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

Final Report

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

June 1983

VOLUME III

Part One: Wars of the 17th, 18th, and
19th Centuries
Vol. III: Wars from 1805 through 1900

HISTORICAL EVALUATION AND RESEARCH ORGANIZATION
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ENGAGEMENTS ANALYZED AND DESCRIBED IN VOLUME III

The Revolutionary-Napoleonic Wars, 1791-1815

War of the Third Coalition

Austerlitz 2 Dec 1805

Jena 14 Oct 1806

Auerstadt 14 Oct 1806

Bylau 8 Feb 1807

Friedland 14 Jun 1807

The Peninsular War, 1807-1809

Vimeiro 21 Aug 1808

Corunna 16 Jan 1809

War Against Austria, 1809

Eckmühl 22 Apr 1809

Aspern-Essling 21-22 May 1809

The Raab 14 Jun 1809

Wagram 5-6 Jul 1809

The Peninsular War, 1809-1814

Talavera 28 Jul 1809

Bussaco 27 Sep 1810

Fuentes de Onoro 5 May 1811

The Napoleonic Wars

The Peninsular War, 1809-1814

Albuera 16 May 1811

Salamanca 22 Jul 1812

Vittoria 21 Jun 1813

War with Russia, 1812

Borodino 7 Sep 1812

Leipzig Campaign, 1813

Luetzen 2 May 1813

Bautzen 20-21 May 1813

Dresden 26-27 Aug 1813

Leipzig 16-19 Oct 1813

Hanau 30-31 Oct 1813

Defense of France, 1814

La Rothiere 1 Feb 1814

Laon 9-10 Mar 1814

Arcis-sur-Aube 20-21 Mar 1814

"The Hundred Days," 1815

Ligny 16 Jun 1815

Quatre Bras 16 Jun 1815

Waterloo 18 Jun 1815

The Nineteenth Century

War of 1812

The Thames 5 Oct 1813

Chippewa 5 Jul 1814

Lundy's Lane 25 Jul 1814

New Orleans 8 Jan 1815

Latin American Wars of Independence

Boyaca 7 Aug 1819

Carabobo 25 Jun 1821

Bombona 7 Apr 1822

Pichincha 24 May 1822

Jumin 6 Aug 1824

Ayacucho 9 Dec 1824

War of Texan Independence

San Jacinto 21 Apr 1836

US-Mexican War

Palo Alto 8 May 1846

Resaca de la Palma 9 May 1846

Buena Vista 22-23 Feb 1847

Cerro Gordo 17-18 Apr 1847

Contreras 20 Aug 1847

Churubusco 20 Aug 1847

Molino del Rey 8 Sep 1847

Chapultepec 13 Sep 1847

The Nineteenth Century (Continued)

Crimean War

The Alma 20 Sep 1854

Inkerman 5 Nov 1854

War of Austria with France and Piedmont

Magenta 4 Jun 1859

Solferino 24 Jun 1859

Austro-Prussian ('Seven Weeks') War

Sadowa (Koeniggraetz) 3 Jul 1866

Austro-Italian War, 1866

Second Custozza 24 Jun 1866

The American Civil War

First Bull Run (First Manassas) 21 Jul 1861

Wilson's Creek 10 Aug 1861

Belmont 7 Nov 1861

Mill Springs 19 Jan 1862

Fort Donelson 15 Feb 1862

Pea Ridge 7-8 Mar 1862

Kernstown 23 Mar 1862

Shiloh 6-7 Apr 1862

Front Royal 23 May 1862

First Winchester 25 May 1862

Cross Keys 8 Jun 1862

The Nineteenth Century (Continued)

The American Civil War (Continued)

Port Republic 9 Jun 1862

Seven Pines (Fair Oaks) 31 May-1 Jun 1862

Mechanicsville 26 Jun 1862

Gaines's Mill 27 Jun 1862

Glendale-Frayser's Farm 29-30 Jun 1862

Malvern Hill 1 Jul 1862

Cedar Mountain 9 Aug 1862

Second Bull Run (Second Manassas) 29-30 Aug 1862

South Mountain 14 Sep 1862

Antietam (Sharpsburg) 17 Sep 1862

Corinth 3-4 Oct 1862

Perryville 8 Oct 1862

Fredericksburg 13 Dec 1862

Murfreesboro (Stones River) 31 Dec 1862-3 Jan 1863

Chancellorsville 1-6 May 1863

Champion's Hill 16 May 1863

Brandy Station 9 Jun 1863

Gettysburg 1-3 Jul 1863

Chickamauga 19-20 Sep 1863

Chattanooga 24-25 Nov 1863

The Wilderness 5-6 May 1864

Spotsylvania 8-18 May 1864

New Market 15 May 1864

Cold Harbor 3 Jun 1864

The Nineteenth Century (Continued)

The American Civil War (Continued)

Kennesaw Mountain 27 Jun 1864

Peachtree Creek 20 Jul 1864

Atlanta 22 Jul 1864

Petersburg 15-18 Jun 1864

Globe Tavern 18-21 Aug 1864

Opequon Creek (Third Winchester) 19 Sep 1864

Cedar Creek 19 Oct 1864

Franklin 30 Nov 1864

Nashville 15-16 Dec 1864

Bentonville 19-21 Mar 1865

Dinwiddie Court House and White Oak Road 29-31 Mar 1865

Five Forks 1 Apr 1865

Selma 2 Apr 1865

Sayler's Creek 6 Apr 1865

Franco-Prussian War

Weissenburg 4 Aug 1870

Froeschwiller (Woerth) 6 Aug 1870

Spichern 6 Aug 1870

Mars la Tour 16 Aug 1870

Gravelotte-St. Privat 18 Aug 1870

Sedan 1 Sep 1870

Coulmiers 9 Nov 1870

Orleans 2-4 Dec 1870

Le Mans 11-12 Jan 1871

Belfort 15-17 Jan 1871

THE NINETEENTH CENTURY (Continued)

Zulu War

Isandhlwana 22 Jan 1879

Ulundi 4 Jul 1879

Transvaal Revolt

Majuba Hill 27 Feb 1881

Egypt and the Sudan

Tel el-Kebir 13 Sep 1882

Omdurman 2 Sep 1898

Italo-Ethiopian War, 18. -1896

Adowa 1 Mar 1896

Boer War

Modder River 28 Nov 1899

Magersfontein 11 Dec 1899

Colenso 15 Dec 1899

Spion Kop 24 Jan 1900

Paardeberg 18 Feb 1900

Spanish-American War

San Juan and El Caney 1 Jul 1898

1. IDENTIFICATION
War: The Napoleonic Wars

Engagement	Date(s)	Campaign	Forces	Commanders	Duration, (days)	Width of Front (Km)
Austerlitz, Moravia	A 2 Dec 1805 D	1805	Allied Army Fr Army	Kutuzov Napoleon I	1	13.0
Jena, Prussia	A 14 Oct 1806 D	Jena	Fr Army Pr Army	Napoleon I Hohenlohe	1	9.0
Auerstadt, Prussia	A 14 Oct 1806 D	Jena	Pr Army Fr III Corps	Brunswick Davout	1	6.0
Eylau, E. Prussia	A 8 Feb 1807 D	Poland, 1807	Fr Army Russ Army	Napoleon Bennigsen	1	8.0
Friedland, E. Prussia	A 14 Jun 1807 D	Poland, 1807	Fr Army Russ Army	Napoleon I Bennigsen	1	11.0
Vimeiro, Portugal	A 21 Aug 1808 D	Peninsula, 1808	Fr Army Br-Port Army	Junot Wellesley	1	?
Corunna, Spain	A 16 Jan 1809 D	Peninsula, 1809	Fr Army Br Army	Soult Moore	1	?
Eckmühl, Austria	A 22 Apr 1809 D	Wagram	Aus Army Fr Army	Archduke Charles Napoleon I	1	18.0
Aspern-Essling, Austria	A 21-22 May 1809 D	Wagram	Aus Army Fr Army	Archduke Charles Napoleon I	2	7.5
The Raab, Hungary	A 14 Jun 1809 D	Wagram (Italy)	Fr Army Aus Army	Eugene John	1	?
Wagram, Austria	A 5-6 Jul 1809 D	Wagram	Fr Army Aus Army	Napoleon I Archduke Charles	2	27.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: The Napoleonic Wars

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Austerlitz	A D	HD	RM	DST	WT	Y x	Complete
Jena	A D	HD	RM	DST	FT	N	--
Auerstadt	A D	HD	RM	DST	FT	Y x	--
Eylau	A D	HD	RM	W&C	WT	N	Minor
Friedland	A D	HD	RM	DST	ST	Y x	--
Vimeiro	A D	PD	RM	DST	ST	N	Minor
Corunna	A D	FD	RM	DST	WT	N	--
Eckmuehl	A D	HD	RM/R&M	DST	SP&T	N	--
Aspern-Essling	A D	HD	U/RM	DST	ST	Y x	Minor
The Raab	A D	HD	RM/R&M	DST	ST	N	--
Wagram	A D	HD	RM	DST	ST	N	--

5. STRENGTHS AND COMBAT OUTCOMES

War: The Napoleonic Wars

Engagement	Strength			Battle Casualties			Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day.			
Austerlitz	A 85,400	16,000	278	27,500	32.2	180	64.7	x	--	7.0
	D 73,200	21,960	139	7,000	9.6	0	0	x	12.0	--
Jena	A 96,000	12,500	114	4,000	4.2	0	0	x	--	--
	D 53,000	11,130	120	30,000	56.6	112	93.3	--	--	6.0
Auerstadt	A 63,500	?	230	20,000	31.5	?	?	x	--	--
	D 27,000	?	40	4,000	14.8	?	?	x	--	0
Eylau	A 78,000	20,000	210	18,500	23.7	23	5.0	x	--	--
	D 80,000	18,000	460	28,000	35.0			x	--	0
Friedland	A 80,000	?	110	8,000	10.0	0	0	x	--	8.0
	D 60,000	?	185	25,000	41.7	80	43.2	x	--	--
Vimeiro	A 13,050	1,950	23	1,800	13.7	14	60.8	x	--	0
	D 19,600	240	18	750	3.8	0	0	x	--	--
Corunna	A 20,600	4,500	40	1,600	7.8	4	44.4	x	--	0
	D 14,800	0	9	1,000	6.8			x	--	--
Eckmühl	A 74,000	8,000	?	12,000	16.2	12	?	x	--	1.0
	D 66,000	10,000	?	6,000	9.1	?	?	x	--	--
Aspern-Essling	A 99,000	14,500	264	23,000	11.6	?	?	x	--	0
	D 66,000	11,000	144	21,000	15.9	3	2.1	x	--	2.0
The Raab	A 35,000	6,000	?	4,000	11.4	?	?	x	--	--
	D 37,000	9,000	?	6,211	16.8	2	?	x	--	3.0
Wagram	A 140,000	30,000	554	34,000	12.1	?	?	x	--	--
	D 140,000	15,000	480	45,000	16.1			x	--	--

4. INTANGIBLE FACTORS

War: The Napoleonic 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 Accom.
Austerlitz	A	x	x	x	C	x	x	C	x	x	7.0	2
	D	x	x	x	C	C	N	C	x	x	12.0	10
Jena	A	x	x	x	C	C	N	C	x	x	--	2
	D	x	x	x	C	C	N	C	x	x	--	2
Auerstadt	A	x	x	x	C	C	N	C	N	x	6.0	10
	D	x	x	x	C	C	N	C	x	x	--	2
Eylau	A	x	c	c	C	C	N	x	x	x	0	6
	D	x	x	x	C	C	N	x	x	x	--	6
Friedland	A	x	x	c	C	C	N	x	x	x	8.0	9
	D	x	x	c	C	C	N	x	x	x	--	3
Vimeiro	A	c	c	c	C	C	N	N	N	x	0	4
	D	x	x	c	C	C	N	N	N	x	--	8
Corunna	A	c	c	c	C	C	N	N	N	x	1.0	4
	D	x	x	c	C	C	N	N	N	x	--	7
Eckmühl	A	c	c	c	C	C	x	C	N	x	0	5
	D	x	x	c	C	C	x	C	N	x	--	4
Aspern-Essling	A	c	c	c	C	C	x	C	N	x	2.0	8
	D	x	x	c	C	x	x	C	N	x	--	4
The Raab	A	x	x	c	C	C	N	x	N	x	3.0	7
	D	c	x	c	C	C	N	x	C	x	--	4
Wagram	A	c	x	c	C	C	N	x	C	x	3.0	7
	D	x	x	c	C	C	N	x	C	x	--	4

War: The Napoleonic Wars

Engagement	Austerlitz	Jena	Auerstadt	Eylau	Friedland	Vimeiro	Corunna	Eckmühl	Aspern-Essling	The Raab	Wagram	Depth
Force Quality	A D	x x	N A D	x N	N N	N x	N N	N N	N x	N x	N x	Fortifi- cations
Reserves												Logistics
Maneuver, Mass,												Narrow Front
Surprise												Maneuverer,
Planning												Masses,
Roads												Terrain,
Leader- ship												Prepon- derance
Weather												Force Prepon- derance
Mobility												Superiority
Reserves												Force Quality
Force Prepon- derance												Reserves
Weather												Terrain,
Roads												Leader- ship
Planning												Masses,
Masses,												Terrain,
Surprise												Prepon- derance
Maneuverer,												Masses,
Masses,												Narrow Front
Logistics												Fortifi- cations
Depth												

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: The Napoleonic Wars

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Austerlitz	A D	F, E(LF) D/O, P, E	-- --		X X	R, WDL B, Ps
Jena	A D	F, E(RF) D	-- --		X X	B, Ps A
Auerstadt	A D	F, E(RF) D/O	-- --			R, WDL B, Ps
Bylau	A D	F, E(RF) D/O	-- --		X X	S, WD B, Ps
Friedland	A D	F, E(RF) D	-- --		X X	S, WD B, Ps
Vimeiro	A D	F, E(RF) D	-- --		X X	R, WD
Corunna	A D	A D	-- --		X X	R S, WD
Bcknuehl	A D	F D/O, E(RF)	-- --		X X	R, WD
Aspern-Essling	A D	F, EE D	-- --		X X	S S
The Raab	A D	F, E(RF) D	-- --		X X	B WD
Wagram	A D	E (LF) D/O, E(LF)	P --		X X	P WD

1. IDENTIFICATION
War: The Napoleonic Wars

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Talavera, Spain D	28 Jul 1809	Peninsular, 1809	Fr Army Br, Sp Armies	Joseph Bonaparte Wellesley and Gesta	1	15.0
Bussaco, Portugal D	27 Sep 1810	Peninsular, 1810	Fr Army of Portugal Br, Port Armies	Massena Wellington	1	12.0
Fuentes de Onoro, Spain D	5 May 1811	Peninsular, 1811	Fr Army Br, Port Armies	Massena Wellington	1	12.0
Albuera, Spain D	16 May 1811	Peninsular, 1811	Fr Army Br, Port, Sp Armies	Soult Beresford	1	10.0
Salamanca, Spain D	22 Jul 1812	Peninsular, 1812	Br Allied Army Fr Army	Wellington Marmot	1	12.0
Vittoria, Spain D	21 Jun 1813	Peninsular, 1813	Br Allied Army Fr Army	Wellington Joseph Bonaparte & Jourdan	1	11.0
Borodino, Russia D	7 Sep 1812	Russia, 1812	Fr Army Russ Army	Napoleon I Kutusov	1	6.0
Luetzen, Saxony D	2 May 1813	Leipzig, 1813	Russ, Pr Armies	Wittgenstein, Blucher	1	8.0
Bautzen, Saxony D	20-21 May 1813	Leipzig, 1813	Fr Army	Napoleon I Blucher	2	19.0
Dresden, Saxony D	26-27 Aug 1813	Leipzig, 1813	Pr, Russ Armies	Napoleon I Wittgenstein, Blucher	2	13.0
			Allied (Aus, Russ, Pr) Army Fr Army	Schwarzenberg Napoleon I		

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: The Napoleonic Wars

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Talavera	A D	PD	RW/RgM	DST	ST	N	--
Bussaco	A D	H/HD	RgB	DST	FT	N	--
Fuentes de Oñoro	A D	PD	U/RM	DST	SpT	N	--
Albuera	A D	HD	RW	DST/WHT	SpT	Y	X
Salamanca	A D	HD	RW	DST	ST	N	--
Vittoria	A D	HD	RW	DST	ST	N	--
Borodino	A D	H/HD	RW	DST	FT	N	--
Luetzen	A D	HD	RW	DST	SpT	Y	X
Bautzen	A D	H/HD	RW	WLT	SpT	N	--
Dresden	A D	H/HD	RW	DST	ST	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: The Napoleonic Wars

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Talavera	A 46,000 D 54,550	8,500 8,950	80 60	7,300 6,700	15.9 12.3	7	8.8	x	0 --
Bussaco	A 65,900 D 51,910	8,400 210	114 60	4,500 1,300	6.8 2.5	?	--	x	0 --
Fuentes de Oñoro	A 48,260 D 37,360	4,660 1,870	38 48	2,700 1,800	5.6 4.8	?	--	x	0 --
Albuera	A 23,000 D 30,000	4,000 3,700	?	8,000 7,500	34.8 25.0	1	?	x	0 --
Salamanca	A 46,000 D 42,000	6,000 4,000	60 78	6,000 13,000	13.0 31.0	0 20	-- 25.6	x	1.0 --
Vittoria	A 79,062 D 68,024	8,317 10,002	90 143	5,148 7,000	6.5 10.3	0 143	-- 100.0	x	2.0 --
Borodino	A 120,000 D 120,000	28,000 18,000	587 640	28,000 40,000	23.3 33.3	13 40	2.2 6.3	x	2.0 --
Luetzen	A 93,000 D 120,000	25,000 7,500	500 250	18,000 22,000	19.4 18.3	?	--	x	0 --
Bautzen	A 115,000 D 97,000	15,000 26,000	300 450	25,000 20,000	10.9 10.3	?	--	x	5.0 --
Dresden	A 148,000 D 70,000	20,000 10,000	400 250	40,000 10,000	13.5 7.1	40	5.0	--	5.0

4. INTANGIBLE FACTORS

War: The Napoleonic Wars

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.
Talavera	A C D	x	C	C	N	N	C	N	x	x	0	5
Bussaco	A C D	x	C	C	N	x	C	x	x	x	0	4
Fuentes de Onoro	A C D	x	C	x	N	N	C	N	x	x	0	6
Albuera	A C D	C	C	C	N	x	C	x	x	x	0	5
Salamanca	A C D	x	C	C	N	N	C	x	x	x	1.0	6
Vittoria	A D	x	x	C	C	N	C	x	x	x	2.0	7
Borodino	A D	x	x	x	C	N	N	C	x	x	0	3
Luetzen	A C D	A C	x	x	C	N	N	C	N	x	2.0	8
Bautzen	A C D	x	x	x	C	N	N	C	x	x	0	3
Dresden	A C D	x	x	x	C	N	N	C	N	x	5.0	6

War: The Napoleonic Wars

Engagement	Talavera	Bussaco	Fuentes de Onoro	Albuera	Salamanca	Vittoria	Borodino	Luetzen	Bautzen	Dresden	Depth
Quality	A D	A D	A D	A D	A D	A D	A D	A D	A D	A D	N
Services	N	N	X	N	N	N	N	N	N	N	X
Mobility	N	X	N	N	N	N	N	N	N	N	N
Superiority	N	N	N	N	N	N	N	N	N	N	N
Force Prepon- derance	N	N	N	N	N	N	N	N	N	N	N
Weather	N	N	N	N	N	N	N	N	N	N	N
Terrain, Roads	N	N	X	N	N	N	N	N	N	N	N
Leader- ship	X	X	X	X	X	X	X	X	X	X	X
Planning	N	N	N	N	N	N	N	N	N	N	N
Surprise	N	N	N	X	N	N	N	X	N	N	N
Mess, Nerves	N	N	N	N	N	N	N	X	N	N	N
Network Front	N	N	N	N	N	N	N	N	N	N	N
Portefeuille- cations	N	N	N	N	N	N	N	N	N	N	X

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: The Napoleonic Wars

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Talavera	A D	F, E(RF) D	--	--	X X	R, WD --
Bussaco	A D	F D	--	--	X X	R, S S, WD
Puentes de Oca	A D	F, E(LF) D/O, F	--	--	X X	R, S S
Albuera	A D	E(RF) D	F	--	X X	P, R, WD
Salamanca	A D	F D/O	--	--	X X	B, Ps R, WDL
Vittoria	A D	F, E(LF) D	--	--	X X	B, Ps WDL
Borodino	A D	F D/O	E(LF)	--	X X	P WD
Luetzen	A D	F D/O, P	--	--	X X	R, WD P
Bautzen	A D	F, E(RR) D	--	--	X X	P WD
Dresden	A D	F D/O, EE	--	--	X X	R, WD P

1. IDENTIFICATION
War: The Napoleonic Wars (Continued)

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Leipzig, Saxony	A 16-19 Oct 1813 D	Leipzig, 1813	Allied (Aus, Russ, Pr, Sw) Army Pr Army	Napoleon I	4	30.0
Hanau, Hesse	A 30-31 Oct 1813 D	Leipzig, 1813	Fr Army Bav Army	Napoleon I Wrede	2	12.0
La Rothiere, France	A 1 Feb 1814 D	Defense of France	Allied Army of Silesia Fr Army	" Blucher Napoleon I	1	13.0
Laon, France	A 9-10 Mar 1814 D	Defense of France	Fr Army Allied Army of Silesia	Napoleon I Blucher	2	13.0
Arcis-sur-Aube, France	A 20 Mar 1814 D	Defense of France	Allied Army of Bohemia Fr Army	Schwarzenberg Napoleon I	1	13.0
Ligny, Belgium	A 16 Jun 1815 D	"The Hundred Days"	Fr Army of No. (elms) Pr Army (elms)	Napoleon I Blucher	1	12.0
Quatre Bras, Belgium	A 16 Jun 1815 D	"The Hundred Days"	Fr Army of No. (elms) Br-Du Army (elms)	Ney Wellington	1	4.0
Waterloo, Belgium	A 18 Jun 1815 D	"The Hundred Days"	Fr Army of No. (elms) Allied (Br, Du, Pr) Armies	Napoleon I Wellington and Blucher	1	9.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: The Napoleonic Wars

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Leipzig	A	RM	ST	FT	Y	X	Minor
	D	HD				--	--
Hanau	A	HD	ST	FT	N	--	
	D						
La Rothiere	A	RM	WHT	WT	Y	X	Minor
	D	H/PD					
Laon	A	HD	ST	SPR		X	Complete
	D						
Arcis-sur-Aube	A	RM	ST	SPR	Y	X	Substantial
	D	HD					
Ligny	A	HD	MLT	ST	N	--	--
	D						
Quatre Bras	A	HD	MLT	ST	N	--	--
	D						
Waterloo	A	H/PD	MLT/ST	Y	--	X	Substantial
	D						

