high ground east of La Neuville Ferme. The regiment's right flank was refused and extended across the Exermont Ravine to cover the ground that the 32d Division had failed to gain.

Significance: On 4 October the 26th Regiment advanced the shortest distance of the 1st Division's four regiments. Intense German machine gun fire from the regiment's right flank, which resulted from the 32d Division's failure to advance, was partly responsible for the regiment's short gains. But the quick reaction and stubborn defense of the 32d Division units opposing the 26th Infantry were also instrumental in stopping the regiment. By the end of 4 October the 26th Infantry was short of its first main objective, Hill 212, while the 28th Infantry and the 1st Brigade on the left were approximately one kilometer ahead of the regiment.

Sources: M.4; M.6; M.8; M.10; M.12; M.14; M.15; N.1; N.2; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, La Neuville le Comte Ferme, 4 October 1918

On the morning of 4 October 1918 the 28th Infantry Regiment of the US 1st Division moved out behind a rolling barrage as part of the 1st Division's attack to penetrate German defenses between Apremont on the west and Tronsol Ferme on the east. The regiment was opposed by elements of the 111th Infantry Regiment of the German 52d Infantry Division, a first-class unit in very good fighting condition. The 28th Infantry was flanked on the left and right by the 1st Division's 16th and 26th Regiments respectively and supported by light tanks manned by US crews. After a swift initial advance under the cover of morning fog, the regiment, with the 3d Battalion in the lead, the 1st Battalion in support, and the 2d Battalion in brigade reserve, came under intense German machine gun and artillery fire. A German strongpoint at La Neuville le Comte Ferme on the north side of the Exermont Ravine proved to be a formidable obstacle, and 28th Infantry troops crossing the ravine were subjected to machine gun fire from this strongpoint. However, units of the German 5th Guard Division to the west of the 111th Regiment were pushed back by the US 16th and 18th Regiments, and the US advance threatened the right flank of the 111th Infantry which was forced to pull back. This withdrawal facilitated the 28th Regiment's successful assault on La Neuville Ferme. At the end of the day the 28th Infantry established liaison with the units on its flanks and consolidated positions north of the Exermont Ravine, along a line Ferme de Beauregard-La Neuville Ferme.

Significance: In the attack of 4 October the 28th Infantry did not take Hill 212, its main objective. However, in taking La Neuville Ferme the regiment helped the 26th Infantry, which had been subjected to intense machine gun fire from that position. Along with the 1st Brigade both regiments penetrated German defenses between Apremont and Tronsol Ferme and opened the way for a continuation of the attack on the next day.

Sources: M.4; M.6; M.8; M.10; M.12; M.14; M.15; N.1; N.2; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Ferme des Granges-Fleville, 4 October 1918

On the early morning of 4 October 1918 the 16th Infantry Regiment of the US 1st Division attacked on the left of the 1st Division, which was participating in a US offensive between the Argonne Forest and the Meuse River. The 16th Infantry was assigned the mission of driving northward over high ground east of the Aire River and across the Exermont Ravine to a line north of the town of Fleville. Supported by US-manned light tanks, the 16th Infantry attacked behind a rolling barrage with the 3d Battalion leading, the 2d Battalion in support, and the 1st Battalion in divisional reserve. Defending opposite the 16th Infantry were the 3d Guard Grenadier Regiment and elements of the 20th Infantry Regiment of the German 5th Guard Division. This division had been heavily engaged in battle earlier in the year and was in dire need of rest and replacements by 4 October.

Under the cover of morning fog the 16th Infantry moved out and quickly penetrated German defenses south of the Exermont Ravine. While tanks provided valuable support for the infantry and neutralized German strongpoints, the regiment's leading elements advanced across the ravine and by early afternoon reached Fleville. However, divisional orders recalled the regiment's advance troops and directed them to take up positions on high ground between Fleville and Exermont Ravine. Here, when the morning fog cleared and visibility improved, German artillery from high ground west of the Aire River shelled the 16th Infantry positions and caused numerous casualties. To the left of the 1st Division, the US 28th Division had made less progress than the 16th Infantry and consequently the 16th Regiment's flank was in the air. Meanwhile, units of the German 37th Infantry Division had been rushed to the 5th Guard Division's sector to strengthen the crumbling front. A counterattack by the 37th Division drove US troops of the 18th Infantry from high ground east of the 16th Regiment and German troops reoccupied Fleville.