3. STRENGTHS AND COMBAT OUTCOMES

War: The Napoleonic Wars

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Leipzig	A 310,000	60,000	1,384	65,000	5.0	?	--	x	3.0
	D 150,000	30,000	717	60,000	9.1	325	11.3		--
Hanau	A 60,000	12,000	140	5,000	4.1	5	1.8	x	2.0
	D 40,000	7,000	138	15,000	12.5	?	--		--
La Rothiere	A 110,000	?	100	6,000	5.5	?	--	x	1.0
	D 40,000	?	70	6,000	15.0	50	71.4		--
Laon	A 47,600	?	100	6,000	6.3	?	--	x	0
	D 85,000	?	150	4,000	2.4	?	--		--
Arcis-sur-Aube	A 80,000	?	150	3,000	3.8	?	--	x	1.0
	D 28,000	?	40	5,000	17.9	?	--		--
Ligny	A 67,567	13,737	236	12,000	17.8	0	--	x	1.0
	D 82,895	8,630	216	18,000	21.7	21	9.7		--
Quatre Bras	A 26,741	6,106	72	4,500	16.8	0	--	x	0
	D 33,765	2,500	68	4,500	13.3	0	--		--
Waterloo	A 68,265	15,489	266	25,000	36.6	220	82.7	x	2.0
	D 137,547	23,880	196	22,500	16.4	0	--		

4. INTANGIBLE FACTORS

Napoleonic 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 Accomp.
Leipzig	A N D	N X	C	X	N	X	N	C	X	X	3.0	7
Hanau	A N D	X	C	X	N	X	N	C	X	X	2.0	5
La Rothiere	A C D	X	X	X	X	X	X	C	X	--	7	
Laon	A C D	C	X	N	X	X	X	C	N	X	1.0	3
Arcis-sur- Aube	A C D	C	X	X	N	X	X	C	X	X	0	8
Ligny	A X D	X	X	X	N	N	X	N	C	X	--	7
Quatre Bras	A C D	C	X	X	N	N	N	C	X	X	1.0	4
Waterloo	A C D	C	C	C	N	N	N	C	X	X	0	6
					O	0	C	N	C	X	2.0	3
												8

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: The Napoleonic Wars

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution	
	A	D	F	D/O, P	--	X	P
Leipzig	A	D	F	D/O, P	--	X	B, Ps WD
Hanau	A	D	F, E(LF)	D	--	X	P WD
La Rothiere	A	D	F	D/O	--	X	P WD
Laon	A	D	F	D/O, F	--	X	P, R, WD
Arcis-sur-Aube	A	D	F	D/O, F	--	X	P, WD
Ligny	A	D	F	D	--	X	P, Ps WD
Quatre Bras	A	D	F	D	--	X	R, S S, WD
Waterloo	A	D	F	D/O, F, E(RF)	--	X	R, WDL P, Ps

THE NAPOLEONIC WARS: WAR OF THE THIRD COALITION, 1805-1807

Austerlitz, 2 December 1805

In an effort to interdict the French Grand Army's line of communications to Vienna, the commanders of the Allied armies of Russia and Austria moved south from Olmütz toward Austerlitz. The two emperors (Alexander I and Francis II) expected to envelop the French right flank. This is exactly what the French emperor, Napoleon, wanted of his adversaries. The Grand Army of France (c. 73,200 men) was 3.2 kilometers west of Austerlitz; Napoleon had deliberately extended his right wing, consisting of one division, in order to invite an attack on it. The Allied staff, under Kutuzov, determined to exploit this apparent vulnerability by massing on their own left and crushing the French right, although this would unfortunately weaken their center, inviting a counterattack there. This was precisely what Napoleon planned.

At dawn on 2 December the attack by better than 59,000 men began on the French right. The French were forced back from the village of Zokolnitz; a counterattack by Marshal Louis Davout regained the village at 0845, only to lose it again by 0900. By this time Telnitz also was under Allied control. Large numbers of allied soldiers continued to move toward their left flank and drive in the French right. Then Napoleon ordered Marshal Nicolas Soult's IV Corps to storm Pratzen Heights at the center of the Allied front, thereby splitting the Allied front. Soult then encircled the Allied left and rolled it up. By early afternoon Soult and Davout had driven the Allies from the field. Meanwhile on the left Marshal Lannes had attacked Prince Peter Bagration's forces on the Brunn-Olmütz road. Bagration offered fierce resistance until Marshal J.P. Bernadotte's I Corps enveloped him from the south. By nightfall the Allied Army had been decisively defeated and driven from the field.

Significance: Napoleon's victory at Austerlitz is a brilliant example of defensive surprise; it likewise serves as an excellent example of counter-attack to achieve tactical and strategic defensive objectives. Napoleon's plan and execution are cogent examples of the application of the principles of concentration and economy of force. The battle of Austerlitz marks the crowning effort of the campaign; because of it Austria made peace, and the collapse of the Third Coalition became inevitable.

Sources: D.4; D.9.

THE NAPOLEONIC WARS: WAR OF THE THIRD COALITION, 1805-1807

Jena, 14 October 1806

Advancing rapidly into Prussia from southern Germany, by 12 October 1806 Napoleon's Grand Army was closer to Berlin than the Prussian-Saxon field army commanded by Karl Wilhelm Ferdinand, the Duke of Brunswick. Sending Davout and Bernadotte with their combined corps west from Naumburg to cut the Prussian line of communications, Napoleon, with about 100,000 men, prepared to attack the main Prussian force at Jena. Actually the Duke of Brunswick had taken 63,000 men northeast from Weimar toward Auerstadt, leaving Prince Friedrich Hohenlohe and 53,000 between Weimar and Jena to cover Brunswick's move and, as it happened, to meet Napoleon's attack.

At 0600 on 14 October French marshal Jean Lannes, having crossed the Saale River, struck the center of the 150 mile Prussian front with two divisions. On his left Marshal Pierre F.C. Augereau moved out to envelop the Prussian right flank. On the right Marshal Nicholas Soult attacked the Prussian left. Lannes's attack initially met with fierce resistance, until leading elements of Soult's force penetrated far enough to ease the pressure on the French center. Augereau made good progress on the French left. By 1300 despite determined counterattacks, Napoleon's main force was across the Saale, and he ordered a general advance. Overwhelmed by the force of the French attack, the Prussian resistance collapsed.

Significance: Together with the defeat at Auerstadt the same day, Jena brought about the collapse of Prussian resistance.

Sources: A. 7; D.4; D.6.

THE NAPOLEONIC WARS: WAR OF THE THIRD COALITION, 1805-1807

Auerstadt, 14 October 1806

While Napoleon was crushing Hohenlohe's force at Jena, Marshal Davout, on orders from Napoleon, moved most of his French II Corps to an area north of the village of Hassenhausen, on the Prussian line of communications, where he threatened the left flank of the Duke of Brunswick's Army. As expected, the Prussians attacked, concentrating against the French right wing, which repulsed the attackers. A single regiment Davout had stationed on his left, south of Hassenhausen, however, was routed. Davout thereupon moved two regiments from his reserve to bolster the threatened flank. But the Prussians failed to exploit their opportunity and continued to assault the strong French right wing. Brunswick was mortally wounded, and the Prussian king, Frederick William III, assumed command. When reinforcements arrived in late morning, he unwisely divided them across his front. Davout, on the other hand, used his reinforcements to strengthen his left wing, which, while his right wing held, was able to overwhelm the Prussian right. Three French divisions pushed forward and drove the Prussians toward Auerstadt. By early afternoon, after more than six hours of fighting, the French had routed the Prussian army.

Significance: The twin battles of Jena and Auerstadt resulted in the destruction of the bulk of the Prussian army; the remnants of that army surrendered to the French in late November. Also, Auerstadt showed the effectiveness of the French system of organization, in which corps-sized forces of all arms -- essentially small armies -- were capable of conducting operations unassisted for significant periods of time and achieving significant results.

Sources: A.7; D.4, D.5.

THE NAPOLEONIC WARS: WAR OF THE THIRD COALITION , 1805-1807

Eylau, 8 February 1807

While Napoleon was in Warsaw and his army was in winter quarters in northern Poland and east Prussia, the Russian general Bennigsen launched a winter offensive (January 1807). Napoleon reacted quickly; his rapid concentration and advance soon menaced Bennigsen's lines of communication. The Russians hurriedly retreated, but Napoleon caught up with them at Eylau on 7 February. The next morning Napoleon attacked with only a part of his force in hand. He launched Marshal Soult's IV Corps in an assault of the Russian front, intended to hold the Russians until the expected arrival of Marshals Ney and Davout with their corps at noon. Each corps would then envelop a Russian flank. Then Augereau's corps, supported by Murat's cavalry, would be committed in an assault on the Russian front. Unfortunately Soult's corps was driven back toward Eylau in a snowstorm; this forced Napoleon to commit Augereau's corps too soon. Because of the blinding snow Augereau's attack hit a strong Russian position instead of the flank and he was repulsed, suffering heavy casualties in the process. Napoleon was forced to employ Murat's cavalry to stave off the Russian onslaught in Augereau's sector. Davout arrived and turned the Russian left, but he, in turn, was checked by newly-arrived C. Anton Wilhelm Lestocq's Prussian corps. Marshal Ney's arrival on the Russian right enabled the French to push the Russians back on that flank, but it was not enough to break the stalemate. Bennigsen withdrew that night.

Significance: Although Napoleon had succeeded in thwarting the Russian winter offensive, Eylau was a setback. Not only was he unable to score a decisive victory in this engagement, but the inconclusive outcome had adverse political repercussions as well. His adversaries looked upon it as a sign that France was not invincible.

Sources: A.7; D.4; D.6.

THE NAPOLEONIC WARS: WAR OF THE THIRD COALITION

Friedland, 14 June 1807

Seeking to gain the strategic initiative, Russian General Bennigsen launched an offensive on 5 June 1807. Napoleon, having planned to begin his own offensive for 10 June, moved quickly. He met and repulsed the Russians, who retreated north. Moving by parallel roads, Napoleon placed the bulk of his army between Bennigsen at Friedland and Lestocq at Königsberg on 13 June. The next morning Napoleon sent Lannes, with 17,000 men, to pin Bennigsen down while the remainder of the French army concentrated to the west. The Russians crossed the Alle River and attacked Lannes with a force of at least 45,000 men. Lannes' delaying action halted the Russians after an advance of nearly five kilometers. Napoleon, taking personal command of the battle as his concentrations progressed, launched his main attack at 1700. Within two hours the Russians' left flank had disintegrated, and they were driven back into Friedland. Their resistance stiffened, but by 2000 Napoleon had driven them across the river in great disorder.

Significance: After Friedland Napoleon cut the line of communication of the remainder of the Russian army by occupying Königsburg. On 19 June the Russians asked for a truce, and in early July The Treaty of Tilsit was signed, bringing an end to what remained of the Third Coalition.

Sources: A.7; D.4; D.6.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1807-1809

Vimiero, 21 August 1808

Since the rapid capture of Lisbon in November 1807, French forces under Marshal Andoche Junot had gradually extended control over most of Portugal. On 1 August 1808, battalions of British infantry commanded by Lieutenant General Sir Arthur Wellesley waded ashore in Portugal at Mondego Bay. Shiploads of British reinforcements continued to arrive, while Wellesley's force covered the landing area located at the mouth of the Maceira River.

With 10,000 infantry and almost 2,000 cavalry, Junot approached the well-prepared 16,300 British and 2,000 Portuguese troops, drawn up on Vimiero Hill. The French had 23 guns to the British 18. The French attempted to turn the Allied left. Failing in that, the French infantry made a series of frontal attacks by columns along the entire Allied line, all of which were repulsed. By dusk, the battle was over, with the French losing about 1,800 men and 14 guns while the British suffered 720 casualties.

Significance: Junot failed to drive the British out of Portugal. At the end of Aug^{ust} he was himself forced to leave.

Sources: D.22.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1807-1809

Corunna, 16 January 1809

In reaction to a series of French military disasters on the Peninsula, Napoleon crossed the Pyrenees in November 1808 at the head of 100,000 veterans of the campaigns in Germany. In a matter of weeks, he administered a series of defeats to the Spanish forces and occupied Madrid on 4 December.

A small British army under Sir John Moore advanced from Portugal to Salamanca to support the Spanish. Ignorant at first of the enormity of the defeats Napoleon had inflicted on the Spanish armies, Moore only gradually realized that there were no Spanish armies left to cooperate with. Left with little choice, he turned his army around and left Salamanca on 11 December, bound for Valladolid.

Followed closely by French forces, Moore's army marched west, moving toward the port of Corunna. Napoleon, called home by political events, turned over command of the French army in the Peninsula to Marshal Nicholas Soult, who continued to pursue the British.

Moore's army arrived in the vicinity of Corunna on 10 January 1809 and, while part of his force manned the fortifications, the rest began to embark on ships. Soult's army, pressing forward, attacked the British in front of the town on 16 January. With approximately equal numbers of infantry on each side, and a French superiority in cavalry, the two armies fought for most of the day. Soult attacked frontally with his infantry, leaving his cavalry mostly out of the action as the ground was not suited for horse. By dusk, the armies' positions were unchanged. The attack was not renewed. Moore was killed in the action.

Significance: Having repulsed the French attack, the British were able to withdraw their army intact.

Sources: D.17; D.22.

THE NAPOLEONIC WARS: THE WAR AGAINST AUSTRIA, 1809

Eckmühl, 22 April 1809

At Abensberg on 19-20 April Napoleon had forced the Austrian army to divide, the left wing driven back toward Landeshut, and the right toward Ratisbon. While the bulk of Napoleon's army was fighting at Landeshut the next day, Marshal Louis Davout, with 36,000 men, was keeping pressure on the Austrian right wing. On 22 April, near Eckmühl, Archduke Charles, commanding the Austrian forces, attacked Davout with more than twice as many men, in an effort to cut Napoleon's line of communication. Davout held out until the sound of gunfire from the south announced Napoleon's arrival. Davout then counterattacked and succeeded in holding the Austrians until Napoleon and his army arrived on Davout's right and enveloped the Austrian left. By midafternoon the Austrian left had been crushed, and the Austrian commander ordered an immediate retreat to Ratisbon.

Significance: Although the French troops were too exhausted to pursue, and Charles was able to escape, Napoleon and Davout had won a decisive victory.

Sources: A. 7; D. 4.

THE NAPOLEONIC WARS: THE WAR AGAINST AUSTRIA, 1809

Aspern-Essling, 21-22 May 1809

Following Napoleon's occupation of Vienna, Archduke Charles concentrated his force on the north bank of the Danube River. Napoleon, on the south bank, had his engineers construct a bridge on 20 May and started moving troops to the island of Lobau and then to the north bank between Aspern and Essling. The next afternoon Charles attacked the bridgehead. The French were surprised and outnumbered, but they drove off numerous Austrian attacks and managed to hold the two villages. The battle broke off, and during the night Napoleon sent reinforcements and supplies across the bridge. The Austrians attacked again at 0500 on 22 May, and at 0700 the French counterattacked. On the left the French drove the Austrians back, and in the center the French II Corps broke through the Austrian front. Just when victory seemed imminent, however, Archduke Charles led a counterattack that brought the French attack to a halt. During the night Napoleon withdrew to the south bank.

Significance: This was Napoleon's first defeat, putting an end to the myth of his invincibility. Austrian propaganda magnified it, and anti-French resistance in Germany, Prussia, and Italy increased.

Sources: A. 7; D.4.

THE NAPOLEONIC WARS: THE WAR AGAINST AUSTRIA, 1809

The Raab, 14 June 1809

The Battle of the Raab was fought on 14 June 1809 by a French army under Eugene de Beauharnais of 35,000 men and an Austrian army under the Archduke John of 37,000 men.

Advancing from the Adige River, the French were attempting to march on Vienna and join the main army under Napoleon. Archduke John's force was attempting to stop or at least delay the move on the Austrian capital. Two minor actions at Kismeyger and Szabadhegy between French advance guard troops and the Austrian rearguard resulted in driving the Austrians farther north, and at a more rapid pace than John expected.

Upon hearing of the check received by Napoleon at the battle of Aspern-Essling on 21/22 May, John resolved to make a stand at the town of Raab, near Graz. Much of his infantry and a portion of his cavalry were Hungarian "Insurrection" troops, of little value in a pitched battle. On the right and in the center of the Austrian line were two villages, which were converted into strongpoints. A stream on the Austrian left anchored that flank. The whole position was situated on a low ridge.

The French advantage lay in the quality of their troops, all regulars and mostly veteran compared to the Hungarian militia the Austrians were forced to employ. Eugene employed the majority of his cavalry on his right, where the ground was better for maneuver. At 1130 hours, the French cavalry drove the Austrian outpost back into their main line in preparation for the main attack which began at 1400 hours. The infantry assaulted the position frontally while the cavalry swept around the Austrian left, threatening the line of retreat. The cavalry broke through first, routing the militia cavalry and overwhelming the regulars. By 1700, the Austrians were finished and started to withdraw under cover of the regular infantry, which was still in good order. By nightfall, the French had sole possession of the field, and the battle was over.

Significance: The Austrians were forced to accelerate their withdrawal. Raab was besieged and quickly taken, and Eugene had time to get his army to Vienna to participate in the battle of Wagram.

Sources: A.2.3; A.13; D.4; D.20.

THE NAPOLEONIC WARS: THE WAR WITH AUSTRIA, 1809

Wagram, 5-6 July 1809

Following his repulse at Aspern-Essling, Napoleon fortified Lobau Island and assembled bridging material.. In early June the French Emperor massed 188,000 troops in the vicinity of Vienna and Lobau. Meanwhile, Napoleon's stepson, Prince Eugene Beauharnais, had pursued the Austrian army of the Archduke John into Hungary and defeated him at Raab, forcing him to retreat to Pressburg, east of Vienna. Napoleon decided he must attack before John could reinforce Charles or before Charles could march east to link with John.

On the night of 4/5 July the bridges were thrown, and the French army established bridgeheads on the north banks of the Danube. Napoleon achieved surprise and successfully placed his army between two adversaries. To prevent them from linking, Napoleon made his main attack against the Austrian eastern or left wing, while launching holding attacks against the Austrian center. Charles tried to turn Napoleon's left so as to cut him off from his Danube bridgehead. The first day of the battle was indecisive. On the second day, Napoleon massed his guns against the Austrian center in the greatest concentration of artillery ever made to that time. He launched a heavy infantry assault in the center, while Marshal Nicolas Davout's III Corps redoubled its efforts to turn the Austrian left. Charles's center was penetrated, and his left flank was thrown back. He withdrew. Although the retreat was made in good order, the defeat was decisive.

Significance: Napoleon's victory had been won at great cost but the defeat of Charles at Wagram sapped the Austrian commander's will to resist. On 10 July he asked for and received an armistice. This led to the treaty of Pressburg, which ended hostilities between France and Austria on Napoleon's terms.

Sources: A. 7; D.4.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1809-1814

Talavera, 28 July 1809

In June of 1809, Sir Arthur Wellesley at the head of the British Peninsular Army invaded Spain. In theory, he was supported by something near 100,000 Spanish irregulars but these Spanish forces were badly divided and proved to be of little help.

Joining with the Spanish General Don Gregorio de la Cuesta, who had 30,000 men under him, Wellesley, with a total of 55,000 men, marched toward Talavera to confront King Joseph Bonaparte and Marshal Claude P. Victor and the French army. When Cuesta failed to attack as planned, the French withdrew, pursued by Cuesta. They returned on 27 July, pursuing Cuesta, and reinforced to a strength of 40,000.

There was some preliminary skirmishing in the afternoon of 27 July. During the night the French attempted an attack on the Allied line, which extended north from the Tagus River and the town of Talavera, with Cuesta's Spanish forces on the right. The attack was repulsed. After dawn the French again assaulted the center of the Allied line, and almost pushed through, but the attack was beaten back. After a brief lull, the third phase of the battle commenced, with heavy and determined French attacks on the Allied center and right. Fighting was intense, but the Allied line held, and the assault was driven off. The fourth and final phase occurred near the end of the day when Marshal Victor tried to outflank the Allied position on the left. Faced with 5,000 fresh British troops, the move failed. This was the end of the battle.

Significance: Although the battle was drawn, it was a strategic British victory. The French retired to Madrid.

Sources: A.7; D.22.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1809-1814

Bussaco, 27 September 1810

By the end of January 1810, there were 325,000 French troops in Spain. Marshal Andre Massena was sent by Napoleon to organize an army of three corps and a cavalry reserve there, in all nearly 70,000 men, for an invasion of Portugal. By April, Massena had this army moving toward Lisbon and the Torres Vedras lines, constructed by the Anglo-Portuguese army under the Duke of Wellington to defend the approaches to Lisbon. Wellington could field fewer than 50,000 men.

Massena overcame the twin fortresses of Ciudad Rodrigo and Almeida on the Spanish-Portuguese border in August. During the following month the Anglo-Portuguese forces withdrew slowly before the French advance. On the morning of 26 September the two armies reached the Bussaco Ridge, a steep, ten mile long hogback stretching north from the banks of the Mondego River. The Coimbra road, the only major east to west road for miles, bisected the ridge. The Anglo-Portuguese army took up defensive positions on the ridge.

French attacks on this position began at 0545 on 27 September 1810. A succession of assaults were made between 0600 and 0900. The French cavalry and artillery could take little part in the battle because of the terrain. After 1100, there was little significant fighting, as Massena realized that there was little he could do to breach the positions. After a day of probing, the French found a path around the Anglo-Portuguese left flank and flanked the position, forcing Wellington's forces back to the lines of Torres Vedras.

Significance: Wellington gained time and a check was administered to the French.

Sources: A. 7; D. 22.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1809-1814

Fuentes de Onoro, 5 May 1811

The battle of Fuentes de Onoro was fought on 5 May 1811 between the Anglo-Portuguese Army commanded by the Duke of Wellington and the French Army of Portugal under Marshal Andre Massena. The French had 48,260 men with 38 guns, while the Allied army consisted of 37,360 men and 48 pieces of artillery.

Marshal Massena was moving to the fortress of Almeida, which was besieged by Wellington's army, in an attempt to relieve the garrison there. Wellington, on hearing of the Massena's approach, marched to a strong position between the French army and Almeida, at the village of Fuentes de Onoro, located near the Spanish-Portuguese border inside Spain. After a probing attack on the village on 3 May, which was easily repulsed Massena launched a full scale attack on 5 May, with 30,000 men and 36 pieces of artillery. The battle lasted the entire day. It ebbed and flowed back and forth, with the Anglo-Portuguese Army in danger of defeat several times. British infantry squares resisted the French cavalry, and British horse drawn artillery charged through the French horsemen. The French finally gave up their attacks and the two armies remained facing each other. Wellington's troops finally prevailed and drove the French from the field. French losses were approximately 2,700 men, and the Allies lost 1,800.

Significance: This was a narrow victory for Wellington. Almeida was abandoned by the French on the night of 10/11 May, when it was apparent that no relief would be coming. Massena was relieved of command and replaced by Marshal Auguste Marmont.

Sources: A.7; A.13; D.17.3.

THE NAPOLEONIC WARS, 1791-1815: THE PENINSULAR WAR, 1809-1814

Albuera, 16 May 1811

British General William Beresford, commanding an Allied army of about 32,000 men, had been besieging Badajoz barely a week when he learned that French Marshal Nicolas Soult, with some 25,000 men, was advancing to relieve the fortress. Beresford marched to meet the French, temporarily raising the siege in order to meet Soult's force some distance away from Badajoz and deny it any possibility of relieving the garrison.

On 15/16 May, Beresford assembled his forces on the flat ground surrounding the town of Albuera, directly astride the major road between Santa Marta and Badajoz, facing east.

Early on the 16th, Soult's army advanced against the town, which was the approximate center of the Allied position and convinced Beresford that the main French attack would be there. Shortly, however, a strong French force of infantry, cavalry, and artillery appeared to the south on the right wing of the Allied army, held by Spanish forces. Surprise was complete. The Spanish commander attempted to pull his line around to face the attack, and Beresford ordered several British battalions to the sector. The Spanish infantry, displaying a steadiness almost unique for them in the Peninsular Campaign, held off the French columns until the British arrived and formed long two-rank lines to maximize their firepower on the advancing French columns. Suddenly a violent storm swept over the battlefield. Hail and rain soaked the powder, and visibility was cut to a minimum. Through the storm, the British infantry failed to see two regiments of French cavalry deployed on the right charge on their flank. The attack was devastating. Within five minutes, three battalions were cut to pieces, losing a total of 80 officers and 1,190 men. The cavalry broke into the Allied rear, causing a great deal of confusion. Finally a reserve brigade stabilized the situation, and the French cavalry withdrew.

After the cavalry charge, the lines drew up and fired at each other for four hours more. By the end of the day, Soult had withdrawn some distance, and the Allied forces were still in possession of the town. The following day, the French retired from the field.

Significance: Marshal Soult's attempt to relieve Badajoz failed, but the Allies paid a heavy price in valuable British infantry.

Sources: A.7; D.22.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1809-1814

Salamanca, 22 July 1812

On 17 June 1812, the Duke of Wellington's Anglo-Portuguese army of 48,000 took Salamanca, with only token resistance from the small French force there. Then Wellington pushed into the foothills north of the city to confront French General Auguste Marmont's 52,000-man army. For over two months the two armies faced each other and made a series of marches and countermarches, as each side tried to gain a tactical advantage.

On 22 July, Wellington finally found the French strung out in march order and struck. The Anglo-Portuguese army was better concentrated than the French. Most of the army attacked three isolated French divisions and drove them back on the main body. One cavalry charge destroyed and routed an entire French division, while a combination of infantry and artillery badly mauled two others.

On the Anglo-Portuguese left, however, a small Portuguese division (2,700 men) attacked 6,400 French while another 6,000 French were in supporting distance. The Portuguese were thrown back with heavy losses. General Clauseel, replacing the wounded Marmont, executed a finely thought out counterattack toward the village of Arapiles, pressing the broken Portuguese battalions back in disorder. Wellington, however, anticipating this, had deployed British reserves behind the Portuguese before the counterattack began. Encountering the steady British line, before too long the French were streaming to the rear in disorder, routed by the volleys from the British infantry.

The French Army of Portugal lost at least 13,000 men at Salamanca, and would have lost considerably more if the pursuit after the battle had been handled efficiently. Allied losses were about 6,000.

Significance: Salamanca opened the way for the march on Madrid, which Wellington's army occupied on 13 August 1812. The French then abandoned Andalusia. The initiative in the Peninsula was now permanently in Wellington's hands.

Sources: A.7; D.17.4; D.22.

THE NAPOLEONIC WARS: THE PENINSULAR WAR, 1809-1814

Vittoria, 21 June 1813

Having spent the winter of 1812-1813 at Ciudad Rodrigo, near the Spanish-Portuguese frontier, reorganizing and reinforcing his army, in the spring the Duke of Wellington took his army into Spain again, crossing the mountains in the north and fording the Elsa River. By the end of May he had forced King Joseph Bonaparte, with approximately 68,000 French troops, actually commanded by Marshal Jourdan, out of Madrid and north of the Ebro River, where the army spread from the river north almost to Vittoria. Wellington, trying to cut off the French retreat route to France, attacked the French on 21 June. Wellington marshalled his forces into three attack columns which struck the French frontally and on their right flank. After some of the bitterest fighting of the Peninsular War, General Picton's 3d Division broke the French center, crumbling all resistance. Ultimately, the French retreat turned into a rout.

Significance: Vittoria ended French rule in Spain. By December of 1813, the Allied army had moved into southern France, pursuing what was left of the French Peninsular armies.

Sources: A.7; D.17.5; D.22.

THE NAPOLEONIC WARS: THE 1812 WAR WITH RUSSIA

Borodino, 7 September 1812

After the failure of Napoleon's third attempt to crush the Russian armies at Smolensk and nearby Valutino, the Russians withdrew to Borodino. There, 96 kilometers west of Moscow, the Russian Army, commanded by Field Marshal Prince Mikhail Kutuzov, took up a strong defensive position. Napoleon, whose political and military reasoning convinced him that he must have a victory before winter, prepared to attack.

Early on 7 September Napoleon launched a number of frontal attacks against the Russian left and center, while engaging the right with holding attacks. Russian counterattacks forced the French back, with both sides suffering heavy casualties. Before 0900 hours Napoleon had committed all of his troops but his Imperial Guard. At 1000 renewed frontal assaults on the Russian center gradually pushed back the Russian line, although intense fire from a strongpoint known as the "Great Redoubt" took a huge toll of the French. But when French victory appeared imminent, reinforcements bolstered the sagging Russian defenses, and counterattacks again drove back the attackers. A 400-gun artillery preparation preceded a mass frontal assault on the Great Redoubt. Although suffering heavy casualties, the French took the formidable stronghold by 1500 hours. The Russians launched one last determined counterattack but failed to drive the French from their hard won positions. A final French attempt to break through the Russian left also failed, but the Russians withdrew to Moscow. The French did not pursue.

Significance: Although a tactical success, Borodino was not the decisive victory that Napoleon sought. Napoleon paid a terrible price in men to open the road to Moscow. Most important, he had not broken the Russian will to resist; hence he was unable to win peace on his terms.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: LEIPZIG CAMPAIGN, 1813

Luetzen, 2 May 1813

In early 1813 Russia, Prussia, Sweden, and Britain formed a new coalition in order to end Napoleon's European hegemony. An Allied army of 100,000 veteran troops was assembled in the Elbe Valley, between Magdeburg and Dresden. Reacting quickly, Napoleon marched a new and inexperienced army from the Rhine to join the remnants of the old Grand Army. On 30 April he crossed the Saale River to move on Leipzig. He planned to penetrate the allied cordon and defeat his enemies in detail. Faulty reconnaissance by his inexperienced cavalry left him unaware that the Russian General A.P. von Wittgenstein was concentrating 73,000 troops on his southern flank. The French advance guard was driving a small allied delaying force to the outskirts of Leipzig when Wittgenstein attacked at 1145 hours on 2 May, surprising Marshal Michel Ney's III Corps, still on the road. Ney counterattacked and a desperate struggle ensued. Napoleon, hearing the sound of artillery as he stood on the battlefield where Gustavus Adolphus had won his great victory in 1632, galloped to the scene. He arrived at 1430 hours and concentrated his army with a great mass of artillery opposite Wittgenstein's center. Leading an overwhelming counterattack himself, Napoleon split the allied lines. Nonetheless, Wittgenstein withdrew in good order.

Significance: The exhaustion of his green troops, and the lack of adequate numbers of cavalry precluded the possibility of a French pursuit. But Napoleon gained the initiative and was able to capture Dresden on 7-8 May.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: LEIPZIG CAMPAIGN, 1813

Bautzen, 20-21 May 1813

After taking Dresden on 7-8 May, Napoleon followed the retreating allies east of the Elbe River. Sending Marshal Michel Ney with nearly half of his army on a wide turning movement north of Dresden, Napoleon pursued Russian General A.P. Wittgenstein with the remainder. Wittgenstein's allied army stood in a formidable position on the east bank of the Spree River. Napoleon launched three full corps and part of a fourth against him across the river, on 20 May, driving the defenders from their positions. Ney's force of four corps came down from the north after dark and was in position to fall on the allied right flank and envelop the rear the following morning. Napoleon intended Ney's flank attack to force Wittgenstein to take men from his center, weakening them, while the envelopment of Wittgenstein's rear would block the allied line of retreat. Then Napoleon would send another corps, previously held in reserve, to break through the allied right center. Although Napoleon's concept was brilliant, Ney stupidly failed to understand it, attacked late, and made no move toward the enemy's rear and his communications. Napoleon, waiting to launch his reserve when Ney sprang the trap, realized too late that Wittgenstein, retreating rapidly, had gotten away safely into Silesia.

Significance: Like Castiglione two decades earlier, faulty execution by subordinates had spoiled Napoleon's brilliantly planned envelopment of his enemy's rear. Again, as at Luetzen, inadequate cavalry deprived Napoleon of any opportunity to exploit his tactical success; this was fortuitous for the Allies, whose morale was low after failing to repulse the French Army in the two-day struggle.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: LEIPZIG CAMPAIGN, 1813

Dresden, 26-27 August 1813

Following a two-month armistice Napoleon positioned the bulk of his army between the Elbe and Oder rivers, preparing to operate against his enemies on interior lines. The Allies, with superior numbers, adopted a strategy of avoiding battle with Napoleon, but attacking his lieutenants whenever possible. The Allied Army of Bohemia under Austrian Prince Karl Schwarzenberg advanced from the south and attacked Dresden, a vital French supply base which was defended by French Marshal Count Gouvion St. Cyr's corps in late August. Napoleon instructed St. Cyr to hold Dresden at all costs until he could concentrate forces and fall on Schwarzenberg's rear. When it appeared that St. Cyr's defense of Dresden would collapse before Napoleon could concentrate, Napoleon was forced to rush to St. Cyr's aid. Napoleon arrived at Dresden with reinforcements on 26 August and at 1730 hours launched counterattacks against both Allied flanks. These succeeded in pushing the Allies back. The next day Napoleon launched a double envelopment at 0600 hours. The attack on the Allied right forced the Allies back five kilometers; the envelopment of the Allied left was a complete success. Schwarzenberg disengaged hurriedly, narrowly escaping encirclement.

Significance: Although Dresden was a brilliant tactical victory for Napoleon, his success there was largely negated because of the failures of his lieutenants in other engagements at Grossbeeren (23 August) and Katzbach (26 August).

Sources: A.7; D.4.

THE NAPOLEONIC WARS: THE LEIPZIG CAMPAIGN, 1813

Leipzig, 16-19 October 1813

Following Napoleon's victory at Dresden his army suffered a number of setbacks. By early October Napoleon's tired and discouraged French army was hemmed in between Dresden and Leipzig, Bavaria defected to the Allies, and the Allies began to close the net. Prussian Marshal G.L. Blucher abandoned his line of communications and crossed the Elbe River north of Leipzig to threaten Napoleon's rear. Austrian Prince Karl Philipp von Schwarzenberg marched north to link with Blucher. Napoleon's former field marshal, Jean Baptiste Bernadotte, now leading an Allied army as King Charles XIV of Sweden, stood idle while French units opposite him joined Napoleon's main army at Leipzig. On 16 October Napoleon's troops began a four-day struggle with the Allied armies. With the French nearly surrounded on 18 October, the Allies launched massive frontal attacks. Napoleon was driven into Leipzig, although his lines remained intact. The Saxon Corps then deserted the French army, ending all possibility of victory. Despite Blucher's repeated efforts, Napoleon was able to keep his line of communications open and make his withdrawal after a frenzied fight inside the city.

Significance: The Allies won a tremendous victory, but Napoleon escaped the trap created by the Allied armies converging on Leipzig. The remnants of the French army withdrew toward the Rhine.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: THE LEIPZIG CAMPAIGN, 1813

Hanau, 30-31 October 1813

After extricating himself and some 100,000 men from Leipzig, Napoleon withdrew toward the Rhine River. Seeking to block his retreat, Prince Karl Philipp von Wrede of Bavaria and a force of 43,000 Bavarians and Austrians marched from the Danube River and took up positions at Hanau, near Frankfurt, to attempt to block the passage across the Kinzig River of what he thought was a single column of the retreating French. Napoleon noticed that Wrede's right wing was on the other side of the river, and so, as he approached, he prepared to attack the Allied left and center. After knocking out the Allies' guns by cleverly using his artillery, he sent his French cavalry to envelop Wrede's cavalry on the Bavarian left. Then the French cavalry wheeled to attack Wrede's center from the flank, inflicting heavy casualties on the Allied troops as they tried to fight their way free.

Significance: Napoleon's victory reopened the road to Frankfurt. The French army was able to continue on, to cross the Rhine, and return to France.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: THE DEFENSE OF FRANCE, 1814

La Rothiere, 1 February 1814

Marshal Blücher sought to gain the town of La Rothiere which was lost as a result of the Battle of Brienne. In a conference of Allied leaders, it was determined that a heavy blow would be launched at Napoleon on 1 February, and Blücher was reinforced to a strength of 110,000 men. Concealed by a blizzard, Blücher's men broke camp on the morning of 1 February at Trannes and marched north towards La Rothiere.

Napoleon did not have adequate information regarding the dispositions of the Allied troops. He was convinced that they were attempting to keep him at La Rothiere while they massed their forces elsewhere. Accordingly, at 1000, the Emperor issued instructions for a movement on Troyes. By midday, however, news reached him of the Allied move from Trannes, indicating an attack. Napoleon decided to hold his ground until the situation became clearer, and stopped the troop movements. The decision to wait put the small French army in deadly peril.

The French defensive position was a strong one. Running from east to west, the left flank was firmly anchored on the village of Morvilliers, and the right on La Rothiere and Dienville. Blücher attacked frontally with a large superiority in numbers. Clinging to the villages and other natural obstacles along the front, the French held the Allies at bay until almost nightfall, when Blücher's troops captured La Rothiere. The French retook the village with the Young Guard, but the Russian Guards drove them out again. The French did not make any further attempt on the town. Casualties were 6,000 men on each side.

Significance: Although losses were about equal, the battle was a tactical victory for the Allies. The morale of the French conscripts suffered and additionally, the French lost 50 guns. The news of the battle shocked the French people, as exemplified by the citizens of Troyes who, shortly after the battle, barricaded their houses against French troops and gave them little assistance.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: THE DEFENSE OF FRANCE, 1814

Laon, 9-10 March 1814

Following the inconclusive engagement at Craonne on 7 March Prussian Marshal Blücher withdrew his army to Laon. There Blücher received reinforcements, giving him nearly 85,000 men. Despite being outnumbered almost three to one, Napoleon resolved to attack. On 9 March he launched a frontal attack against the Prussians, who had taken up a strong defensive position. The French were repulsed. Throughout the remainder of the day Napoleon made several more unsuccessful attacks. Blücher, fearing that Napoleon was baiting a trap for him, did not counterattack until evening. The old Prussian Field Marshal launched a night attack that took the French VI Corps completely by surprise. The troops panicked and fled. Fortunately for Napoleon, Blücher was ill the next day, and his Chief of Staff, August von Gneisenau, failed to press the advantage. This enabled Napoleon to withdraw to Soissons.

Significance: Napoleon's reckless assaults had failed. Not only had he been unable to force Blücher to withdraw, but the heavy losses of men and equipment sapped both the physical and moral strength of his soldiers.

Sources: A.7; D.4.

THE NAPOLEONIC WARS: THE DEFENSE OF FRANCE

Arcis-sur-Aube, 20 March 1814

The battle of Arcis-sur-Aube was fought on 20 March 1814 between the Army of Bohemia (Austro-Russian), with 80,000 men and 150 artillery pieces, and the French army, with 28,000 men and 40 pieces of artillery. The Emperor Napoleon commanded the French, and Austrian Prince Karl Philipp von Schwarzenberg commanded the Allies.

The Army of Bohemia was concentrated between the Seine and Aube rivers, preparing to continue its advance on Paris. In an attempt to break out to the Marne and into the rear of both the Army of Bohemia and the other Allied army operating in France, the Army of Silesia, Napoleon's army marched on Arcis-sur-Aube and the upper Marne River. The village of Arcis-sur-Aube was significant, because of its bridge across the Aube River.

Napoleon's army deployed within striking range of the Army of Bohemia, south of the Aube River, between Plancy and Arcis. With such a decided disadvantage in numbers, it was foolhardy to deploy such a small army so near one so large.

Three Allied corps advanced from Troyes, accompanied by all the allied cavalry. The Allied horse attacked, surprising the French, breaking two French cavalry divisions and thundering into the main positions. The intervention of the cavalry of the Imperial Guard, and later the infantry, was the only thing that staved off disaster. Gradually the situation stabilized, and the Allied forces withdrew three kilometers to their encampments.

Significance: Schwarzenberg proceeded west and defeated the corps of General Auguste Marmont and Marshal Eduard Mortier four days later, eliminating Napoleon's hope of joining forces with them and attacking the Allies. After Marmont surrendered Paris, Napoleon's only course was abdication.

Sources: D.4; D.13.

THE NAPOLEONIC WARS: "THE HUNDRED DAYS"

Ligny, 16 June 1815

The French Army of the North secretly assembled along the Franco-Belgian border during the second week of June 1815. Two Allied Armies, one Prussian and the other Anglo-Dutch, were in Belgium. Napoleon led the French army across the border at Charleroi, interposing between the two Allied armies.

The Prussian commander, Field Marshal Blücher, assembled three of his four corps at Ligny while the Anglo-Dutch army concentrated 25 kilometers to the west. Napoleon took two-thirds of his army and marched to Ligny to attack the Prussians; the remaining third of the French army was ordered to seize the crossroads at Quatre Bras, cutting communications between the Allied armies.

On 16 June Napoleon made a frontal attack against the Prussians at Ligny. He ordered the force marching on Quatre Bras, which was commanded by Marshal Ney, to move on the Prussian right flank and rear after seizing the crossroads. By late afternoon, despite the fact that Ney's force did not appear, Napoleon had driven the Prussian army back. At dusk, Napoleon completed the victory by committing his elite reserve, the Imperial Guard, in an attack against the Prussian center. Darkness and a heavy rain impeded the French pursuit.

Significance: Napoleon succeeded in driving a wedge between the two Allied armies, but darkness, rain, and Ney's inability to carry out his part of the plan denied Napoleon the decisive victory he sought.

Sources: D.4; D.19.

THE NAPOLEONIC WARS: "THE HUNDRED DAYS"

Quatre Bras, 16 June 1815

While Napoleon took two-thirds of his army to confront the Prussians at Ligny, Marshal Ney was instructed to take the remaining third of the army, the left wing, and seize the village of Quatre Bras on the main road linking the positions of the Prussian and English armies.

Ney procrastinated during a critical period when the Anglo-Dutch army had just one reinforced brigade at the crossroads. The French, had they attacked, would have easily driven off this unit. However, during the afternoon the English commander, Wellington, concentrated almost 34,000 men to oppose the French. When the French finally did attack, they were beaten back in a sharp engagement.

A confusion in orders on the French side caused one of Ney's corps, about 20,000 men, to march between Ligny and Quatre Bras, not participating in either action.

Significance: By denying Ney the crossroads Wellington saved the Prussian army defeated at Ligny from destruction.

Sources: D.4; D.19.

THE NAPOLEONIC WARS: "THE HUNDRED DAYS"

Waterloo, 18 June 1815

The French Emperor Napoleon, following his victory over the Prussian army of Field Marshal Gebhard A. Blücher at Ligny (16 June) and Marshal Ney's drawn battle with the Anglo-Dutch army of the Duke of Wellington at Quatre Bras (same day), ordered his right wing, commanded by Marshal Emmanuel de Grouchy, to pursue the Prussians, who were retreating to the northeast, toward Wavre. Napoleon himself, with the remainder of the French army, followed Wellington due north, toward Waterloo.

On the morning of 18 June, following delays caused by bad weather and French procrastination and disorganization, Napoleon confronted Wellington south of Waterloo. The Anglo-Dutch were deployed in a strong position along a low ridge and had converted a chateau and a group of farm buildings in front of their main line into strongpoints. The French could not attack immediately because the ground was wet, which hampered the movement of their artillery and cavalry. A delay of several hours ensued -- a delay which proved fatal because, unbeknownst to either Napoleon or Grouchy, Blücher's Prussian army had rallied and, having slipped Grouchy's inept pursuit, was marching westward from Wavre toward the French right at Waterloo.

At noon, following a tremendous artillery preparation, Napoleon's army attacked the Anglo-Dutch, and by 1600 hours, despite stubborn resistance, the allies had been pushed back all along the line and were nearing exhaustion. At about the same time, however, Blücher's army, arriving piecemeal, began to pressure the French right. Napoleon, surprised, was forced to shift troops from his reserves to hold off the Prussians, and was unable to complete his victory over the Anglo-Dutch. A final French attack, made by the unsupported infantry of the Imperial Guard, was beaten. Wellington, sensing victory, ordered a counterattack. Under tremendous pressure from the Anglo-Dutch and Prussian armies the French army collapsed. The French fled down the Charleroi road, pursued by the Allied cavalry.

Significance: The French defeat at Waterloo brought about the abdication and surrender of Napoleon, who was exiled. The Bourbon monarchy was restored in France, and the Allies concluded a peace with France.

Sources. A.1; A.7; D.4; D.19.