At the end of 4 October the 16th Infantry had advanced the furthest of the 1st Division's four infantry regiments and was in position south of Fleville. On the following day the regiment was ordered to participate in the continuation of the 1st Division's attack after the division's other three regiments moved abreast of the 16th Infantry. However, since the other three regiments did not achieve their initial objectives, the 16th Infantry did not attack on 5 October and instead remained in position, subjected to intense German artillery fire from across the Aire River.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Ferme des Granges-Fleville, 4 October 1918 (Continued)

Significance: The 16th Infantry's successful attack was a major factor in the 1st Division's penetration of the German positions in the Argonne Forest.

Sources: M.4; M.6; M.7; M.8; M.9; M.12; M.13; M.15; N.1; N.2; N.12; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Hill 212, 5 October 1918

On the morning of 5 October 1918 the 26th Infantry Regiment of the US 1st Division continued its attack against German defenses north of the Exermont Ravine. The regiment's initial mission was to help advance the right wing of the 1st Division and bring it even with the 16th Regiment which had advanced its line approximately two kilometers ahead of the 26th Infantry in the previous day's attack. Once this objective had been reached the entire division was to drive to a line north of Fleville-Cote de Maldah. The 26th Regiment's final objective was Hill 272, a dominating height two kilometers northwest of the regiment's line on 5 October.

With the 1st Battalion leading, the regiment moved out under the cover of morning fog through positions of the 170th Infantry Regiment of the German 52d Infantry Division, a unit which had been roughly handled in the 4 October attack. 26th Infantry troops infiltrated through gaps in the German line, the result of a confused German troop reorganization on the night of 4/5 October, and pushed to the top of Hill 212 under intense German machine gun and artillery fire. In the early afternoon the 3d Battalion, previously in division reserve, passed through the 1st Battalion and, after a brief artillery preparation, set out towards Hill 272. Moving northwestward between German-occupied woods and with the heights of Hill 272 and a German strongpoint at Ferme d'Arietal ahead, the 3d Battalion was subjected to intense fire from all directions. After taking Ferme d'Arietal the 26th Infantry stopped and consolidated its position. In the meantime, a small detachment from the regiment moved eastward out of the 1st Division's zone to occupy part of Hill 269 in the rear of the German defenses holding up the US 32d Division.

Significance: The 26th Infantry had advanced its line but was unable to seize Hill 272, which the Germans had made the key to their defenses in front of the 1st Division's attack and had occupied strongly. However, the detachment sent to the right of the division's boundary surprised the Germans and took part of Hill 269, a move which facilitated US attacks during subsequent operations.

Sources: M.6; M.8; M.10; M.12; M.14; M.15; N.1; N.2; N.7; N.12; N.13.

WORLD WAR I, (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Bois de Boyon-Montrefagne, 5 October 1918

On the morning of 5 October 1918 troops of the 18th Infantry Regiment of the US 1st Division moved out from positions along the Exermont Ravine towards Hill 240 (Montrefagne), a dominating terrain feature overlooking the center of the 1st Division's line. The initial mission of the 18th Infantry and the 2d Brigade (US 26th and 28th Infantry Regiments) to the right was to move the right and center of the 1st Division's front abreast of the front of the 16th Infantry Regiment. Operating on the far left of the 1st Division, the 16th Infantry had gained the most ground during the previous day's attack. Once the first objective was secured, the entire division was to continue to a line north of Fleville-Cote de Maldah. The right boundary of the 18th Regiment's attack sector ran northwestward across the summit of Montrefagne so the regiment was to be assisted in its attack on the hill by the adjacent right-hand regiment, the 28th Infantry. Defenders opposite the 18th Infantry were the 2d and part of the 3d Battalions of the 150th Infantry Regiment, of the German 37th Infantry Division. This division was in good fighting condition and had been attached to the German LVIII Corps (Group Argonne) on 3 October in anticipation of a US offensive. On 4 October the 150th Regiment's 3d Battalion assisted by elements of the 2d, had driven advance troops of the 18th Infantry from Montrefagne in a counterattack.

Under the cover of dense fog on the morning of 5 October, the 18th Regiment's 3d Battalion led the assault against Montrefagne. To the west of the hill 18th Infantry troops drove through a gap between the 2d and 3d Battalions of the 150th Infantry and began an envelopment around Montrefagne's western slope. To the east of the hill the 28th Infantry executed a similar maneuver while elements of both regiments moved directly up the hill's southern slope in the face of intense German machine gun and artillery fire. During mid-morning three companies of the 3d Battalion, 150th Regiment, were encircled on Montrefagne and forced to fight their way back to German lines. Having aided in securing Montrefagne, the 18th Infantry advanced through woods north of Montrefagne. Attempts to continue the attack to the second objective

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase II, Bois de Boyon-Montrefagne, 5 October 1918 (Continued)

were repulsed in the late morning and afternoon as the Germans moved reinforcements from the 147th Infantry Regiment to hold their line.

Significance: On 5 October the 18th Infantry moved forward to a line nearly even with the 16th Regiment but was unable to continue beyond to its second objective. Nevertheless, the high ground on Montrefagne was taken, and, on 9 October, the regiment renewed its attack.

Sources: M.6; M.7; M.8; M.12; M.13; M.15; N.1; N.2; N.5; N.13.

WORLD WAR I, (WESTERN FRONT, 1918)

Hill 272, Meuse-Argonne, Phase II, 9 October 1918

On 8 October 1918 the US I Corps to the left of the US 1st Division renewed its offensive in the Argonne Forest. To follow up the I Corps's success on 8 October, the US V Corps prepared to attack the next day. As the left flank division of the V Corps, the 1st Division had as its primary mission the protection of the V Corps's left flank, which rested on the Aire River. For the division's initial attack, the 1st Battalion of the 16th Infantry Regiment was inserted between the division's 1st and 2d Infantry Brigades on the right of the 18th Infantry Regiment. In reserve since the beginning of the 1st Division's attack on 4 October, the 1st Battalion, 16th Infantry, was fresh and at full strength. The battalion's initial objective was Hill 272, a steep-sided hill which the Germans had held successfully against several probes by the 1st Division since 5 October. On the morning of 9 October, the 147th Infantry Regiment of the German 37th Infantry Division occupied fortified defenses on the hill and, despite losses since going into action on 5 October, was in good fighting condition.

Under the cover of a dense morning fog, the 1st Battalion, 16th Infantry, moved out behind a rolling barrage. The fog hindered German observation and aided the advance of the battalion to the southern base of Hill 272. From there, however, fighting became particularly intense, marked by hand-to-hand combat and several small German counterattacks. Working around the hill's flanks and up its southern slope, the 1st Battalion cleared the summit of the hill, capturing numerous German prisoners and machine guns. In the confusion of the battle, German troops who were surrounded and still fighting on the hill were hit by their own artillery fire when a German artillery barrage was directed against the hill after its apparent loss.

Significance: By taking Hill 272 the 1st Battalion, 16th Infantry, gained its objective and facilitated the advance of the entire 1st Division. Following the action of 9 October German units opposite the division withdrew to a stronger defensive line in their former reserve positions.

Sources: M.4; M.6; M.7; M.8; M.10; M.12; M.13; M.15; N.2; N.6; N.7; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase III, 1-11 November 1918

Pershing replaced the tired US divisions with fresh ones and continued the offensive. The First Army broke through the remaining German strong points, enabling the French Fourth Army to cross the Aisne River, and raced in the open toward the Meuse River. To the right of the First Army, the Second Army broke through the German line and was driving toward Montmédy on 10 November.

Significance: German resistance collapsed in the face of continued American assaults, which were stopped only by the Armistice.