1. IDENTIFICATION
War: War of 1812

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
The Thames, Canada	A 5 Oct 1813 D	Northwestern	US Army Br Army	Harrison Proctor	1	?
Chippewa, Canada	A 5 Jul 1814 D	Northern	Br Army US Army	Riall Brown	1	1.6
Lundy's Lane, Canada	A 25 Jul 1814 D	Northern	US Army Br Army	Brown Drummond	1	4.0
New Orleans, Louisiana	A 8 Jan 1815 D	New Orleans	Br Army US Army	Pakenham Jackson	1	2.1

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: War of 1812

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
The Thames	A D	HD	FW	DST	FT	N	--
Chippewa	A D	HD	RM	DST	ST	N	--
Lundy's Lane	A D	HD	RM	DST	ST	N	--
New Orleans	A D	PD	RM	DST	WT	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: War of 1812

Engagement	Strength			Battle Casualties			Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day	%/Day		
The Thames	A 3,500 D 1,800	?	?	29 668	0.8 37.1	0 ?	--	--	x	?
Chippewa	A 2,100 D 2,650	200 ?	6 4	604 335	28.8 12.6	2 0	--	33.3	x	N --
Lundy's Lane	A 2,000 D 3,000	?	16 9	860 878	43.0 29.3	?	--	22.2	x	N --
New Orleans	A 6,000 D 3,200	?	24 25	2,600 71	43.3 2.2	?	--	--	x	N --

4. INTANGIBLE FACTORS
War: War of 1812

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Mo-men-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
The Thames	A	C	C	C	N	N	C	C	X	X	?	7
	D	O	O	O	N	N	N	N	X	X	--	1
Chippewa	A	C	C	C	N	N	C	N	X	X	--	2
	D	C	C	C	N	N	N	N	X	X	--	6
Lundy's Lane	A	C	C	C	N	N	C	N	X	X	--	3
	D	C	C	C	N	N	N	N	X	X	--	4
New Orleans	A	C	X	C	C	N	N	C	N	X	--	3
												8

6. FACTORS AFFECTING OUTCOME

War: War of 1812

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: War of 1812

Engagement	Main Attack and Scheme of Defense		Secondary Attack	Success	Resolution
	Plan and Maneuver				
The Thames	A D	F D	E(RF) --	X	P, Ps WD
Chippewa	A D	F D/O	-- --	X	R, WD P, Ps
Lundy's Lane	A D	F D	-- --	X	S, WD --
New Orleans	A D	F D	-- --	X	R, WD --

1. IDENTIFICATION
War: Latin American Wars of Independence

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Boyaca, Colombia A D	7 Aug 1819	Boyaca	Patriot Army Sp Army	Bolivar Barreiro	1	1.5
Carabobo, Venezuela A D	25 Jun 1821	Carabobo	Patriot Army Sp Army	Bolivar La Torre	1	3.2
Bombona, Quito A D	7 Apr 1822	Bombona	Patriot Army Sp Army	Bolivar Garcia	1	7.5
Pichincha, Quito A D	24 May 1822	Pichincha	Sp Army Patriot Army	Aymerich Sucre	1	1.0
Junin, Peru A D	6 Aug 1824	Junin	Patriot Army Sp Army	Bolivar Canterac	1	1.4
Ayacucho, Peru A D	9 Dec 1824	Ayacucho	Sp Army Patriot Army	La Serna Sucre	1	4.5
War: War of Texan Independence						
San Jacinto, Texas A D	21 Apr 1836	Texas, 1836	Texan Vol Army Mex Army	Houston Santa Anna	1	?

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Latin American Wars of Independence

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Boyaca	A D	HD	RM	DST	WT	N	--
Carabobo	A D	HD	RM	DST	WT	N	--
Bombona	A D	HD	RGM	DST	FT	N	--
Pichincha	A D	HD	RGM	DST	FT	N	--
Julin	A D	HD	RM	DST	WT	N	--
Ayacucho	A D	HD	RM	DST	ST	N	--

War: War of Texan Independence

San Jacinto	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
	A D	HD	RM/RM	DST	SpT	Y	X

3. STRENGTHS AND COMBAT OUTCOMES

War: Latin American Wars of Independence

Engagement	Strength		Arty. Pieces		Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Total	%/Day	Total	%/Day	Total	%/Day		
Boyaca	A 3,000 D 3,000	?	0 400	3	66 1,800	2.2 60.0	0 3	-- 100.0	x	0.5 --
Carabobo	A 6,400 D 5,180	?	?	?	200 2,908	3.1 56.1	0 ?	-- --	x	2.0 --
Bombon	A 1,800 D 2,200	?	0 ?	2	531 250	29.5 11.4	-- 2	-- 100.0	x	0.5 --
Pichincha	A 2,500 D 2,400	300 400	14 0	14	590 340	23.6 14.2	14 --	100.0 --	x	1.0 --
Junin	A 2,000 D 2,000	2,000 2,000	-- --	--	145 464	7.3 23.2	-- --	-- --	x	0.3 --
Ayacucho	A 9,310 D 5,780	?	?	11	2,500 2,919	26.9 15.9	11 0	100.0 --	x	1.5 --
War: War of Texan Independence										
San Jacinto	A 743 D 1,600	?	0 ?	0	39 1,600	5.2 100.0	0 ?	-- ?	x	?

4. INTANGIBLE FACTORS

War: Latin American Wars of Independence

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.
Boyaca	A D	x C	x C	C C	N N	N N	N N	C C	x x	x x	0.5 2.0	10 10
Carabobo	A D	C C	x C	C C	N C	N C	N N	C C	x x	x x	3 4	3 4
Bombona	A D	C C	C C	C C	C C	N N	N N	C C	x x	x x	0.5 0.5	.8 .8
Pichincha	A D	C C	x x	C C	C C	N N	N N	C C	x x	x x	1.0 0.3	6 10
Julin	A D	C C	x x	C C	C C	N N	N N	C C	x N	x x	9 3	9 3
Ayacucho	A D	D x	x x								1.5 2	10 10

War: War of Texan Independence

San Jacinto	A D	x	x	C	C	N	N	x	C	x	x	?
												9 10

6. FACTORS AFFECTING OUTCOME
War: Latin American Wars of Independence

Engagement	Force Quality	Force Superiority	Resources	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Meneuver, Mass, Narrow front	Logistics	Fortifi-cations	Keph
Boyaca	A D	N A D	N N N	N N N	N N N	N X X	X X N	N N N	N N N	N N N	N N N	N N
Carabobo	A D	N A D	N N N	N N N	N N N	N X X	X X N	N N N	N N N	N N N	N N N	N N
Bombona	A D	N A D	N N N	N N N	N N N	N X X	X X N	N N N	N N N	N N N	N N N	N N
Pichincha	A D	N A D	N N N	N N N	N N N	N X X	X X X	N N N	N N N	N N N	N N N	N N
Julin	A D	N A D	N N N	N N N	N N N	N X X	X X X	N N N	N N N	N N N	N N N	N N
Ayacucho	A D	N A D	N N N	N N N	N N N	N X X	X X X	N N N	N N N	N N N	N N N	N N
San Jacinto	A D	x N	N N N	0 0 0	N N N	x x x	x x x	N N N	N N N	N N N	N N N	N N

War: War of Texan Independence

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: Latin American Wars of Independence

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Boyaca	A F D D	-- E(RF) --	X	B, Ps WDL
Carabobo	A F D D	-- E(RF)	X	B, Ps WDL
Bombona	A F D D	-- E(RF)	X	P WD
Pichincha	A F D D/O, F	-- --	X	R, WDL Ps
Junin	A F D D/O, F	-- --	X	B, Ps R, WD
Ayacucho	A F D D/O, E(LF)	E(LF) --	X	R, WDL Ps
War: War of Texan Independence				
San Jacinto	A F D D	-- --	X	B, Ps A

1. IDENTIFICATION
War: US-Mexican War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Palo Alto, Texas	A 8 May 1846 D	Northern	US Army Mex Army	Taylor Arista	1	2.7
Resaca de la Palma, Texas	A 9 May 1846 D	Northern	US Army Mex Army	Taylor Arista	1	1.9
Buena Vista, Mexico	A 22-23 Feb 1847 D	Northern	Mex Army US Army	Santa Anna Taylor	2	7.0
Cerro Gordo, Mexico	A 17-18 Apr 1847 D	Central Mexico	US Army Mex Army	Scott Santa Anna	2	2.4
Contreras, Mexico	A 20 Aug 1847 D	Central Mexico	US Army Mex Army	Pillow Valencia	1	2.5
Churubusco, Mexico	A 20 Aug 1847 D	Central Mexico	US Army Mex Army	Scott Santa Anna	1	2.0
Molino del Rey, Mexico	A 8 Sep 1847 D	Central Mexico	US Army Mex Army	Worth Santa Anna	1	1.6
Chapultepec, Mexico	A 13 Sep 1847 D	Central Mexico	US Army Mex Army	Scott Santa Anna	1	1.8

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES
 War: US-Mexican War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Palo Alto	A D	HD	FB	DSH	Sp Desert	N	--
Resaca de la Palma	A D	HD	FM	DSH	Sp Desert	N	--
Buena Vista	A D	HD	RgB	WLT	W Desert	N	--
Cerro Gordo	A D	PD	RgM	DSH	SPT	Y	X Substantial
Contereras	A D	PD	RgB	DSH	ST	Y	X Substantial
Churubusco	A D	PD	FB	DSH	ST	N	--
Molino del Rey	A D	PD	RM	DSH	FT	N	--
Chapultepec	A D	FD	RgM	DSH	FT	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: US-Mexican War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Palo Alto	A 2,288 D 6,000	?	1,000	48 400	2.1 6.7	0 ?	--	x	1.8 --
Resaca de la Palma	A 1,700 D 5,600	?	?	16 600	122 10.7	0 8	--	x	2.7 --
Buena Vista	A 14,000 D 4,759	?	1,018	?	2,000 7,746	7.1 7.8	?	--	N --
Cerro Gordo	A 8,500 D 12,000	?	?	7 40	431 4,000	2.5 16.7	0 40	--	3.0 --
Contreras	A 4,500 D 4,000	?	?	?	60 1,513	1.3 37.8	0 22	--	1.0 --
Churubusco	A 8,497 D 10,500	?	?	?	996 3,124	11.7 29.8	0 ?	--	11.2 --
Molino del Rey	A 3,100 D 12,000	300	?	9 ?	792 2,700	25.6 22.5	0 ?	--	0.8 --
Chapultepec	A 7,180 D 15,000	?	?	8 13	863 1,800	12.0 12.0	0 13	--	4.5 --

4. INTANGIBLE FACTORS

War: US-Mexican 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 Accompl.
Palo Alto	A D	x 0	x	C	N	N	N	C	x	x	1.8 --	6 2
Resaca de Palma	A D	x 0	x	C	N	x	N	C	x	x	2.7 --	7 1
Buena Vista	A D	0 x	C	C	N	N	N	C	x	x	-- N	2 6
Cerro Gordo	A D	x 0	x	C	N	N	N	C	x	x	3.0 --	8 1
Contreras	A D	x 0	x	C	N	N	x	C	x	x	1.0 --	9 1
Churubusco	A D	x	x	x	C	N	x	C	N	x	11.2 --	7 2
Molino del Rey	A D	C x	x	x	C	N	x	N	x	x	0.8 --	7 2
Chapultepec	A D	C x	x	x	C	N	x	C	x	x	4.5 --	9 2

6. FACTORS AFFECTING OUTCOME

War: US-Mexican War

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: US-Mexican War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Palo Alto	A D	F D/O, E(RF)	-- --		X	Ps R, WD
Resaca de la Palma	A D	F D	-- --		X	P, Ps WDL
Buena Vista	A D	F D/O	E(LR) --		X	R, WD --
Cerro Gordo	A D	F D	EE --		X	B, Ps WDL
Contreras	A D	F D	E(LR) --		X	B, Ps WDL
Churubusco	A D	F D	E(RR) --		X	B, Ps WDL
Molino del Rey	A D	F D	E(LF) --		X	B, Ps WD
Chapultepec	A D	F D	E(RR) --		X	B, Ps WD

THE WAR OF 1812

The Thames, 5 October 1813

From June 1812 to August 1813 British forces and Canadian militia together with Indians led by Tecumseh, held the initiative on the northwestern frontier of the United States. During the first six months of 1813 British General Thomas Proctor's force attacked US outposts throughout the region, eliminating any chances for a US invasion of Upper Canada. In late 1812 US Major General William Henry Harrison was charged with the responsibility of retaking Detroit (lost to the British in August 1812) and the territory of Michigan, but difficulties in organizing and training troops delayed the execution of this mission. By the late summer of 1813, however, Harrison had made sufficient preparations and, following the American naval victory on Lake Erie (10 September 1813), which gave the United States control of the lake, he moved north from Fort Stephenson on the southern shore of Lake Erie to attack Proctor's force.

On 29 September Harrison's troops retook Detroit, and on 5 October his main body caught up with Proctor's command on the Thames River northeast of Detroit near Moravian Town. Proctor had deployed his men in open order in the area between the Thames on the left and a swamp on the right, with a small swamp opposite his center. The Canadian militia and British regulars formed the left wing of his line, and Indians under Tecumseh held the right. Two battalions of Colonel Richard M. Johnson's Kentucky mounted riflemen attacked the British formations, one battalion against each wing. The British and Canadians were quickly routed and the majority of them taken prisoner. On the British right, Tecumseh's Indians fought well but when their leader was killed the Kentucky riflemen, dismounted, dispersed them. Johnson was wounded in this part of the action, but his troops' able performance had shattered the British line. Proctor early on had fled the battlefield.

Significance: The US victories at the battles of Thames River and Lake Erie gave the public hope after a series of demoralizing defeats, secured the territory of Michigan, and ended Tecumseh's Indian confederacy.

Sources: A.7; A.17; D.12.

THE WAR OF 1812

Chippewa, 5 July 1814

In early July 1814, Major General Jacob Brown, with a force composed of regulars, militia, and Indians, launched an invasion of Canada, capturing Fort Erie at the northeastern end of Lake Erie on 3 July. On 5 July a British force under Major General Phineas Riall, also including regulars, militia and Indians, crossed the Chippewa River 23 kilometers north of Fort Erie and attacked to destroy Brown's command. Initial contact was made with US Brigadier General Peter Porter's brigade of militia and Indians on Brown's left wing, and Riall's troops quickly drove them back. Brigadier General Winfield Scott, in command of a brigade of US regulars, deployed his soldiers, who had been parading in honor of Independence Day, for battle. As Scott's Brigade moved into position north of Street's Creek, Porter's troops arrived from the north with the British not far behind in pursuit. Riall spotted the gray uniforms of Scott's men (normally the color of the uniforms of the little-respected US Militia) and ordered his artillery pieces forward to scatter the Americans. A well-organized defensive disrupted the British artillery deployment, and the Americans moved forward. Flanking fire from Scott's concave line shattered a hastily organized British charge and sent the attackers reeling in confusion. Scott's men did not pursue, however, and the survivors of Riall's command returned to their entrenchments on the north bank of the Chippewa.

Significance: The American victory forced the British to fall back before the American advance along the Niagara River. Coming at the end of a long series of defeats, it greatly increased morale and confidence among American troops.

Sources: A.7; A.11; A.17; D.12.

THE WAR OF 1812

Lundy's Lane, 25 July 1814

After the US victory at the Battle of Chippewa (5 July 1814), US Major General Jacob Brown moved his invading forces north down the Niagara River. Meanwhile, British Lieutenant General Sir Gordon Drummond took command of Major General Phineas Riall's force and, with reinforcements recently arrived from Europe, advanced south down the Niagara to halt the invading Americans. When news of a British raid on Lewiston on the east side of the Niagara reached Brown, he ordered his troops, with Brigadier General Winfield Scott's brigade in the lead, to drive north along the west bank of the River. At Lundy's Lane, a road running west from the river, Scott's command encountered a British force led by Riall in the late afternoon of 25 July.

A battle ensued when Scott sent the bulk of his force in a frontal assault against the British positions on a hill north of Lundy's Lane. One regiment was sent around the left (east) flank of the British line to envelop the British positions. As the battle developed and darkness fell, reinforcements arrived on both sides, and confusion reigned. In the center of the line a British artillery position was taken by an American charge and held against British counterattacks. Scott's flanking regiment was forced to withdraw, and, both sides lacking reserves, neither side could gain the upper hand. Scott, Brown, Drummond, and Riall were wounded, and Riall was taken prisoner. Finally, Brown ordered a withdrawal, and the armies disengaged. The Americans retreated to Fort Erie, which the British unsuccessfully attempted to besiege in August and September.

Significance: Although Lundy's Lane was tactically a draw, it was a strategic victory for the British, who had stopped Brown's invasion of Canada.

Sources: A.7; A.11; A.17; D.12.

THE WAR OF 1812

New Orleans, 8 January 1815

In November 1814, US Major General Andrew Jackson was sent to New Orleans after rumors of a British concentration in the Gulf of Mexico raised the possibility of a British invasion on the lower Mississippi River. The possibility became reality when British Major General John Keane landed in mid-December with a force of Peninsular War veterans on the western shore of Lake Borgne, southeast of New Orleans. While Keane awaited the arrival of reinforcements and his commander, Major General Sir Edward Pakenham, Jackson prepared defenses between New Orleans and the British landing force. Jackson's command, a collection of units, including militia, regulars, and volunteers, built field fortifications on the north bank of a canal that ran northeast of the Mississippi. Jackson's positions were covered on the right flank by the Mississippi and on the left flank by a cypress swamp. These eliminated any possibility of an outflanking maneuver by the British. After a US raid on the British camp on the night of 23/24 December and skirmishing between the opposing forces, the British planned an attack for 8 January 1815. A number of boats were hauled across land from Lake Borgne to ferry troops across the river, where they were to take an American artillery position and drive up the west bank.

Early on 8 January the British attacked Jackson's defenses frontally. Superb marksmanship and the strength of the defenses stopped two assaults by the British. In less than an hour the British sustained over 2,000 casualties. Only on the west bank of the Mississippi were the attackers successful but withdrew after defeat of the main body. Down the river a small naval attack was repelled by US artillery in Fort St. Philip.

Significance: Jackson's preparations and superlative defense at New Orleans stopped the British attack on the lower Mississippi River. But the US victory actually came after a peace treaty between the United States and Great Britain had been signed and therefore had no direct effect on the outcome of the War of 1812.

Sources: A.7; A.11; A.17; D.12.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Boyaca, 7 August 1819

A Spanish force commanded by Colonel Barreiro defended the approaches to Bogota against Bolivar's Patriot army. Bolivar attacked the Spanish near the Boyaca River, routing them completely after a brief combat.

Significance: Boyaca was the decisive battle of the revolution in northern South America. New Granada's independence was assured. Bolivar entered Bogota in triumph on 10 August, and the Congress of Angostura on 17 December established Great Colombia, consisting of New Granada, Venezuela, and Quito. Bolivar was established as president and military dictator of the infant nation.

Source: D.14.2.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Carabobo, 25 June 1821

Bolivar and his Patriot army attacked a Spanish force under General La Torre that was blocking the route through the valley of the Carabobo River in Venezuela. Bolivar drove in the Spanish outposts and then sent a mixed force of cavalry and infantry to envelop the Spanish right flank. La Torre, in response, divided his army, sending a detachment to meet the threat to his right. The Patriots defeated La Torre's detachment and attacked all along the front, winning an easy victory. The Spaniards were routed and were pursued for 20 miles. Bolivar subsequently entered Caracas in triumph.

Significance: Carabobo guaranteed the independence of Venezuela. On 30 August Bolivar was named president of the republic.

Sources: D.14.3.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Bombona, 7 April 1822

A Royalist army under the command of Colonel Vasilio Garcia barred Bolivar's advance through the mountains of Quito Province (Ecuador) near Pasto. The Royalist position was extended but strong. Its right flank rested on the slopes of the Galeras volcano, its left on the Guaitara River; the front extended along the slopes of a ravine. In addition, the Royalists had improved their position with obstacles of slashings and had built stone redoubts.

Bolivar's main force made costly frontal attacks against the Royalist position while a detachment of Patriots worked around the Royalist right flank. The flanking move was successful, and, after hard fighting, the Royalists withdrew. The Patriots had been so reduced in numbers by battle casualties, detachments, and sickness that Bolivar halted his advance and withdrew.

Significance: Bolivar won a victory but was unable to continue his campaign and join his lieutenant, Antonio de Sucre, for the campaign to take Quito.

Sources: D.14.3.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Pichincha, 24 May 1822

Aymerich, the Spanish governor of Quito Province, attacked a Patriot army under Sucre that was positioned on the slopes of the Pichincha volcano, just west of the city of Quito. In a stubborn fight, the Spanish were at first successful, but Sucre counterattacked and drove the Spanish down the slopes and into Quito, where Aymerich surrendered the next day.

Significance: Sucre's victory achieved the liberation of Quito, which subsequently joined with Great Colombia.

Source: D.14.3.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Julin, 6 August 1824

Bolivar and Sucre, with about 9,000 men, campaigned against a Spanish army of about equal size in the region northeast of Lima, Peru. The cavalry of the opposing armies, operating ahead of the infantry, met in combat near Julin. In a swirling melee in which not a shot was fired on either side, the Spanish cavalry was routed and pursued back to the position of its infantry. The Spanish then withdrew.

Significance: The victory of the revolutionaries was a serious setback for the Spanish. While Sucre pursued the defeated army into the highlands east of Lima, Bolivar entered Lima and established a government.

Source: D.14.3.

THE LATIN AMERICAN WARS OF INDEPENDENCE

Ayacucho, 9 December 1824

Sucre, campaigning in Peru, encamped on the Plain of Ayacucho, inviting attack by the Royalists. The Spanish, commanded by La Serna, attacked on 9 December, attempting to turn Sucre's refused left flank while engaging his center by a frontal attack. Sucre, using his central position brilliantly, contained the Royalist attacks, and counterattacked with his right wing, turning the Spanish left. When Sucre threw in his reserve division the Royalist army collapsed. Next day, General Canterac, who had succeeded La Serna in command when the latter was captured, surrendered the remnants of the demoralized Royal army.

Significance: The Spanish defeat and capitulation ended forever Spain's grip on South America. Peru's independence was established, and Sucre followed up by moving eastward into the Presidency of Charcas. (modern Bolivia), bordering on Brazil. On 6 August 1825 Sucre established the Republic of Bolivia.

Source: - D.14.3.

WAR OF TEXAN INDEPENDENCE

San Jacinto, 21 April 1836

Following the defeat of the Texan garrison at the Alamo mission near San Antonio, Texas in March 1836, Mexican General and President Antonio Lopez de Santa Anna marched his troops eastward to attack the assembly area of the insurgent Texan forces. On 21 April, along the San Jacinto River, a numerically inferior force of troops under Texan General Sam Houston surprised Santa Anna's men while they were taking a siesta and overcame the Mexicans. Santa Anna was captured, and he thereupon recognized the Texan Republic (an act which the Mexican government later repudiated). With US recognition of Texas in July 1836, Mexican resentment increased, and when Texas was eventually annexed to the United States war broke out between the United States and Mexico.

Significance: The easy Texan victory at San Jacinto was the decisive engagement of the War of Texan Independence; it assured the independence of Texas from Mexico.

Sources: A.2.4; A.7.

THE US-MEXICAN WAR

Palo Alto, 8 May 1846

In March 1846, Major General Zachary Taylor's US Army advanced to the Rio Grande River. This river was claimed by the United States as the southern boundary of US territory. After a Mexican cavalry raid north of the Rio Grande in late April 1846, Taylor announced that hostilities had commenced, and on 1 May he marched most of his force of Regular Army troops to the mouth of the Rio Grande to protect his supply base at Point Isabel. The small garrison left behind at Taylor's base at Camp Texas was besieged two days later by a Mexican force under General Mariano Arista. Learning of this, Taylor moved his troops back to meet the Mexicans. Meanwhile, Arista unsuccessful at Fort Texas, placed his command hear the pond of Palo Alto to block the approach of Taylor's force.