Sources: A.11.2; L.8.8; L.16; L.42.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase III, Remilly-Aillicourt, 6/7 November 1918

Early in November 1918 the US 1st Division returned to the front lines southeast of Sedan near the Meuse River. After relieving the US 80th Division the 1st Division attacked north from the line la Besace-Besumont on the morning of 6 November and pushed forward against negligible resistance to the Meuse. In the afternoon of 6 November orders were given to the division to change its direction to the northwest and advance to and capture Sedan. This order entailed a night march. The 1st Battalion, 16th Infantry Regiment, with one machine gun company attached, was directed to cover the right flank of the division and to advance along the Meuse River valley. After passing Pont Maugis, the battalion was to join the rest of the 16th Infantry just south of Sedan. By the evening of 6 November most German units between Remilly and Pont Maugis, along the first section of the battalion's march route, had withdrawn across the Meuse, and only small rearguard detachments were on the west side of the river.

After dark on 6 November the 1st Battalion, 16th Infantry, and the rest of the 1st Division assembled and began their march. The 1st Battalion set out from Autrecourt and then passed through Villers devant Mouzon. Reaching Remilly, the battalion encountered considerable machine gun fire from troops of the German 195th Infantry Division, and the advance slowed. Early in the morning of 7 November the battalion reached Aillicourt and, in a brief and violent street fight, cleared the town and continued its advance to Pont Maugis.

Significance: Despite heavy rain, poor road conditions, and German delaying actions, the 1st Battalion, 16th Infantry, marched along the Meuse River valley and linked up with the rest of the 16th Infantry on the morning of 7 November. However, having crossed into the zones of other Allied divisions, the 1st Division was ordered to pull back from the southern approaches to Sedan and did not capture the city.

Sources: M.4; M.6; M.12; M.13; M.18; N.1; N.2; N.13.

WORLD WAR I (WESTERN FRONT, 1918)

Meuse-Argonne, Phase III, Hill 252-Pont Maugis, 7 November 1918

On the night of 6/7 November 1918 the 16th Infantry Regiment of the US 1st Division began a march in two columns along the west bank of the Meuse River toward Sedan. The easternmost column, composed of the 1st Battalion, 16th Infantry, and one machine gun company, encountered German resistance during the night, but by morning elements of the battalion were in contact with the 2d Battalion near the town of Thelonne, about 5.5 kilometers south of Sedan. Near Thelonne the 16th Infantry prepared to attack a German bridgehead on the west bank of the Meuse held by elements of the 14th Reserve Division. By 7 November almost all of the 14th Division's artillery had withdrawn across the Meuse while its infantry units remained on the river's west side to block the southern approaches to Sedan. Company "A" of the 1st Engineer Regiment had been attached to the 16th Infantry and was assigned the mission of occupying the town of Pont Maugis and protecting the right flank of the 16th Regiment's attack. The 16th Regiment's objective was Hill 252, located northwest of Pont Maugis and between Thelonne and Sedan.

On the morning of 7 November the 16th Infantry attacked. Machine gun fire from the vicinity of Noyers, a town north of Thelonne, held up the attack. However, both the troops of the 16th Infantry and Company "A", 1st Engineers, continued to advance through German artillery and machine gun fire and took both of their objectives by mid-afternoon. On the left, the 165th Infantry Regiment of the US 42d Division assisted in the capture of Hill 252. During the advance on the 16th Infantry's objectives, German artillery fire from batteries on the opposite bank of the Meuse had been particularly intense.

Significance: The 16th Infantry Regiment succeeded in taking Hill 252 just south of Sedan. On the night of 7 November the German bridgehead was evacuated, and the 1st Division marched back from its position south of Sedan while troops of other Allied divisions moved into positions near the city.

Sources: M.6; M.12; M.13; M.16; M.18; N.1; N.2; N.13.