On 8 May the US force approached Arista's lines from the north. The US troops were outnumbered, but they had more artillery pieces than Arista's force and planned to exploit this advantage. Arista permitted Taylor's men to deploy and then sent a cavalry unit to strike the US right rear. This attempted envelopment was repulsed by an infantry regiment, supported by effective artillery fire. Taylor then ordered the right wing of his line forward, and Arista withdrew his left wing in response. Another Mexican charge, this time primarily by infantry, struck Taylor's left, and once again the superior US artillery repelled the Mexicans. They subsequently withdrew from the battlefield in poor order, and Taylor's troops did not pursue.

Significance: The US victory at Palo Alto raised the morale of the US Army Regulars under Taylor's leadership. Taylor's success permitted him to continue his march toward Fort Texas.

Sources: A.6; A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Resaca de la Palma, 9 May 1846

Following the victory of Major General Zachary Taylor's US Army Regulars over Mexican forces at the Battle of Palo Alto on 8 May 1846, the demoralized Mexican forces withdrew southward. Early on 9 May, at a dry riverbed in the thick scrub of the chaparral north of the Rio Grande River, Mexican General Mariano Arista halted his troops to attempt to stop Taylor's pursuit. Arista chose a naturally strong defensive position, and the heavy growth of the chaparral was an obstacle to Taylor's attack. The US artillery opened the battle by firing on the Mexican line and was soon reinforced by infantry moving up in disorder through the chaparral. Two US attacks against the left of the Mexican line were required to seize a Mexican artillery position; first a cavalry charge that took the guns but could not hold them and then an infantry attack that secured the position. Both assaults encountered heavy musket and cannon fire. When the Mexican guns were finally taken, the entire line, including the untouched right wing, collapsed. US soldiers pursued the fleeing Mexicans past Fort Texas to the Rio Grande, inflicting heavy casualties.

Significance: Taylor's second victory in as many days completed the defeat and rout of Arista's army. The Mexicans were driven south of the Rio Grande River with heavy losses of men and equipment; they had lost any chance of victory in Texas.

Sources: A.6; A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Buena Vista, 22-23 February 1847

In early January 1847, Major General Zachary Taylor was ordered to transfer almost two-thirds of his command to reinforce General Winfield Scott's amphibious invasion of Mexico via Vera Cruz. Taylor was left with fewer than 5,000 men, only a few of which were US Army Regulars. Concentrating his force around Saltillo, Mexico, Taylor went on the defensive, while Scott carried the war to the Mexican capital. Meanwhile, Mexican General Antonio Lopez de Santa Anna assembled a force of 20,000 men at San Luis Potosi and advanced in late January 1847 to destroy Taylor's force. Having lost many men on the march north, Santa Anna approached Saltillo on 19 February. Two days later, Taylor withdrew his outnumbered command to a naturally defensible position 11.5 kilometers south of Saltillo near Buena Vista and prepared to meet Santa Anna's attack.

On 22 February, Santa Anna demanded that Taylor surrender. When Taylor refused, Santa Anna sent a brigade of infantry in a flanking maneuver around the left of the US position, but it was stopped by a force of riflemen. From late afternoon into the night only minor fighting took place. On the morning of 23 February the battle began in earnest, when the Mexicans continued their outflanking maneuver against the extreme left of the US line. A demonstration against US artillery directly astride the road to Buena Vista was repulsed, but a strong infantry and cavalry attack against positions between the road and the extreme left penetrated a position manned by US volunteers. Thereafter, in a complicated battle, the Mexicans continued to assail the US left, while US artillery and infantry rushed from less threatened sectors to hold the line. Two brigades of Mexican cavalry were beaten back in attacks against the US left rear, but on the main battlefield the possibility of a breakthrough continued. However, a steady defense, bolstered by the presence of Taylor and other Regular Army officers, and the excellent support of US artillery, held the line. Santa Anna finally called off his attacks and retired. The following morning the Mexican troops were withdrawing southward, leaving the battlefield in US hands.

Significance: The US victory at Buena Vista prevented Santa Anna from crushing the only US force in northeastern Mexico, and prevented him from threatening southern Texas and possibly forcing the cancellation of General Scott's expedition. It was also the last battle of the war in the lower Rio Grande River area and Taylor's final victory over the Mexicans.

Sources: A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Cerro Gordo, 17-18 April 1847

After the capture of the Mexican fortress city of Vera Cruz on 27 March 1847, US General Winfield Scott proceeded westward to attempt to capture the Mexican capital, Mexico City. On 17 April, near Cerro Gordo, he assembled his army to attack a fortified defile blocking his path, which was defended by a force of Mexicans assembled by General Antonio Lopez de Santa Anna. After failing to destroy Major General Zachary Taylor's command two months before, Santa Anna had marched the survivors of his army south to Mexico City and, after reorganization, had marched east to meet Scott's invasion, stopping to erect defenses at Cerro Gordo.

Santa Anna's defenses were located on three main heights, with his right wing at the summit of a nearly perpendicular cliff on the south side of the road to Mexico City. The left wing was situated north of the road on two fortified hills, La Atalaya and El Telegrafo. A reconnaissance by Scott's engineers discovered a route that outflanked the Mexican left. A US attack on 17 April cleared La Atalaya, the eastern-most of the two positions north of the road and allowed the US troops to prepare a covering position for the main attack on the following day. On the morning of 18 April a charge from La Atalaya, coordinated with an envelopment of the rear of the Mexican position, routed the defenders. A second flanking maneuver against Santa Anna's camp facilitated the Mexican collapse. Meanwhile, an improperly executed demonstration in front of the Mexican right was repulsed by cannon fire from the heights. However, this position was surrendered without a fight when the US successes to the rear and on the left of the Mexican position cut off the defenders.

Significance: Scott's victory at Cerro Gordo was overwhelming and led to the capture of many Mexican soldiers and their weapons and equipment. Santa Anna's army was routed but not immediately pursued. Scott advanced practically unopposed against the defenses of Mexico City.

Sources: A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Contreras, 20 August 1847

On 19 August 1847 General Gabriel Valencia, a subordinate of General Antonio Lopez de Santa Anna, disobeyed orders from his superior and deployed his command of approximately 4,000 soldiers in positions west of the main road leading into Mexico City from the south. Valencia's troops were isolated from the main body of the Mexican Army; nevertheless his men prepared defenses from which Valencia hoped to strike the flank of the US force attacking the Mexican capital. But as Valencia prepared his positions, US engineers began to improve a road across the rugged terrain of the pedegral* to his front to allow part of General Winfield Scott's army to outflank the main defenses to the east of the pedegral. When Valencia's artillery brought the American work to a halt, two US infantry brigades began to envelop the left of Valencia's defenses, since any direct assault was impractical. Night fell. Under the cover of darkness and in a heavy rainstorm US units moved almost completely around Valencia's position in preparation for an attack at daybreak. A demonstration by US artillery to the front distracted Valencia's soldiers on the morning of 20 August, allowing US infantry to launch a surprise attack against the Mexican rear. The defenders were routed and fled to the northeast, where US troops covering the main US attacking force's rear took many prisoners.

Significance: This victory exposed the main Mexican positions covering the south road into Mexico City to attacks by US troops from the front and the rear. The victors of the engagement at Contreras pursued the retreating Mexicans and aided in the victory at Churubusco later in the day.

Sources: A.11; A.17; D.8.

*A presumably impassable rocky area of volcanic lava origin.

THE US-MEXICAN WAR

Churubusco, 20 August 1847

On the morning of 20 August 1847, after part of General Winfield Scott's army had defeated Mexican forces at Contreras near Padierna, he ordered an immediate attack on Mexican positions blocking the southern approaches to Mexico City. The US units from Padierna were advancing toward the right rear of the Mexican position blocking Scott's approach from the south. This position at San Antonio was evacuated, and the retreating column was struck by a flank attack that scattered the Mexicans. Since the initial pursuit from Padierna, the battle lines had converged on the fortified town of Churubusco on the south bank of the Rio Churubusco. One US column struck across the river to the west of the town and was soon heavily engaged with Mexican troops blocking the road into Mexico City at Portales. At Churubusco the battle centered around a fortified bridgehead on the south bank of the river and a strongpoint at the San Pablo Convent, a half kilometer southwest of the bridge. A US infantry charge eventually broke the lines around the bridgehead and the positions at the San Pablo Convent, and Portales fell soon afterward. US troops pursued the retreating Mexicans as far as the limits of Mexico City, but Scott delayed the immediate storming of the city.

Significance: At Churubusco casualties were high on both sides, but the outcome was an overwhelming American victory. With his defenses outside Mexico City for the most part eliminated, Santa Anna requested a truce -- ostensibly to discuss peace negotiations but in reality to enable him to reorganize his forces.

Sources: A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Molino del Rey, 8 September 1847

On 7 September 1847, General Winfield Scott terminated the military armistice of 24 August with the Mexicans. Repeated violations of the armistice's terms by the Mexican Army had convinced Scott that the Mexicans were preparing for further conflict. Southwest of Mexico City, a group of buildings known as Molino del Rey was reputed to be a foundry used by the Mexicans for manufacturing cannon. On 8 September Scott ordered General William J. Worth's division to attack Molino del Rey, reinforced by a small cavalry contingent and five cannon. The Mexican position was well fortified, with gun and infantry positions in the buildings and in a bastioned fort, the Casa Mata, to the right (west). Commanding these positions were cannon located to the east on the fortified hill of Chapultepec. A division of Mexican cavalry was positioned on the right of the main Mexican positions for possible use against the flank of any American attack.

Before dawn on 8 September, Worth's infantry advanced to attack positions and, after an artillery preparation, attacked the Mexican defenses. Intense musket and cannon fire struck the attackers and inflicted heavy casualties. After a bloody and confused struggle, the Mexican lines were breached, and the defenders driven off, leaving the fortifications in the possession of the US troops. No major trouble had been experienced from the Mexican cavalry on the left. US cavalry and artillery had held them at bay on the far side of a ravine separating the opposing lines.

Significance: Although Molino del Rey was a clearcut US victory, it had been achieved only after a costly frontal assault against a fortified position. The foundry at Molino del Rey was found to be inoperative.

Sources: A.7; A.11; A.17; D.8.

THE US-MEXICAN WAR

Chapultepec, 13 September 1847

General Winfield Scott's original plan to make his final attack on Mexico City from the south was scrapped in favor of a plan in which the main attack would be made from the west. There, at Chapultepec, the Mexican defenses were thought to be less formidable than those around the southern approaches, where the defenders expected the main attack. However, the hill of Chapultepec and the Mexican Military College atop it presented a serious obstacle to the projected US attack. Steep-sided, and with commanding fields of fire, Chapultepec would be easy to defend. However, the US troops would have to seize the hill, since it commanded both roads into Mexico City that the US force planned to use. After a day-long artillery bombardment on 12 September, the attack commenced on the following day. Elements of one division, directly south of the city, made a demonstration to draw attention away from the attack at Chapultepec. Two attack columns, one from the west, and one from the south, converged on the hill, led by assault parties with equipment to scale the steeper slopes. After a bitter struggle, the western column broke through. When the southern defenses collapsed also, the hill fell to the attackers. Soon after the fall of Chapultepec, two groups of US troops set out over the western causeways that carried the roads above the surrounding marshlands into Mexico City. Stiff resistance held them up at the city gates. But before dawn on 14 September General Santa Anna withdrew northward from the city and the remaining defenders surrendered.

Significance: The Battle of Chapultepec was General Scott's final victory in Mexico. It effectively ended organized Mexican resistance and led to final peace negotiations between Mexico and the United States.

Sources: A.7; A.11; A.17; D.8.

1. IDENTIFICATION
War: Crimean War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
The Alma, The Crimea	A D 20 Sep 1854	Sebastopol	Br, Fr, Turk Armies Russ Army	Raglan, Saint-Arnaud Lvenshikov	1	10.0
Inkerman, The Crimea	A D 5 Nov 1854	Sebastopol	Russ Army Br and Fr Army	Raglan, Canrobert	1	8.0

War: War of Austria with France and Piedmont

Magenta, Lombardy	A D 4 Jun 1859	Lombardy, 1859	Fr and Pied Army Aus Army	Napoleon III Sylului	1	?
Solférino, Lombardy	A D 24 Jun 1859	Lombardy, 1859	Fr and Pied Army Aus Army	Napoleon III Franz Josef I	1	11.0

War: Austro-Prussian ('Seven Weeks') War

Sadowa, Austria (Koeniggraeitz)	A D 3 Jul 1866	Bohemia, 1866	Pr Army group Aus and Sax Army	Moltke Benedek	1	12.0
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War: Austro-Italian War, 1866

Gustoza II Venetia	A D 24 Jun 1866	Venetia, 1866	Ital Army Aus Army	La Marmora Archduke Albert	1	
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2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Crimean War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Surprise
The Alma	A D	H/PD	RB	DST	FT	N	--
Inkermann	A D	PD	RB	WIC	FT	Y	X minor

War: War of Austria with France and Piedmont

	A	HD	FB	DSH	ST	N	--
Magenta	A D	HD	RM	DSH	ST	N	--
Solférino	A D	H/PD				--	--

War: Austro-Prussian (Seven Weeks') War

	A	HD	RM	WHT	ST	N	--
Sadowa (Koeniggrätz)	A D	H/PD					--

War: Austro-Italian War, 1866

	A	HD	RM/RGM	DST	ST	N	--
Custoza II	A D	H/PD					--

3. STRENGTHS AND COMBAT OUTCOMES

War: Crimean War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
The Alma	A D	65,000 36,400	1,000 3,400	136 118	2,562 5,709	3.9 15.7	?	-- --	x x
Inkerman	A D	42,000 16,000	? ?	106 56	1,5187 4,105	36.2 25.7	?	-- --	x x

War: War of Austria with France and Piedmont

Magenta	A D	48,090 61,618	1,207 3,435	87 152	4,530 10,236	9.4 16.5	?	-- --	x x
Solférino	A D	143,000 130,000	15,000 ?	420 536	17,400 21,800	12.2 16.8	?	-- --	x x

War: Austro-Prussian ('Seven Weeks') War

Sadowa (Koeniggraez)	A D	220,000 215,000	27,000 24,000	780 770	9,200 44,300	4.2 20.6	?	-- 187	x 24.3
Custoza II	A D	90,000 75,000	7,000 ?	192 172	8,100 5,600	9.0 7.5	14 ?	-- --	x 0

4. INTANGIBLE FACTORS

5. OUTCOME

War: Crimean War

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Monen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
The Alma	A D	x C	C	C	N	N	C	C	x	x	3.0 --	6 3
Inkerman	A D	x C	x	C	x	N	C	N	x	0 --	3 4	

War: War of Austria with France and Piedmont

Magenta	A D	C C	C	C	N	N	C	C	x	x	?	5
Solférino	A D	C C	C	C	N	N	C	x	x	3.0 --	5 3	

War: Austro-Prussian ('Seven Weeks') War

Sadowa (Koeniggraez)	A D	C x	C	C	N	N	C	C	x	x	9.0 --	7 5
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War: Austro-Italian War, 1866

Custoza II	A D	x x	x	C	N	N	C	N	x	0 --	3 6
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6. FACTORS AFFECTING OUTCOME

War: Crimean War

Engagement	A	D	A	D	N	N	N	N	N	N	N	Depth
The Alma	x									x		Portfolios
Inkerman	x		x									Front Masses, narrow
												Meneville, Surprise
												Planning
												Leader-ship
												Roads
												Terrain,
												Watchers
												Force-on-force
												Superiority
												Resources
												Quality

War: War of Austria with France and Piedmont

Magenta	A	D	x		N		N		N	0	N	N
Solférino	A	D	x		N		N		N	0	N	N

War: Austro-Prussian ('Seven Weeks') War

Sadowa (Koeniggrätz)	A	D	N	N	x		N		N	x	N	N
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War: Austro-Italian War, 1866

Custoza II	A	D	x		N		x		N	x	x	N
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Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
The Alma	A D	F D	-- --		X	P WD
Inkerman	A D	F D/O, F	-- --		X	R, WD --
War: War of Austria with France and Piedmont						
Magenta	A D	F D/O, F	-- E		X	P WD
Solférino	A D	F D/O, F	-- --		X	P WD
War: Austro-Prussian (Seven Weeks') War						
Sadowa (Koeniggrätz)	A D	EE, D	-- --		X	P WD
War: Austro-Italian War, 1866						
Custoza II	A D	F D/O, F	-- --		X	R, WD --

THE CRIMEAN WAR

The Alma, 20 September 1854

In September 1854, following the declaration by France and Great Britain of war on Russia (March), a Franco-British invasion force was landed on the west coast of the Crimean peninsula, about 50 kilometers north of the Russian naval base of Sebastopol, its objective. The Allied army, commanded by French Marshal Armand J. L. de Saint-Arnaud and British Major General Fitzroy James Henry Somerset, Lord Raglan, advanced southward along the coast toward Sebastopol. A Russian army, commanded by Prince Alexander Menshikov, opposed the Allied advance from prepared defenses along the line of the Alma River.

A battle resulted on 20 September when the Allies stormed the Russian position, which was very strongly situated on a plateau and the Kurganie Hill and dominated the river valley. Following a preliminary artillery bombardment the Allied infantry advanced, the French on the right and the British on the left. The French were delayed, however, due partly to inept leadership, and the brunt of the battle fell on the British, who took the Kurganie Hill and the Russian redoubts there. The Russian defense was uninspired, and the Russian infantry, formed in deep, dense columns, was no match for the fire-power of the British linear formations. The Russians withdrew after attempting a counterattack. The Allies did not pursue.

Significance: The Allied victory opened the road to Sebastopol, which the Allies placed under siege within a month. A Russian victory would have forced the Allies to quit the Crimea; in this sense, then, the Alma was the decisive battle of the war.

Sources: A.1; D.10.

THE CRIMEAN WAR

Inkerman, 5 November 1854

On 5 November 1854, Russian forces from the besieged city of Sebastopol attempted a large-scale sortie to drive a wedge between the besieging lines of the British and the French and their supply bases. The brunt of the action fell on the British in an all-day "soldiers' battle" in heavy fog, during which all coordination and control was lost by the commanders on both sides. The arrival of a French reinforcement tipped the balance, and the Russians withdrew, having suffered substantially higher casualties than the Allies. This was the second Russian attempt to lift the siege of Sevastopol, which continued into the following year.

Significance: The Allied victory enabled them to continue the siege of Sebastopol. The Russians, after a sanguinary, heroic resistance, finally abandoned the fortress in September 1855. The Peace of Paris (30 March 1856) ended the war.

Sources: A.1; A.2.4; A.7.

WAR OF AUSTRIA WITH FRANCE AND PIEDMONT, 1859

Magenta, 4 June 1859

In March 1859, King Victor Emmanuel of Piedmont was assured by a secret treaty of French support in a war to expel Austria from northern Italy. Both sides mobilized their forces, and when the Piedmontese refused an Austrian demand to demobilize, France entered the conflict. At the Battle of Palestro on 30 May 1859 the Piedmontese won a victory over the Austrians, and five days later a French army corps, reinforced by Piedmontese troops, blundered into the Austrian Army near Magenta in Lombardy. In a series of meeting engagements the inept commanders of both sides committed portions of their respective commands. The elan of the French troops, however, brought the allies victory, and after an Austrian withdrawal, they entered Milan in triumph.

Significance: This victory at Magenta allowed the French and Piedmontese to continue their invasion of Austrian-occupied northern Italy.

Sources: A.1; A.2.4; A.7.

WAR OF AUSTRIA WITH FRANCE AND PIEDMONT, 1859

Solferino, 24 June 1859

Austrian Emperor Franz Josef I assumed personal command of the Austrian Army in Lombardy following the Austrian defeat at Magenta on 4 June 1859. Located on high ground near Solferino along the Mincio River, the Austrians awaited an attack by French and Piedmontese forces, now under the overall command of Emperor Napoleon III of France. On 24 June, the two armies met in a series of uncoordinated engagements in which the respective high commands lost control of their forces. The French soldiers, ably led by individual corps commanders, eventually decided the issue after an all-day battle in which both sides incurred heavy casualties. A stubborn Austrian rearguard action saved the Austrians from being completely routed.

Significance: This victory led to negotiations in which Austria ceded most of Lombardy to Piedmont. The terrible suffering of the wounded soldiers at Solferino inspired the Swiss Henri Dunant to found the International Red Cross.

Sources: A.1; A.2.4; A.7.

AUSTRO-PRUSSIAN (SEVEN WEEKS') WAR

Sadowa (Koeniggraetz), 3 July 1866

In June 1866, Prussian General Count Helmuth von Moltke, utilizing the extensive Prussian railway net, sent three armies south through Saxony and Silesia and across the Bohemian mountains on a wide front. Bohemia was defended by an Austrian army under General Ludwig von Benedek. Following a series of frontier defeats, the Austrian army withdrew to Sadowa, where Benedek concentrated his forces to stop the Prussian advance. Moltke's intelligence reports revealed the Austrian concentration, and the Prussian leader formulated a plan to trap and destroy the Austrian army in a three-pronged convergent attack employing the Prussian First and Second armies and the Army of the Elbe.

Elements of the Elbe and First armies attacked at dawn on 3 July in heavy rain but, heavily outnumbered, they were checked by Austrian counter-attack. Densely packed along the attack front, the Prussians might have been driven from the field had the Austrian cavalry charged, but Benedek held his mounted troops back. In the afternoon, the Prussian Second army arrived, after being delayed by a communications breakdown, and it attacked the Austrian right flank, taking the key position of the Austrian defense. Following an unsuccessful counterattack, the Austrians withdrew in order.

Significance: This decisive Prussian victory decided the outcome of the Seven Weeks' War and allowed Prussian Chancellor Otto von Bismarck to impose his peace terms on Austria. From a military standpoint, the superiority of the Prussian breech-loading needle gun was instrumental in giving the Prussian infantry a decisive fire superiority over the Austrians.

Sources: A.1; A.2.4; A.7.

AUSTRO-ITALIAN WAR, 1866

Custoza II, 24 June 1866

On 20 June 1866 the Kingdom of Italy, taking advantage of the war between Prussia and Austria to advance its own territorial claim to Austrian-held Venetia, declared war on Austria. Italian King Victor Emmanuel II immediately sent an army of invasion into Venetia from Lombardy. The Italians, commanded by General La Marmora, crossed the Mincio River and entered the hilly country west of Verona, which obliged them to disperse somewhat in their march. The Austrians, commanded by Archduke Albert, awaited the approach of the Italians on the Plain of Custoza. On 24 June the Italians emerged from the hills and attacked the Austrians repeatedly throughout the day. However, because of the extension of their columns on the approach march, the attacks were made piecemeal. The Austrians, employing their cavalry as the arm of counterattack, easily triumphed. The Italians then withdrew across the Mincio.

Significance: The Austrians did not follow the defeated Italians but instead withdrew from Venetia to assist in the defense of Vienna against the Prussians. In October 1866, Austria, having been defeated by Prussia, ceded Venetia to Italy. This cession completed the unification of Italy.

Sources: A.1; A.2.4; A.7.

1. IDENTIFICATION
War: American Civil War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
First Bull Run, Virginia	A 21 Jul 1861 D	First Bull Run	US Army CS Army	McDowell Beauregard & Johnston	1	4.5
Wilson's Creek, Missouri	A 10 Aug 1861 D	Missouri, 1861	US Army CS Army	Lyon McQuiloch	1	2.0
Belmont, Missouri	A 7 Nov 1861 D	Missouri, 1861	US Army CS Army	Grant Polk	1	1.0
Mill Springs, Kentucky	A 19 Jan 1862 D	Kentucky, 1862	CS Army US Army	Zollicoffer Thomas	1	1.0
Fort Donelson, Tennessee	A 15 Feb 1862 D	Henry & Donelson	CS Army US Army	Floyd Grant	1	2.5
Pea Ridge, Missouri	A 7-8 Mar 1862 D	Missouri, 1862	CS Army US Army of the SW	Van Dorn Curtis	2	6.0
Kernstown, Virginia	A 23 Mar 1862 D	Valley, 1862	CS Army US Army	Jackson Shields	1	3.0
Shiloh, Tennessee	A 6-7 Apr 1862	Tennessee, 1862	CS Army of Mississippi US Armies of the Tenn, Grant and the Ohio	A.S. Johnston	2	6.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
First Bull Run	A D	HD	RW	DST	ST	N	--
Wilson's Creek	A D	HD	RW	DST	ST	Y x	Substantial
Belmont	A D	HD	FM	DST	FT	N	--
Mill Springs	A D	HD	RW	WLT	WT	N	--
Fort Donelson	A D	HD	RW	DSC	WT	N	--
Pea Ridge	A D	HD	RW	DST	SpT	N	--
Kernstown	A D	HD	RW	DST	SpT	N	--
Shiloh	A D	HD	RW	DST	SpT	Y x	Substantial

3. STRENGTHS AND COMBAT OUTCOMES

War: American Civil War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
First Bull Run	A 35,000 D 32,500	? 1,300	49 44	2,896 1,982	8.3 6.2	25 0	51.0 --	x	2.4 --
Wilson's Creek	A 5,400 D 10,175	? ?	16 15	1,235 1,095	22.9 10.8	5 0	31.3 --	x	-- 1.2
Belmont	A 3,144 D 4,000	0 0	6 6	607 642	19.3 16.1	0 6	-- 100.0	x	1.0 --
Mill Springs	A 4,000 D 4,000	? ?	12 7	533 262	13.3 6.6	12 0	100.0 --	x	0.3 --
Fort Donelson	A 21,000 D 27,000	? ?	14 ?	2,000 2,609	9.5 9.7	0 ?	-- --	x	1.0 --
Pea Ridge	A 16,202 D 10,500	? ?	50 49	1,300 1,384	4.0 6.6	4 10	8.0 10.2	x	1.0 --
Kernstown	A 3,087 D 7,000	290 750	30 24	718 590	23.3 8.4	0 0	-- --	x	N --
Shiloh	A 40,335 D 66,812	? ?	108 170	10,699 13,047	13.3 9.8	30 29	13.9 8.5	x	1.5 --

4. INTANGIBLE FACTORS
War: American Civil 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 Accompl.
First Bull Run	A D	C x	C	C	C	N	C	C	N	x	2.4 --	3 5
Wilson's Creek	A D	C C	C	C	C	N	N	C	x	x	-- 1.2	5 6
Belmont	A D	C x	C	C	C	N	O	C	x	x	-- 1.0	6 5
Mill Springs	A D	C x	C	C	C	N	N	C	N	x	0.3 --	4 8
Fort Donelson	A D	C x	C	C	O	N	N	C	x	x	1.0 --	7 4
Pea Ridge	A D	C C	C	C	C	N	x	C	N	x	1.0 --	5 6
Kernstown	A D	C x	C	C	C	N	O	C	N	x	N --	6 8
Shiloh	A D	C C	C	C	C	N	C	C	x	x	1.5 --	4 6

6. FACTORS AFFECTING OUTCOME

War: American Civil War

Engagement	Force Quality	Reserves	Mobility Superiority	Force Preparation	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Mass, Never,	Narrow front	Logistics	Fortifi-cations	Depth	
First Bull Run	A D	N	X	N	N	N	X	N	N	N	N	N	N	N	N
Wilson's Creek	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Belmont	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Mill Springs	A D	N	N	N	N	N	N	N	N	N	N	N	O	N	N
Fort Donelson	A D	N	N	N	N	N	N	N	N	N	N	N	O	N	N
Pea Ridge	A D	N	N	N	N	N	N	N	N	N	N	N	O	N	N
Kernstown	A D	N	N	N	N	N	X	N	N	N	N	N	N	N	N
Shiloh	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
War: American Civil War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
	A	D	F	--		
First Bull Run	A	E(LF) D/O	E(LR) --	X	X	R, WD --
Wilson's Creek	A	F D/O	--	X	X	R, WD --
Belmont	A	F D/O, E(LF)	--	X	X	P, WD --
Mill Springs	A	F D/O(EE)	--	X	X	R, WDL PS
Fort Donelson	A	F D/O	--	X	X	P, WD PS
Pea Ridge	A	E(LR) D/O	E(RF) --	X	X	R, WD --
Kernstown	A	F D/O	--	X	X	R WD
Shiloh	A	F D/O	--	X	X	P, R, WD --

1. IDENTIFICATION
War: American Civil War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Front Royal, Virginia	A 23 May 1862 D	Valley, 1862	CS Valley Army 1st Md. Rgt.	Jackson Kenly	1	0.5
First Winchester, A Virginia	D 25 May 1862	Valley, 1862	CS Valley Army US V Corps	Jackson Banks	1	2.4
Cross Keys, Virginia	A 8 Jun 1862 D	Valley, 1862	US Army of W.Va. CS Valley Army	Fremont Bell	1	2.4
Port Republic, Virginia	A 9 Jun 1862 D	Valley, 1862	CS Valley Army US V Corps	Jackson Tyler	1	2.0
Seven Pines (Fair Oaks), Va	A 31 May-1 Jun D 1862	Peninsular, 1862	CS Army US Army of the Potomac	J. E. Johnston, Smith McMellan	2	15.0
Mechanicsville, Virginia	A 26 Jun 1862 D	Peninsular, 1862	CS Army of No. Va. US Army of the Potomac	Lee Porter	1	17.0
Gaines's Mill, Virginia	A 27 Jun 1862 D	Peninsular, 1862	CS Army of No. Va. US Army of the Potomac	Lee Porter	1	12.0
Glendale-Frayser's Farm, Virginia	A 29-30 Jun 1862 D	Peninsular, 1862	CS Army of No. Va. US Army of the Potomac	Lee Sumner, Heintzelman Porter	2	12.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Front Royal	A D	H/WDL	R4	DST	SpT	Y	x
First Winchester	A D	HD	RM	DST	SpT	N	--
Cross Keys	A D	HD	RM	DST	ST	N	--
Port Republic	A D	HD	RM	DST	ST	N	--
Seven Pines	A D	HD	RM	DST	SpT	N	--
Mechanicsville	A D	HD	RM	DST	ST	N	--
Gaines's Mill	A D	HD	RM	DST	ST	N	--
Glendale-Frayser's Farm	A D	HD	RM	DST	ST	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: American Civil War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Front Royal	A 16,000 D 1,063	1,700 0	48 2	35 904	0.2 85.0	0 2	-- 100.0	x	1.0 --
First Winchester	A 16,000 D 7,000	1,700 ?	48 2	365 2,126	2.3 30.4	0 2	-- 100.0	x	2.0 --
Cross Keys	A 10,500 D 5,000	? ?	30 16	684 288	6.5 5.8	0 0	-- --	x	0 --
Port Republic	A 15,000 D 3,000	? 150	12 16	800 1,018	5.3 34.0	0 8	-- 50.0	x	2.0 --
Seven Pines	A 41,816 D 41,797	? ?	? ?	6,100 5,000	7.3 6.0	10 ?	-- ?	x	6 --
Mechanicsville	A 16,808 D 15,631	? ?	? ?	1,484 1,361	8.8 2.3	? ?	-- --	x	0 --
Gaines's Mill	A 57,018 D 34,214	? ?	? ?	8,751 6,837	15.3 20.0	? ?	-- --	x	0.5 --
Glendale-Frayser's Farm	A 86,748 D 51,908	? ?	? ?	9,477 8,036	5.5 7.7	? ?	-- --	x	0 --

4. INTANGIBLE FACTORS

War: American Civil War

S. 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.
Front Royal	A D	C X	C	C	C	X	X	C	X	X	1.0 --	9 3
First Winchester	A D	C X	C	X	C	X	C	C	X	X	1.6 --	8 3
Gross Keys	A D	O C	C	C	C	C	C	C	N	X	0 --	9 3
Port Republic	A D	C X	C	C	C	N	N	C	N	X	1.6 --	8 5
Seven Pines	A D	C C	C	C	C	N	N	C	X	X	0 --	5 5
Mechanicsville	A D	C C	C	C	C	N	N	C	X	X	0 --	6 7
Gaines's Mill	A D	C C	C	C	C	N	N	C	X	X	0 --	5 5
Glendale-Frayser's Farm	A D	C C	C	C	C	N	N	C	X	X	0 --	5 6

6. FACTORS AFFECTING OUTCOME

War: American Civil War

7. COMBAT FORMS AND RESOLUTION OF COMBAT
War: American Civil War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Front Royal	A D	F, EE D	-- --		X	B A
First Winchester	A D	F, E(RF) D	-- --		X	B, Ps ML
Cross Keys	A D	F D/O	-- E(F)		X	R, MD
Port Republic	A D	F D/O	-- --		X	B, Ps ML
Seven Pines	A D	F D	-- --		X	R
Mechanicsville	A D	F D	-- --		X	R
Gaines's Mill	A D	F D	-- E(RG)		X	R
Glendale-Frayser's Farm	A D	F D	-- --		X	R

1. IDENTIFICATION
War: American Civil War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Malvern Hill, Virginia	A 1 Jul 1862 D	Peninsular	CS Army of No. Va. US Army of the Potomac	Lee McClellan	1	12.0
Cedar Mountain, Virginia	A 9 Aug 1862 D	Second Bull Run	US Army of Va. (-) CS Army of No. Va.	Banks Jackson	1	13.0
Second Bull Run, Virginia	A 29-30 Aug 1862 D	Second Bull Run	US Army of Va. (+) CS Army of No. Va.	Pope Lee	2	11.0
South Mountain, Maryland	A 14 Sep 1862 D	Antietam	US Army of the Potomac CS Army of No. Va. (-)	McClellan D.H. Hill	1	10.0
Antietam, Maryland	A 17 Sep 1862 D	Antietam	US Army of the Potomac CS Army of No. Va.	McClellan Lee	1	8.0
Corinth, Mississippi	A 3-4 Oct 1862	Iuka-Corinth	US Army of the Miss. CS Army of W. Tenn.	Rosecrans Van Dorn	2	6.0
Perryville, Kentucky	A 8 Oct 1862 D	Perryville	US Army of the Ohio CS Army of Tenn. (-)	Buell Bragg	1	9.0
Fredericksburg, Virginia	A 13 Dec 1862 D	Fredericksburg	US Army of the Potomac CS Army of No. Va.	Burnside Lee	1	12.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Malvern Hill	A D	HD	RW/RGM	DST	ST	N	--
Cedar Mountain	A D	HD	RW	DST	ST	N	--
Second Bull Run	A D	HD	RW	DST	ST	N	--
South Mountain	A D	HD	RGM	DST	FT	N	--
Antietam	A D	HD	RW	DST	FT	N	--
Corinth	A D	PD	RW	DST	FT	N	--
Perryville	A D	HD	RW	DST	FT	N	--
Fredericksburg	A D	PD	RW	DST	WT	N	--

3. STRENGTHS AND COMBAT OUTCOMES
War: American Civil War

Engagement	Strength			Battle Casualties			Arty. Pieces Lost			Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	\$/Day	Total	%/Day	Total	%/Day		
Malvern Hill	A 86,748 D 83,345	?	?	?	9,477 8,036	10.9 9.6	?	?	--	x	0 --
Cedar Mountain	A 8,030 D 16,848	1,167 1,200	?	?	2,353 1,338	29.3 7.9	?	?	--	x	1.0 --
Second Bull Run	A 75,696 D 48,527	?	?	?	14,462 9,474	9.6 9.8	?	?	--	x	1.0 --
South Mountain	A 28,480 D 17,852	?	?	27 7	1,813 2,685	6.4 15.0	?	?	--	x	3.0 --
Antietam	A 90,000 D 46,000	4,500 ?	?	?	12,410 13,700	13.8 29.8	?	?	--	x	1.0 --
Corinth	A 21,147 D 22,000	?	?	?	2,520 4,233	6.0 9.6	?	?	--	x	3.0 --
Perryville	A 36,940 D 16,000	?	?	?	4,211 3,396	11.4 21.2	?	?	--	x	0.5 --
Fredericksburg	A 106,007 D 72,497	?	?	?	12,653 4,656	11.9 6.4	?	?	--	x	1.0 --

4. INTANGIBLE FACTORS
War: American Civil War

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logistics	Momen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Malvern Hill	A	C	C	C	C	X	N	C	X	X	0	4
	D	C	C	C	C	C	N	C	X	X	--	6
Cedar Mountain	A	C	C	C	C	C	O	C	X	X	1.0	5
	D	C	C	C	C	C	X	C	X	X	--	6
Second Bull Run	A	C	X	C	C	C	X	C	X	X	1.0	3
	D	C	C	C	C	C	X	C	X	X	--	9
South Mountain	A	C	C	C	C	C	N	C	X	X	3.0	6
	D	C	C	C	C	C	X	C	X	X	--	5
Antietam	A	C	C	C	C	C	X	C	X	X	1.0	5
	D	X	C	C	C	C	N	C	X	X	--	7
Corinth	A	C	C	C	C	C	N	C	X	X	3.0	7
	D	C	C	C	C	C	N	C	X	X	--	6
Perryville	A	D	X	X	X	X	C	C	X	X	0.5	5
	D	C	X	X	C	C	N	C	N	N	--	6
Fredricksburg	A	C	X	X	C	C	N	C	N	X	1.0	3
	D	C	X	X	C	C	N	C	N	X	--	10

6. FACTORS AFFECTING OUTCOME

War: American Civil War

Engagement	Force Quality	Reserves	Mobility Superiority	Force Prepar- durance	Weather	Terrain, Roads	Leader- ship	Planning	Surprise	Maneuver, Mass,	Narrow Front	Logistics	Fortifi- cations	Depth	
Malvern Hill	A D	N	N	N	N	x	N	N	N	N	N	N	N	N	N
Cedar Mountain	A D	N	x	N	N	N	x	N	N	N	N	N	x	N	N
Second Bull Run	A D	N	N	N	N	x	N	N	N	N	N	N	N	N	N
South Mountain	A D	N	x	N	N	N	N	N	N	N	N	N	N	N	N
Antietam	A D	N	x	N	N	N	N	N	N	N	N	N	x	N	N
Corinth	A D	N	x	N	N	N	x	N	N	N	N	N	x	N	N
Perryville	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Fredericksburg	A D	N	N	N	N	N	N	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: American Civil War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Malvern Hill	A D	F D	--	--	X	R, WD
Cedar Mountain	A D	F D/O	--	--	X	R, WD
Second Bull Run	A D	F D/O, E(LF)	--	--	X	R, WD B, Ps
South Mountain	A D	F, E(LF)	--	--	X	P, Ps WD
Antietam	A D	F, EE D/O	--	--	X	R, S WD
Corinth	A D	F, EE	--	--	X	B, Ps WD
Perryville	A D	F D/O, F, E(LF)	--	--	X	R, P, WD
Fredericksburg	A D	F	--	--	X	R, WD --

1. IDENTIFICATION
War: American Civil War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Murfreesboro, Tennessee	A 31 Dec 1862- D 3 Jan 1863	Stones River	CS Army of Tennessee US Army of the Cumberland	Bragg Rosecrans	4	7.0
Chancellorsville, Virginia	A 1-6 May 1863	Chancellorsville	US Army of the Potomac CS Army of Northern Virginia	Hoover Lee	6	25.0
Champion's Hill, Mississippi	A 16 May 1863	Vicksburg	US Army CS Army	Grant Pemberton	1	6.4
Brandy Station, Virginia	A 9 Jun 1863	Gettysburg	US Cav. Corps CS Cav. Corps	Pleasanton Stuart	1	8.0
Gettysburg, Pennsylvania	A 1-3 Jul 1863	Gettysburg	CS Army of Northern Virginia US Army of the Potomac	Lee Meade	3	10.5
Chickamauga, Georgia	A 19-20 Sep 1863	Chickamauga	CS Army of Tennessee US Army of the Cumberland	Bragg Rosecrans	2	10.0
Chattanooga, Tennessee	A 24-25 Nov 1863	Chattanooga	US Army of the Cumberland CS Army of Tennessee	Grant Bragg	2	16.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Murfreesboro	A D	HD	RM	WLC	WT	X	Substantial
Chancellorsville	A D	HD	RM	DST	SpT	X	Complete
Champion's Hill	A D	HD	RM	DST	SpT	--	--
Brandy Station	A D	HD	RM	DST	ST	X	Substantial
Gettysburg	A D	HD	RM	DST	ST	--	--
Chickamauga	A D	HD	RM	DST	FT	X	Substantial
Chattanooga	A D	P /FD	R&M, RM	WL/DST	FT	--	--

3. STRENGTHS AND COMBAT OUTCOMES

War: American Civil War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Murfreesboro	A 34,732 D 41,400	4,500 3,200	120 100	11,739 12,906	8.4 7.8	6 28	1.3 7.0	x x	2.0 --
Chancellorsville	A 134,000 D 80,000	? ?	404 170	17,278 12,821	2.1 2.7	120 7	5.0 0.7	x x	0 --
Champion's Hill	A 29,373 D 20,000	? 500	? ?	2,441 3,851	8.3 19.3	? 11	-- --	x x	2.0 --
Brandy Station	A 12,000 D 10,000	? ?	? ?	900 500	7.5 5.0	? ?	-- --	x x	1.5 --
Gettysburg	A 75,054 D 83,289	8,000 13,000	250 300	28,063 23,049	12.5 9.2	3 6	0.4 0.7	x x	1.1 --
Chickamauga	A 66,326 D 58,222	8,000 10,000	? 246	18,454 16,170	13.9 13.9	15 51	-- 10.4	x x	1.6 --
Chattanooga	A 61,000 D 40,000	? 4,856	? ?	5,824 6,667	4.8 8.3	? 40	-- --	x x	4.4 --

4. INTANGIBLE FACTORS

War: American Civil 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 Accom-p.
Murfreesboro	A	C	C	C	N	N	C	x	x	x	2.0	6
	D	C	x	C	N	x	C	x	x	x	--	5
Chancellors-ville	A	D	x	C	C	N	C	x	x	x	0	3
Champion's Hill	A	C	x	C	N	N	C	x	x	x	--	10
Brandy Station	A	C	C	C	N	N	C	x	x	x	2.0	8
	D	C	C	C	N	x	C	x	x	x	--	4
Gettysburg	A	D	C	C	N	N	C	x	x	x	1.5	6
	C	O	C	C	N	x	C	x	x	x	--	5
Chickamauga	A	D	O	C	N	N	C	x	x	x	1.6	6
Chattanooga	A	D	x	C	N	N	C	x	x	x	4.4	8
											--	4

6. FACTORS AFFECTING OUTCOME

War: American Civil War

Engagement	Force Quality	Mobility Superiority	Force Prepon-derance	Weather	Terrain, Roads	Leader-ship	Planning	Surprise	Maneuver, Mass,	Network front	Logistics	Portelli- cations	Depth
Murfreesboro	A D	N	N	N	N	N	N	N	N	N	N	N	N
Chancellorsville	A D	N	N	N	N	N	N	N	N	N	N	N	N
Champion's Hill	A D	N	N	N	N	N	N	N	N	N	N	N	N
Brandy Station	A D	N	N	N	N	N	X	N	N	N	N	N	N
Gettysburg	A D	N	N	N	N	N	X	N	N	N	N	X	X
Chickamauga	A D	N	N	N	N	N	O	N	N	N	N	X	X
Chattanooga	A	N	N	N	N	N	N	N	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: American Civil War

Engagement	Plan and Maneuver		Success	Resolution
	Attack and Defense Scheme	Secondary Attack		
Murfreesboro	A D	F, EE D	-- --	X R, WD B
Chancellorsville	A D	E(IR) D/O, E(RR)	F(RF) --	X X P, Ps WD
Champion's Hill	A D	F D	-- --	X X P, WD --
Brandy Station	A D	F, E(RR) D/O	-- --	X R, WD --
Gettysburg	A D	F, EE D	-- --	X X P, Ps WD
Chickamauga	A D	F D	-- --	X X B, Ps WD
Chattanooga	A D	F, EE D	F, P --	X X B, Ps WD

1. IDENTIFICATION
War: American Civil War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
The Wilderness, Virginia	A 5-6 May 1864 D	Wilderness	US Army of the Potomac CS Army of No. Va.	Grant Lee	2	10.0
Spotsylvania, Virginia	A 8-18 May 1864 D	Spotsylvania	US Army of the Potomac CS Army of No. Va.	Grant Lee	7 (combat)	8.0
New Market Virginia	A 15 May 1864 D	Shenandoah Valley, 1864	CS Army of No. Va. US Army of the Potomac	Breckinridge Sigel	1	2.5
Cold Harbor, Virginia	A 3 Jun 1864 D	Wilderness-Spots.- Cold Harbor	US Army of the Pot. (+) CS Army of No. Va.	Grant Lee	1	12.0
Kenesaw Mtn., Georgia	A 27 Jun 1864 D	Atlanta	US Army of the Omb'd CS Army of Tennessee	Sherman Johnston	1	11.0
Peachtree Creek, Georgia	A 20 Jul 1864 D	Atlanta	CS Army of Tennessee US Army of the Omb'd	Hood Thomas	1	5.0
Atlanta, Georgia	A 22 Jul 1864 D	Atlanta	CS Army of Tennessee US Army of the Tenn.	Hood McPherson	1	7.0
Petersburg, Virginia	A 15-18 Jun 1864 D	Petersburg	US Army of the James CS Petersburg Gar. (+)	Butler Beauregard	4	6.0
Globe Tavern, Virginia	A 18-21 Aug 1864 D	Siege of Petersbg.	US V Corps (+) CS III Corps (+)	Warren Hill	4	4.0
Opequon Creek, Virginia	A 19 Sep 1864 D	Sheridan's Valley	US Army of the Shen. CS II Corps	Sheridan Early	1	6.4
Cedar Creek, Virginia	A 19 Oct 1864 D	Sheridan's Valley	CS II Corps US Army of the Shen.	Early Sheridan	1	5.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
The Wilderness	A D	HD	RW/RW	DST	SpT	N	--
Spotsylvania	A D	H/PD	RW	DST/WHT	SpT	N	--
New Market	A D	HD	RW	WLT	ST	N	--
Cold Harbor	A D	PD	RW	DST	ST	N	--
Kenesaw Mountain	A D	PD	RW/RgM	DSh	ST	N	--
Peachtree Creek	A D	H/PD	RW	DST	ST	Y	X
Atlanta	A D	HD	RW	DST	ST	Y	X
Petersburg	A D	FD	RW	DST	ST	N	--
Globe Tavern	A D	HD	RW/RW	WHT	ST	N	--
Oreagon Creek	A D	H/PD	RW	DST	ST	Y	X
Cedar Creek	A D	HD	RW	DST	FT	Y	X