1. IDENTIFICATION
War: World War I

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
The Piave, Austria	A 15-22 Jun 1918	Italian Front, 1918	Aus Conrad & Borojevic Groups It Army Group	Archduke Eugene Gen Diez	8	144.0
Megiddo, Palestine	D A 19-20 Sep 1918	Palestine, 1918	Br XXI Corps (+) Tk Eighth Army	Gen Allenby Gen Liman von Sanders	2	24.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: World War I

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise	Air Superiority
The Piave	A D FD	RM RB	MHT DST	ST FT	N Y	-- X	-- substantial	X
Megiddo	A D FD							X

3. STRENGTHS AND COMBAT OUTCOMES

War: World War I		Strength				Air				Battle Casualties				Arty Losses				Aircraft Losses			
Engagement	Personnel Total	Total	Armor	Inf.	NBT	Arty Pieces	Air Sorties	Total	\$/Day	Total	\$/Day	Arty Lost	Pieces Lost	Total	\$/Day	Total	\$/Sorties/Day				
The Piave	A	840,000	0	--	--	7,500	?	150,000	2.2	0	--	70	0.1	?	--	--	--				
	D	784,000	0	--	--	7,043	?	69,079	1.1	0	--	?	--	?	--	--	--				
Megiddo	A	51,170	0	--	--	384	200	1,000	1.0	9	--	?	--	?	--	--	--				
	D	18,250	0	--	--	150	10	4,500	12.3	0	--	?	--	?	--	--	--				

4. INTANGIBLE FACTORS

War: World War I

S. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Technol- ogy	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
The Piave	A	C	C	C	N	N	X	C	N	X	4.0	4
Megiddo	D	A	X	X	O	N	N	C	X	X	35.0	7

6: FACTORS AFFECTING OUTCOME

War: World War I

7. COMBAT FORCES AND RESOLUTION OF CONFLICT

War: World War I

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
The Piave	A F D/O, F	-- -- E (LF)	X X	R, S S B, PS WIL
Megiddo	A D	F D	--	

WORLD WAR I (ITALIAN FRONT, 1918)

The Piave, 15-22 June 1918

The Austrian forces on the Italian Front were divided into two army groups, the Conrad Group and the Borojevic Group, under the overall command of Archduke Eugene. An offensive was planned; the objective of the Conrad Group was Verona; the Borojevic Group's objective was Padua.

On 15 June the Austrians began their offensive with an artillery preparation. The Italians, who had been reinforced after Caporetto by several British and French divisions, delivered a very effective counter-preparation which disrupted the attack of the Austrian infantry. In the battle that followed the Italians had an advantage because the Austrian reserves had to be shuttled across difficult terrain when their services were in demand, while the Italian reserves were easily shifted to sectors where they were needed. Some significant Austrian gains were made, but they were lost subsequently when the Italians counter-attacked.

Significance: Austrian forces which were desperately needed on the Western Front had been sacrificed in an offensive that failed.

Sources: A.7; L.10; L.15; L.35; L.41; L.51.

WORLD WAR I (TURKISH FRONTS, 1918)

Megiddo, 19-20 September 1918

In mid-September 1918, British General Sir Edmund Allenby, commander of the British forces in Palestine, facing the Turkish forces on a line from the Mediterranean coast north of Jaffa to the Jordan Valley, prepared for a surprise attack to break through the Turkish defenses. In a series of preliminary operations and feints, he drew Turkish forces inland, while he concentrated his own near the coast. Thus, achieving numerical superiority and heavier firepower at the point of main effort, Allenby surprised the Turks in the early morning of 19 September with an artillery preparation followed by an attack by the XXI Corps. The British troops made a wide gap in the Turkish line near the coast, and British cavalry raced through it and sped north up the coast. While British aircraft bombed rail junctions and Turkish communications links, the cavalry raced north through the disintegrating Turkish Eighth Army. By early morning of 20 September they reached Megiddo and swung right through Megiddo and across the plain, through Nazareth, and to the Sea of Galilee. The Turkish Seventh Army as well as the Eighth was nearly completely encircled, and Turkish power in Palestine was crushed.

Significance: Through a combination of excellent planning and superior forces, numerically and qualitatively, Allenby in two days had won an overwhelming victory over the Turks and destroyed their presence in Palestine. Turkey began moves to make peace.

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