3. STRENGTHS AND COMBAT OUTCOMES

War: American Civil War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
The Wilderness	A 101,895 D 61,025	13,003 7,261	318 224	17,666 7,750	8.7 6.4	2 ?	0.3 -	x	0 --
Spotsylvania	A 90,000 D 50,000	12,000 7,000	274 200	18,399 10,000	2.9 2.9	?	-	x	0 --
New Market	A 6,500 D 5,150	900 1,000	14 22	577 831	8.9 16.1	0 5	22.7 -	x	3.2 --
Cold Harbor	A 107,907 D 59,000	12,976 ?	?	11,000 3,000	10.2 5.1	?	-	x	0 --
Kennesaw Mountain	A 16,225 D 17,733	?	200	2,051 442	12.6 2.5	?	-	x	0 --
Peachtree Creek	A 18,832 D 20,139	?	?	2,746 1,600	14.6 7.9	?	-	x	N --
Atlanta	A 36,934 D 30,477	7,150 ?	?	8,000 3,722	21.7 12.2	?	?	x	1.5 --
Petersburg	A 63,797 D 41,499	?	?	8,150 4,752	1.2 2.9	?	-	x	2.4 --
Globe Tavern	A 20,289 D 14,787	?	?	4,455 1,619	5.5 2.7	?	-	x	1.0 --
Opequon Creek	A 37,711 D 17,103	10,000 5,135	100 ?	5,018 3,921	13.3 22.9	?	?	x	13.0 --
Cedar Creek	A 18,410 D 30,829	3,864 7,929	40 ?	2,910 5,665	15.8 18.4	24 0	60.0 -	x	9.0 --

4. INTANGIBLE FACTORS
War: American Civil War

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accompl.
The Wilderness	A	C	C	C	C	C	C	X	X	0	4
	D	C	C	C	C	C	C	X	X	--	5
Spotsylvania	A	C	C	C	C	C	C	X	X	0	5
	D	C	C	C	C	C	C	X	X	--	6
New Market	A	C	O	C	C	C	C	X	X	3.2	5
	D	C	O	C	C	C	C	X	X	--	3
Cold Harbor	A	C	O	C	C	C	C	X	X	0	5
	D	A	O	C	C	C	C	X	X	--	7
Kenesaw Mountain	A	C	C	C	C	C	C	X	X	0	4
	D	C	C	C	C	C	C	X	X	--	7
Peachtree Creek	A	C	X	C	C	C	C	X	X	N	3
	D	C	X	C	C	C	C	X	X	--	7
Atlanta	A	C	X	C	C	C	C	X	X	1.5	3
	D	C	X	C	C	C	C	X	X	--	6
Petersburg	A	C	O	C	C	C	C	O	X	2.4	4
	D	C	O	C	C	C	C	C	X	--	7
Globe Tavern	A	C	C	C	C	C	C	C	X	1.0	5
	D	C	C	C	C	C	C	C	X	--	4
Opequon Creek	A	C	C	C	X	C	C	C	X	13.0	6
	D	C	C	C	X	C	C	C	X	9.0	4
Cedar Creek	A	C	X	C	X	C	C	C	X	3	7

6. FACTORS AFFECTING OUTCOME
War: American Civil War

Engagement	Force Quality	Reserves	Mobility	Pre-positioned resources	Weather	Roads	Leadership	Planning	Surprise	Masses, material	Maneuver,	Logistics	Portfolios - cutlions	Critical
The Wilderness	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Spotsylvania	A D	N	N	N	N	N	X	X	X	N	X	N	N	N
New Market	A D	N	N	N	N	O	N	N	N	N	N	N	N	N
Cold Harbor	A D	N	N	N	N	O	X	X	X	N	N	N	N	N
Kenesaw Mountain	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Peachtree Creek	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Atlanta	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Petersburg	A D	N	N	N	N	N	O	O	N	N	N	N	N	N
Globe Tavern	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Opequon Creek	A D	N	N	N	N	N	N	N	N	N	N	N	N	N
Cedar Creek	A D	N	N	N	N	N	X	X	X	N	N	N	N	N

7. COMBAT FORMS AND RESOLUTION OF COMBAT
 War: American Civil War

Engagement	Main Attack and Scheme of Defense		Secondary Attack	Success	Resolution
	Plan and Maneuver				
The Wilderness	A D	F, E D/O	-- --	X	R, S R, S, WD
Spotsylvania	A D	F, E D/O	-- --	X	S, S, WD
New Market	A D	F D	-- --	X	P WD
Cold Harbor	A D	F D	-- --	X	R, S S, WD
Kenesaw Mountain	A D	F, E D	-- --	X	R, S S, WD
Peachtree Creek	A D	F, E D/O	-- --	X	R, WD
Atlanta	A D	F, E D/O	-- --	X	R, WD
Petersburg	A D	F D	-- --	X	R, S S
Globe Tavern	A D	F, E D	-- --	X	P, S S
Opequon Creek	A D	F, EE D	-- --	X	P WDL
Cedar Creek	A D	F, E D/O	-- --	X	R, WD

1. IDENTIFICATION
War: American Civil War (Continued)

Engagement	Date (s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Franklin, Tennessee	A 30 Nov 1864 D	Franklin & Nashville	US Army of Tennessee US IV, XIII Army Corps (+)	Hood Schofield	1	3.5
Nashville, Tennessee	A 15-16 Dec 1864 D	Franklin & Nashville	US Army of the Cumberland (-) (+) CS Army of Tennessee	Thomas Hood	2	8.0
Bentonville, North Carolina	A 19-21 Mar 1865 D	The Carolinas	CS Army of Tennessee US Army of Georgia (-)	Johnston Sherman	3	5.0
Dinwiddie Court House & White Oak Road, Va.	A 29-31 Mar 1865 D	Petersburg	US Army of the Pot. (+) CS Army of No.Va. (elms)	Sheridan Pickett	3	8.0
Five Forks, Virginia	A 1 April 1865 D	Petersburg	US V Corps CS Pickett's Div. (+)	Sheridan Pickett	1	4.0
Selma, Alabama	A 2 April 1865 D	Selma	US Cav Corps Mil Div Mississippi Elms CS Cav Corps	Wilson Forrest	1	5.0
Saylor's Creek, Virginia	A 6 Apr 1865 D	Appomattox	US VI Corps (+) CS Army of No.Va. (elms)	Sheridan, Wright Ewell, Anderson	1	7.2

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: American Civil War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Franklin	A D	PD	RM/FM	DST	FT	N	--
Nashville	A D	PD	RM	DST	WT	N	--
Bentonville	A D	HD	RM	DST	Spt	Y	X
Dinwiddie Court & White Oak Road	A	HD	RM	WLT	Spt	N	--
Five Forks	A D	PD	RM	DST	Spt	N	--
Selma	A	FD	RM	DST	Spt	N	--
Saylor's Creek	A D	HD	RM	WLT	Spt	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: American Civil War

Engagement	Strength		Arty. Pieces	Battle Casualties		Arty. Pieces Lost	%/Day	Success	Advance (Km/Day)
	Total	Cavalry		Total	%/Day				
Franklin	A 26,897 D 27,939	5,000 6,400	? 60	6,252 2,326	23.2 8.3	?	- 8	13.3 x	1.0 --
Nashville	A 49,773 D 23,207	11,643 1,080	170 156	3,061 5,350	3.1 11.5	?	- 59	18.9 x	3.2 --
Bentonville	A 27,000 D 60,000	5,000 4,500	? ?	2,606 1,646	3.2 0.9	?	- 4	x	0 --
Dinwiddie Court House and White Oak Road	A 45,247 D 20,030	11,815 5,700	? ?	2,781 ?	2.0 ?	?	- ?	x x	1.0 --
Five Forks	A 30,000 D 10,000	11,500 ?	? 10	634 5,200+	2.1 52.0+	?	- 10	100.0 x	3.0 --
Selma	A 13,500 D 7,000	? ?	8 ?	400 4,000	3.0 57.1	0 32	- -	x	0.6 --
Saylor's Creek	A 30,000 D 10,000	? ?	?	1,180 7,000	3.9 70.0	?	- 0	x	1.0 --

4. INTANGIBLE FACTORS
War: American Civil War

5. OUTCOME

Engagement	CE	Leadership	Training/ Experience	Morale	Logis- tics	Monen- tum	Intelli- gence	Tech- nology	Initia- tive	Victor	Distance Advanced (Km/Day)	Mission Accomp.
Franklin	A D	C X	C	C	C	C	C	C	X	X	1.0 --	3 7
Nashville	A D	C X	C	X	C	C	C	C	X	X	3.2 --	8 2
Bentonville	A D	C C	C	X	C	C	C	C	X	X	0 --	4 7
Dinwiddie Court House & White Oak Road	A D	C C	C	X	C	C	C	C	X	X	1.0 --	5 5
Five Forks	A D	C C	C	X	C	C	C	C	X	X	3.0 --	8 3
Selma	A D	C C	X	X	C	X	C	C	X	X	0.6 --	8 2
Saylor's Creek	A D	C C	C	X	X	C	C	C	X	X	1.0 --	8 2

6. FACTORS AFFECTING OUTCOME
War: American Civil War

Engagement	Force Quality	Reserves	Mobility Superiority	Preco- dictive Propon- deristic	Weather	Roads, Terrain,	Ship- peder- age	Planning	Surprise	Maneuver, Masses, Narrow Front	Logistics	Fortifi- cations	Depth	
Franklin	A D	N X	X	N	N	N	X	X	N	N	N	N	N	N
Nashville	A D	N X	X	N	O	N	X	N	N	N	N	X	X	N
Bentonville	A D	N X	X	N	N	N	X	X	N	N	N	N	N	N
Dixieville Court House & White Oak Road	A D	N X	X	N	O	N	X	N	N	N	O	N	N	N
Five Forks	A D	N X	X	N	N	N	X	N	N	N	X	N	N	N
Selma	A D	N X	X	N	N	N	X	N	N	N	X	N	N	N
Saylor's Creek	A D	N X	X	N	N	N	X	N	N	N	X	N	N	N

7. COMBAT FORCES AND RESOLUTION OF COMBAT
War: American Civil War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Franklin	A D	F D	--	--	X	R WD
Nashville	A D	F, E (LR) D	--	--	X	B, Ps A
Bentonville	A D	F, E (LF) D/O	--	--	X	R, WD Ps
Dinwiddie Court House & White Oak Road	A D	F, E D	--	--	X	R, S
Five Forks	A D	F, E (LR) D	--	--	X	S, WD
Selma	A D	F D	--	--	X	B WD
Saylor's Creek	A D	F, EE D/O, F	--	--	X	B WDL

THE AMERICAN CIVIL WAR

First Bull Run, 21 July 1861

With the three-month enlistments of many Union soldiers about to expire, in mid-July 1861 Brevet Major General Irvin McDowell moved his 38,000 Union troops from Washington toward the town of Manassas, Virginia, where a Confederate army of 20,000 under Major General Pierre G.T. Beauregard, was posted. Unbeknownst to McDowell, another Confederate force of approximately 12,000 men, commanded by General Joseph E. Johnston, was already enroute from the Shenandoah Valley in sections by train as McDowell prepared to attack the Confederate forces, positioned where the Warrenton Turnpike crossed Bull Run.

McDowell planned to envelop the Confederate line on the left, while holding the center. His plan was too complicated, his troops too inexperienced. After making little headway at first, in the late morning the Union forces pushed the Confederates back to a low ridge called Henry House Hill. There Beauregard set up a new defense line, with a brigade commanded by General Thomas J. Jackson in the center. As the troops on the left started to run away, the sight of Jackson's men, standing "like a stone wall" on the hill caused them to halt. Still the Northerners might well have pushed the Confederates back, had not the last contingent from the Shenandoah arrived by train. Rushed up to bolster the Confederate left, their fresh attack was more than the weary Union soldiers could stand, and they broke, most of them fleeing from the field in panic. The Confederate soldiers were too tired to pursue, had they been ordered to do so. They had lost 1,983 men, the Union forces 2,896.

Significance: This first battle of the Civil War ended the Union's hope for a quick and easy victory, and raised Confederate hopes for victory. Both sides realized the necessity for better trained troops.

Sources: E.1; E.5; E.6.1.

THE AMERICAN CIVIL WAR

Wilson's Creek, 10 August 1861

In early July 1861, Brigadier General Sterling Price's pro-Southern Missouri militia, which had been driven south by Union Brigadier General Nathaniel F. Lyon, joined forces with troops from Arkansas under Brigadier General Ben McCulloch, who assumed command of the joint force. With additional men from Louisiana and Texas -- 11,600 in all -- McCulloch commenced to march to Springfield to drive Lyon out and secure Missouri for the Southern cause. Lyon avoided a surprise attack on 3 August, by withdrawing to Springfield. On 9 August, with the Confederate forces encamped at Wilson's Creek, he moved his 5,400 men out to make a surprise attack. Lyon sent a detachment under General Franz Sigel to hit the enemy rear from the south while with the main body he attacked frontally from the north.

At 0530 on 10 August, Lyon's main attack took the Confederates by surprise. His right wing drove the defenders back over a low ridge south of the Springfield road. Sigel pushed aside token resistance and established a line across Price's and McCulloch's escape route to the south. After a brief lull in the action, Price's troops charged Lyon's positions. The Union troops were pushed back, and Lyon was killed. Sigel meanwhile had been dislodged from his position by a superior force, and, losing all but one cannon, his troops retreated toward Springfield, many of them taken prisoner on the way. A final Confederate counterattack on the main line was beaten back, but with ranks depleted the Union line withdrew. Price and McCulloch did not pursue, and the retreating forces were reunited at Springfield. The next day, however, they evacuated the city.

Significance: The Confederate forces had won a tactical victory, but Lyon's aggressive action had saved Missouri for the Union.

Sources: E.1; E.S.1.

THE AMERICAN CIVIL WAR

Belmont, 7 November 1861

To relieve growing Confederate pressure in Missouri, Major General U.S. Grant, based at Cairo, Illinois, made a hit-and-run attack against the Confederate garrison of 5,000 at Belmont, Missouri, an outpost across the river from Columbus, Kentucky. This was the western end of the Confederate line designed to block river movements south down the Mississippi and up the Tennessee and Cumberland rivers. Disembarking from gunboats about five miles above Belmont, Grant led about 3,000 men against the fort, while gunboats shelled the fortified Confederate positions at Columbus, in order to neutralize the guns and prevent the sending of reinforcements to Belmont. Grant's troops routed the defending force and were looting the camp, when a Confederate counterattack struck the Union flank and rear. Quickly regrouping, the Union troops escaped envelopment and reembarked, to be ferried back up the Mississippi to safety.

Significance: The raid illustrated to the Confederates the vulnerability of the Belmont position but of itself had no tactical or strategic significance.

Sources: E.1; E.6.1.

THE AMERICAN CIVIL WAR

Mill Springs (Logan Cross Roads), 19 January 1862

To head off the advance of 4,000 Union troops under Brigadier General George H. Thomas toward the Cumberland Gap in eastern Kentucky, Confederate generals George Crittenden and Felix Zollicoffer, with about the same number of men, attacked on 19 January 1862. General Thomas calmly organized his units and counterattacked, driving the Southerners from the field.

Significance: The attempt to deny the use of the Cumberland Gap to this portion of the Army of the Ohio failed.

Sources: E.1; E.6.1.

THE AMERICAN CIVIL WAR

Fort Donelson, 15 February 1862

Following the surrender of Fort Henry, Major General U.S. Grant moved his troops on Fort Donelson, twelve miles away, on the Cumberland River. Union gunboats bombarded the fort on 14 February with little effect. The next day the Confederate garrison, under the command of General John B. Floyd, attempted to fight its way out. In an attack on the Union right flank they almost broke through the encircling forces, but Floyd and his two assistant commanders, generals Gideon Pillow and Simon Buckner, disagreed on what to do. While they delayed Grant prepared a counterattack, which swept the Confederate troops back into the fort. Generals Floyd and Pillow escaped up the river. General Buckner, having been refused terms by Grant, surrendered the fort and its occupants unconditionally on 16 February.

Significance: General Albert Sidney Johnston, confederate commander in the west, was forced to abandon Kentucky as a result of the loss of the two forts that controlled the river approaches to western Kentucky.

Sources: E.1; E.6.1.

THE AMERICAN CIVIL WAR

Pea Ridge (Elkhorn Tavern), 7-8 March 1862

On 3 March 1862, Major General Earl Van Dorn took command of the combined Confederate forces in northwest Arkansas and immediately assumed the offensive. Union forces in the area (commanded by Brigadier General Samuel R. Curtis, who learned on 5 March that Van Dorn was preparing to attack) were concentrated on 6 March along Sugar Creek, south of a group of hills called Pea Ridge. The Union defensive positions faced south, where the attack was expected to come. But Van Dorn, rather than risking a frontal assault against the formidable defenses, chose to swing around to the left of the line and attack the Union rear from the northeast. Under cover of darkness, his troops moved out on the night of 6 March only to be slowed down by obstructions placed across the road. Early in the morning, Curtis detected the flanking maneuver and shifted his troops to meet it.

Straggling during the night dispersed the Confederates, and they attacked the original Union rear on the morning of 7 March from both northwest and the northeast, instead of concentrating in one attack from the northeast. The right (northwest) attack under Brigadier General Ben McCulloch had some initial success against hastily shifted Union cavalry. Then two Union infantry divisions arrived and broke up the attack; McCulloch and another Confederate general were killed, several high ranking officers were captured and the Confederate threat from this direction ended. Meanwhile, Van Dorn and Major General Sterling Price attacked from the northeast down a wide, wooded ravine, and drove a Union division back. But the terrain favored the defenders, and a stiff defense checked the attack and prevented a breakthrough. Van Dorn halted his tired troops that evening and both sides consolidated positions.

Early in the morning, Curtis counterattacked under a heavy cannonade, down a sloping field toward a line of woods where the Confederate right was emplaced. Union artillery fire and shrinking ammunition supplies put Confederate guns out of action. Union infantry pushed Confederate infantry out of its positions all along the line. In midafternoon the Confederates withdrew from the battlefield.

Significance: Curtis won a tactical and strategic victory at Pea Ridge. Organized Confederate resistance in Missouri ended and would not threaten the state again until an offensive in the fall of 1864.

Sources: E.1; E.2.

THE AMERICAN CIVIL WAR

Kernstown, 23 March 1862

In March 1862, Confederate Major General T.J. "Stonewall" Jackson, with 4,300 men, was south of Strasburg, in the lower Shenandoah Valley. Union General N.P. Banks, charged with preventing a threat to the security of Washington from the Valley, having decided that Jackson posed no such threat, moved the bulk of his force east to Manassas, leaving about 9,000 men under Brigadier General James Shields around Winchester. When Jackson heard of the moves, he ordered his troops to march north to attack Shields. Covering some 60 kilometers in two days, the Valley Army advanced on Shields at Kernstown, 6.4 kilometers south of Winchester. Believing that this force was Shields's rear guard, Jackson launched an assault that was met with stiff resistance. But even with his reserves, Jackson's troops were outnumbered, and when the Union forces counterattacked the Confederates were forced to withdraw.

Significance: So vigorous was the Confederate attack that Shields reported to his superiors that Jackson commanded a larger force than he actually had. President Lincoln therefore withheld 30,000 men who had been earmarked for General McClellan's campaign against Richmond. With another 10,000 men they were ordered deployed around Fredericksburg, to protect Washington from any offensive launched by Jackson. Thus Jackson's audacity enabled him to tie down 40,000 Federal troops.

Sources: A.7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

Shiloh, 6-7 April 1862

In March of 1862 Major General U.S. Grant and the Army of the Tennessee, en route to Corinth, Mississippi, to attack the strategic railroad junction, halted on the west bank of the Tennessee River near Pittsburg Landing and Shiloh Church, to await the arrival of Major General D.C. Buell and the Army of the Ohio. Confederate General Albert Sidney Johnston, having reorganized his forces following their defeat at Fort Donelson, moved 40,000 troops into position near the Union camp, undetected. Grant had about 35,000 men.

Johnston's troops attacked in the early morning of 6 April and took the defenders by surprise. The sheer weight of the attack, coupled with the shock of surprise, pushed Grant's entire line back. Johnston hoped to get to Pittsburg Landing and cut off Grant's escape, but Grant, having ordered his men to stand fast in an area of the battlefield that became known as the Hornet's Nest, rapidly prepared a new line along a stream that flowed into the river at Pittsburg Landing, and massed all his artillery on a hill overlooking the stream.

General Johnston was mortally wounded, but the Confederates pushed ahead under the command of General P.G.T. Beauregard, as the Union troops withdrew to the new line. Blasted by the artillery and two gunboats in the Tennessee River, the Confederate attempt to take Pittsburg Landing was thrown back, and the attack ended as darkness fell. During the night, in a heavy rain, Buell's army arrived. The following morning, 7 April, the combined Union armies attacked, and this time the stubborn Confederates, with no reinforcements to call on, were driven back beyond Shiloh Church, and down the road to Corinth.

Significance: A disaster to the Union forces was averted, at considerable cost. The way was open for the Union forces to take Corinth. However, it was not until May that the city, by then vacated by Confederate forces, was occupied by Union troops.

Sources: E.1; E.5; E.6.1.

THE AMERICAN CIVIL WAR

Front Royal, 23 May 1962

After checking the advance of Major General John C. Fremont's Union force at McDowell, Virginia on 8 May 1862, General T.J. Jackson moved north up the Shenandoah Valley to face the threat posed by General N.P. Banks's force near Strasburg. He sent Brigadier General Richard Ewell north on the road east of Massanutten Mountain and himself proceeded west of the mountain with his main force. At New Market he turned east through Massanutten's only pass to join Ewell. Near Front Royal on 23 May they encountered Colonel John Kenly's 1st Maryland Regiment, whose task it was to guard the Manassas Gap Railroad at its Shenandoah River bridge. Hopelessly outnumbered, Kenly attempted to resist but was forced to withdraw, pursued by a cavalry unit of 250.

Significance: Jackson's success at Front Royal placed him on Banks's eastern flank and threatened the Union supply base at Winchester. Banks abandoned his fortified positions at Strasburg and withdrew to Winchester, exposing himself to further attack as he did so.

Sources: A.7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

First Winchester, 25 May 1862

Learning that Jackson had taken Front Royal, Union General N.P. Banks moved out of Strasburg on 24 May and began a rapid withdrawal to his major supply base at Winchester. Although Banks reached Winchester before Jackson, Jackson's troops twice attacked the rear of the Federal column and captured prisoners and valuable stores. When Jackson reached the Winchester area, he found Banks holding a strong defensive position on a ridge just south of the town. Early on 25 May Jackson attacked, with some 16,000 men. Despite intense and accurate fire from the rifled cannon of the Union forces, 7,000 men could not resist the onslaught of more than twice their numbers. Banks's line broke, and the Federal troops fled to Harper's Ferry and across the Potomac.

Significance: McDowell's corps, which was to have joined McClellan near Richmond, was sent instead from Fredericksburg toward the Valley. Thus Jackson, in addition to capturing about 9,000 small arms, some cannons, and other valuable stores, as well as 3,000 prisoners, deprived McClellan of 50,000 men and forced the Union to change its plan of campaign.

Sources: A.7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR.

Cross Keys, 8 June 1862

President Lincoln learned of Major General T.J. Jackson's victory at Front Royal on 24 May. Determined to destroy Jackson's Valley Army, Lincoln ordered Major General John C. Fremont to march east from Franklin, West Virginia, to Harrisonburg, thereby cutting Jackson's line of communications from Winchester. The President also ordered generals James Shields and Irvin McDowell to march west from near Fredericksburg to the Valley. Jackson would thus be hemmed in and outnumbered by about four to one. Fremont disregarded his Commander in Chief's order and took a more northerly route to the Valley Pike that more than doubled the distance of his march. Shields, moving in advance of McDowell, recaptured Front Royal on 30 May. Hard marching by the Valley Army, Fremont's timidity, and bad weather enabled Jackson to avoid being ensnared. At one point Fremont could have pounced on the "Stonewall Brigade," but a demonstration deterred him. Heavy rain made the road east of Massanutton Mountain a quagmire. Thus Jackson, availing himself of the macadamized Valley Pike, easily won the race against Shields up the Valley. He had his cavalry set fire to the bridge across the South Fork of the Shenandoah River, which prevented Shields and Fremont from joining forces. Jackson withdrew to Port Republic, 14 kilometers southeast of Harrisonburg and 19 kilometers southwest of Conrad's Store. The Union forces followed him. Jackson sent General Richard Ewell with 5,000 men to Cross Keys, 4.8 kilometers northwest of his own position, to hold Fremont while he prepared to meet Shields. On 8 June Fremont launched a frontal attack against Ewell's right wing, which was sharply repulsed. Ewell's right in turn counter-attacked and advanced almost two kilometers. For the remainder of the day the Union general was content to carry on a long range artillery duel, leaving his wounded to perish in a wheat field.

Significance: Ewell's check of Fremont enabled Jackson to concentrate on Shields's advance from the northeast, and to recall the bulk of Ewell's force to help. Ewell and his reinforcements were to prove decisive in the Battle of Port Republic the next day. (See Port Republic)

Sources: A.7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

Port Republic, 9 June 1862

On 8 June four regiments of Union General James Shields's division, commanded by Brigadier General E.B. Tyler, took up a strong defensive position three kilometers northeast of Port Republic in the Shenandoah Valley. At 0700 the following day Major General T.J. Jackson launched a determined attack on the Federal front. Infantry and artillery fire repulsed the Confederate attack. Jackson sent two regiments of the "Stonewall Brigade" to storm the six-gun battery on the Federal left that was punishing Confederate attackers. The attack was repulsed with heavy casualties. When the leading elements of Ewell's command arrived from Cross Keys, Jackson sent them to envelop the Federal left and silence the battery, while the Stonewall Brigade created a diversion by launching another frontal assault. The Federal troops halted that attack and then counterattacked, driving the Stonewall Brigade back. At this point Ewell himself arrived on the scene and his brigade joined the combat. Meanwhile the Confederate troops sent to envelop the Federal flank, having passed through a thick forest, attacked the formidable Union battery and captured it. Finally, the arrival of more Confederate reinforcements from Cross Keys, and the rallied Stonewall Brigade, drove the Federals from the field.

Significance: After the defeats at Cross Keys and Port Republic, Lincoln ordered both Shields and Fremont to withdraw up the Valley. With fewer than 17,000 men Jackson had tied down between 60,000 and 70,000 Federal troops which could have made the difference in McClellan's drive on Richmond.

Sources: A.7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

Seven Pines (Fair Oaks), 31 May-1 June 1862

Within sight of Richmond, the capital of the Confederacy, Union General George McClellan deployed three corps north of the Chickahominy River to facilitate an expected junction with General Irvin McDowell's corps from the north. Two corps were deployed south of the river: General E.D. Keyes's IV Corps, less than 10 kilometers east of Richmond at Seven Pines, and General Samuel Heintzelman's III Corps, 6.4 kilometers east of Keyes's. Confederate General Joseph E. Johnston planned to take advantage of the division of McClellan's army (which was made worse since the Chickahominy was in flood) to crush the two corps south of the Chickahominy. Divisions commanded by Generals Whiting and James Longstreet would envelop Keyes's right, followed by a frontal attack by General D.H. Hill's division. General Benjamin Huger's division would cover Hill's right flank. The attack was planned for 31 May, unfortunately, Longstreet took the wrong road, hopelessly confusing and delaying the plan. After waiting vainly for six hours for a signal from Huger, D.H. Hill finally made his assault. He met fierce resistance but, reinforced by Longstreet, was able to penetrate the Federal defenses. Keyes, however, formed a new line further east. Meanwhile, Whiting, reinforced by A.P. Hill, made his attack on Keyes's exposed right flank. By this time (late afternoon) Union General Edwin Sumner had brought his II Corps across the Chickahominy and collided with Smith's forces. This brought Whiting's advance to a halt. Keyes was also reinforced by one division of Heintzelman's corps, which proved sufficient to halt Longstreet and D.H. Hill. Johnston was seriously wounded and General G.W. Smith assumed command. The Confederates attacked again the next day but were again repulsed.

Significance: Johnston was incapacitated, and General Robert E. Lee was appointed in his place. Although the Confederates captured many small arms and inflicted heavy casualties on the enemy, they failed in their objective and sustained heavy losses themselves.

Sources: A. 7; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

Mechanicsville, 26 June 1862

In June 1862 the Army of the Potomac under Union General George B. McClellan was in position on the northeastern outskirts of the Confederate capital at Richmond. McClellan's lack of boldness during the previous two months of the Peninsular Campaign had prevented him from capturing Richmond and turned the initiative over to McClellan's opponent, General Robert E. Lee, since 1 June commander of the Army of Northern Virginia. In late June, with all of the Union army except the V Corps of General Fitz-John Porter south of the Chickahominy River, Lee decided to destroy the isolated corps, turn the Union right flank, and cut McClellan's forces off from their supply base at White House on the Pamunkey River. Leaving a covering force east of Richmond, Lee planned to shift the bulk of his army north of the Chickahominy near Mechanicsville. There, Lee's troops were to attack Porter's corps from the front while the forces of General Thomas J. Jackson, enroute from the Shenandoah Valley, swept around Porter's right flank and completed the destruction of his corps.

Lee's attack on 26 June did not proceed as planned. Jackson was delayed and never got in the battle. Lee's frontal attack against the V Corps was repulsed at Beaver Dam Creek east of Mechanicsville. Now aware that his right flank was dangerously exposed to attack by greatly superior forces, during the night, Porter withdrew his troops to a strong defensive position along Boatswain Swamp, through which ran a small northern tributary of the Chickahominy. Here he formed a convex line facing east and north.

Significance: Jackson's inexplicable failure to advance on Porter's right flank and rear probably cost the Confederates a major victory.

Sources: E.1; E.3.1; E.4.1.

THE AMERICAN CIVIL WAR

Gaines's Mill, 27 June 1862

On 27 June, Lee continued his offensive against Porter's corps. Confederate troops pushed back a Union delaying forces at Gaines's Mill, northwest of Boatswain Swamp, and in the afternoon they arrived at the main defenses of the V Corps, located on the eastern side of the swamp. Defending from field fortifications located on commanding terrain, Porter's troops easily stopped two Confederate assaults with heavy losses to the attackers, before Lee halted his attack to await the arrival of Jackson's forces, once again delayed. After Jackson finally arrived on the field, Lee launched an all out attack against the entire V Corps, with a heavy concentration against the center of the Union line. Once again the defenders inflicted heavy losses on Lee's troops, but a penetration was made in the Union center, and Confederate troops poured into it to widen the breach. Union reinforcements arrived from south of the Chickahominy, however, and helped Porter to check the Confederate advance and restore order to his shaken troops. Again Lee's hopes of a major victory were thwarted by the stubborn defense of the US V Corps.

Significance: The right wing of the Union army had been driven back but had neither been turned nor seriously damaged by Lee's attacks of the 26th and 27th. Lee's hopes to cut McClellan's army off from its supply base were thwarted. McClellan, however, was convinced that his army was threatened in its position northeast of Richmond. He ordered his troops south to the James River where a new supply base was established.

Sources: A.7; E.1; E.3.1; E.6.2.

THE AMERICAN CIVIL WAR

Glendale-Frayser's Farm, 29-30 June 1862

Following the Battle of Gaines's Mill, on the evening of 27 June, Union General McClellan ordered the Army of the Potomac to withdraw from its positions to the north and east of Richmond to the James River, where it could be supported by the Union Fleet. McClellan said that the army was "changing its base." His corps commanders were dumbfounded since they knew that Porter's V Corps had repulsed the vigorous Confederate attacks of the two previous days. McClellan, however, insisted upon withdrawal. That night and the next day the Union V and IV Corps (Porter and Keyes) withdrew. Porter's corps and the army's trains moved south over the bridges across White Oak Swamp while Keyes, slipping to his left, took up positions near Glendale, west of the swamp and northwest of Malvern Hill, covering the line of retreat. The other three corps readied themselves for departure that night, skirmishing with Magruder's men, and with Lee's troops, which had moved up to the Chickahominy in Porter's old positions.

Early on 29 June Lee discovered the withdrawal of the entire Union army. He guessed that McClellan was heading for the James, and gave immediate orders for pursuit.

Magruder soon came on Sumner's corps, which, with part of Franklin's, was the Union rear guard. Sumner had taken up a defensive position near Savage's Station, and repulsed Magruder's repeated assaults. Magruder expected Jackson to come up on Sumner's right flank, but Jackson had been delayed in rebuilding the bridges the Federals had destroyed, and didn't arrive till after dark. Meanwhile, Sumner, his mission accomplished, had withdrawn toward White Oak Swamp.

By morning of 30 June the entire Union army and its trains had crossed White Oak Swamp. The bridges had been destroyed and the fording was covered by Franklin. Sumner, Heintzelman and Porter held a line from White Oak Swamp to the James, west of Malvern Hill, while Keyes was in reserve on Malvern Hill. The trains continued southward, behind this line, heading for Harrison's Landing and the protection of the Union Navy.

All day and into the night, Longstreet and A.P. Hill, following their orders from Lee, attempted vainly to break through the Federal line near Frayser's Farm and Glendale. Jackson, meanwhile, who had reached the northern side of White Oak Swamp with D.H. Hill, contented himself with exchanging

THE AMERICAN CIVIL WAR

Glendale-Frayser's Farm, 29-30 June 1862 (Continued)

artillery fire with Franklin, south of the swamp. During the night most of the Union army fell back to positions McClellan had selected on Malvern Hill, while Keyes' corps, covering the rear of the trains, moved down toward Harrison's Landing.

Significance: The Union troops again demonstrated their capability to stand on equal terms with the best of the Confederates. But their defensive successes were negated by the pusillanimous performance of their commanding general.

Sources: A.7; E.2.

THE AMERICAN CIVIL WAR

Malvern Hill, 1 July 1862

Continuing its withdrawal, by the evening of 30 June the Army of the Potomac fell back to Malvern Hill, a strong natural position on the James River. The Union position, in McClellan's absence, was commanded by Major General Fitz-John Porter. The line faced north, occupying a restricted front on the hill, its flanks protected by swamps and creeks. The powerful Union artillery was massed on the crest of the hill.

The Confederate army approached the Union position from the north on the morning of 1 July. A planned Confederate artillery preparation was broken up completely by the Union artillery, which dominated the battlefield, and repeated attacks by the Confederate infantry, which began in the late afternoon and continued until nightfall, were met by a murderous concentrated fire of infantry small arms and artillery and beaten back with heavy losses.

McClellan did not capitalize on this success. During the night of 1-2 July he ordered the hill abandoned and the Union troops moved to a new base at Harrison's Landing on the James River, protected by Union gunboats. The Army of the Potomac occupied this base until August, when the Union troops were withdrawn by ship to reinforce Pope's army near Washington. (Second Bull Run Campaign).

Significance: Malvern Hill was the last battle of the Seven Days' Battle and of the Peninsular Campaign. Although it was a Confederate defeat, the Union withdrawal effectively ended the threat to Richmond. Lee was now free to move against Union forces in northern Virginia.

Sources: E.1; E.6.2; E.7.

THE AMERICAN CIVIL WAR

Cedar Mountain, 9 August 1862

Disappointed with McClellan's performance on the Peninsula, President Lincoln called Major General John Pope from successful operations in the West to command a new Army of Virginia. Pope was directed to advance on Richmond from the north, while Lee was engaged in operations against McClellan.

As Pope advanced southward across the Rappahannock River toward Culpeper, Lee realized that his army was in danger of being crushed between the two Federal armies, or that these two armies would join forces in northern Virginia, and overwhelm him with superior numbers. On 7 August he ordered Jackson to move north to delay Pope and to offer battle if conditions favored. Jackson, with about 24,000 men, moved north from Gordonsville to the Rapidan River and on the morning of 9 August started crossing that river and heading toward Culpeper, hoping to threaten Pope's communications. In the meantime Pope, learning of Jackson's advance, ordered General N.P. Banks to march south from Culpeper and delay the Confederates. Although he had fewer than 10,000 men, Banks struck hard at Jackson's left flank, driving it back. The Confederate center was in danger of collapsing, when A.P. Hill's reserve division was thrown into the battle. While Jackson was rallying the rest of the Confederate line, Hill counterattacked and drove Banks and his force back to Culpeper.

Significance: Jackson's personal efforts and A.P. Hill's timely counterattack had saved the Army of the Valley from defeat. Banks had delayed their advance, however, buying time for the Union forces.

Sources: A.7; E.1; E.2; E.3.1; E.4.2.

THE AMERICAN CIVIL WAR

Second Bull Run (Second Manassas), 29-30 August 1862

Lee attempted to concentrate against General John Pope's Union Army of Virginia, along the line of the Rappahannock River, before McClellan's Army of the Potomac, moving by water from Harrison's Landing on the Virginia Peninsula, could reinforce him. Lee, whose force was inferior in numbers to each of the Union armies, sparred inconclusively with Pope along the Rappahannock before sending General T.J. Jackson's corps on a strategic envelopment of Pope's right flank (25 August). Pope was slow to react to Jackson's move, and Jackson fell on Pope's forward logistical base at Manassas Junction and destroyed it (26 August). Having disrupted Pope's communications with Washington, Jackson then fell back to Sudley Mountain, where he posted his men in a strong defensive position and awaited Pope's attack. On 29 August Pope, reinforced by elements of McClellan's army, attacked Jackson; in a day of furious fighting he was unable to break Jackson's line. General James Longstreet's corps of Lee's army, meantime, moved into a position threatening Pope's left flank. On 30 August Pope renewed his attacks against Jackson, ignoring the threat Longstreet posed to his flank. Jackson again repelled Pope's attacks, and Longstreet, moving forward into a void where Pope expected Fitz-john Porter's corps of McClellan's army to be (due to confusion in orders Porter was about four kilometers southeast), took the entire Union force in flank and threw it back across the fields and hills south of Bull Run Creek. Pope managed to extricate his army from this predicament and withdraw to the defenses of Washington.

Significance: Pope's defeat resulted in both Union armies withdrawing to the fortifications covering Washington. Pope was removed from command, and McClellan, who had actually been temporarily without a command, assumed command of the united Union armies. Lee, having pursued Pope nearly to Washington, embarked on an invasion of the North.

Sources: E.1; E.6.2.

THE AMERICAN CIVIL WAR

South Mountain, 14 September 1862

On 13 September 1862 General George B. McClellan's Union Army of the Potomac was at Frederick, Maryland, shielding Washington, D.C., against General Robert E. Lee's Confederate Army of Northern Virginia, which had crossed the Potomac River and invaded Maryland. Lee's army was west of Frederick, divided into two separated wings. General James Longstreet's wing was in the vicinity of Hagerstown, Maryland, and General T.J. Jackson's wing was at Harpers Ferry on the Potomac, some 20 kilometers south of Longstreet's southernmost elements. The dangerous separation of the two wings was masked by the South Mountain range, which intervened between the two opposing armies.

McClellan intercepted one of Lee's orders describing the plan and disposition of the Confederate forces; he reacted by striking west, attempting to cross the passes of the South Mountain range and attack and defeat Lee's separated wings in detail.

The Battle of South Mountain took place at Turner's Gap, the northernmost of two passes the Federal forces had to cross in order to strike at Lee's wings to the west. The gap was held by General D.H. Hill's division (reinforced) of Longstreet's Corps. The battle began at 0900 in the morning of the 14th and continued until midnight. The Union forces that attacked -- elements of McClellan's I and XI corps -- assaulted the Confederate position from the front and worked their way around the Confederate left flank, which was enveloped by 2200 hours. At that point the outnumbered Confederates began to disengage and withdraw. In the south, at Crampton's Gap, the Federals were also successful.

Significance: The victory presented McClellan with a great opportunity, but his cautious nature prevailed, and he was slow to follow up his successes at Turner's Gap and Crampton's Gap. Lee began to concentrate his army at Sharpsburg, west of South Mountain.

Sources: E.1; E.5; E.6.2.

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Antietam (Sharpsburg), 17 September 1862

The Union army having forced the gaps in the South Mountain barrier west of Frederick, Maryland, in the battles of Turner's Gap and Crampton's Gap, General G.B. McClellan had an excellent opportunity to defeat Lee's Confederate Army of Northern Virginia in detail. McClellan, however, wasted a day and was not prepared to attack Lee, at Sharpsburg, on the Antietam Creek, until the morning of 17 September. Lee, by then, had effected a concentration of his two wings (minus A.P. Hill's Division of Jackson's Corps, which Jackson left behind to secure prisoners and stores captured at Harper's Ferry. Lee's position just west of Antietam Creek in a loop of the Potomac River (which protected his flanks to a certain extent) was strong, but the Union forces had a significant superiority in numbers, and the Confederates, in the coming battle, would fight with their backs to the river, which could be crossed by only a few fords.

At dawn on 17 September the first of a series of piecemeal Union attacks which continued throughout the day was made against Lee's left by General Joseph E. Hooker's I Corps. Hooker was shortly supported by General J.K.F. Mansfield's XII Corps, which attacked on his left. These attacks pushed the Confederates back but did not break them. At 1000 hours General E.V. Sumner's Union II Corps attacked the Confederate left center and initially made some gains, but it too was stopped. The Union VI Corps followed Sumner into action but accomplished little. Directly opposite the Confederate center, General Fitz-John Porter's Union V Corps, which might have cracked Lee's defense, remained practically immobile all day -- held back by McClellan as a reserve. Meantime, on the Union left, General Jacob D. Cox's IX Corps made a series of fruitless attacks against the Confederate right, securely posted on a hill overlooking the only bridge in its zone.

The Confederates repelled or contained all of McClellan's uncoordinated thrusts but, seriously outnumbered, had been pushed back all along the line in desperate fighting. Lee, however, managed the defensive battle magnificently.

The last of many crises for the Confederates occurred during the afternoon when the fighting had died out all along the line except on the Confederate right; there, finally, Cox's men had managed to cross

THE AMERICAN CIVIL WAR

Antietam (Sharpsburg), 17 September 1862 (Continued)

the creek and were driving on Sharpsburg, threatening the Confederate army's only line of communications.

At 1630 hours, however, A.P. Hill's Division arrived from Harpers Ferry and struck Cox's left and rear, ending the Union threat. This attack ended the battle, which is remembered as the single bloodiest day of combat in American history.

Significance: Lee, outnumbered and with his back to the river, staved off a defeat which might have ended in the destruction of his army (and with it the Southern cause). McClellan's incompetence as a commander was revealed, and he was removed from command of the Army of the Potomac. Nonetheless, Lee had to withdraw from Maryland to Virginia, and Antietam -- tactically a draw -- may be considered a Union strategic victory. The result of the campaign reinforced the arguments of the Union's friends in Europe and provided Lincoln with the "victory" he needed to issue the Preliminary Emancipation Proclamation (22 September).

Sources: E.3.1; E.4.2; E.5.

THE AMERICAN CIVIL WAR

Corinth, 3-4 October 1862

In September 1862, the Confederate forces of Generals Earl Van Dorn and Sterling Price were united under Van Dorn's command for an attack against the Union-held junction of the east-west Memphis and Charleston and north-south Mobile and Ohio railroads at Corinth, Mississippi. Van Dorn's overall strategy involved the capture of Corinth and the destruction of its garrison before an invasion of west Tennessee in which Van Dorn planned to defeat other Union forces in detail. In late September Van Dorn moved north parallel to and west of the Mobile and Ohio Railroad before swinging his army east and advancing on Corinth from the northwest. At Corinth, Union General William S. Rosecrans, wary of Van Dorn's movement but unsure of his destination, had concentrated his forces for possible action against the Confederates. As a result, when Van Dorn reached Corinth on 3 October, Rosecrans was there in strength behind two lines of entrenchments.

In the early morning of 3 October Van Dorn's attack struck the first line of Union defenses northwest of Corinth. This line consisted of old Confederate works thinly held by Union troops and intended by Rosecrans only to delay an attack. A successful delaying action was fought until early afternoon, when the defenders began to withdraw to the second line of more formidable defenses, just outside the town. As they pulled back, the Union troops stubbornly contested the Confederate advance. By sunset both sides had assumed new positions, with Rosecrans's forces securely situated in their defenses, and the battle ended for the night. On the following morning Van Dorn renewed his attack, and units on the Confederate left wing penetrated into Corinth before being driven out again. In a fierce battle the Union defenses opposite the Confederate right held out against repeated Confederate assaults until Van Dorn called off his attack in the afternoon and withdrew his troops unmolested to the northwest.

Significance: The successful Union defense at Corinth quickly ended Van Dorn's planned invasion of West Tennessee. However, Rosecrans's failure to pursue immediately allowed Van Dorn to escape. The strategic outposts of Corinth and Memphis remained securely in Union hands.

Sources: A.7; E.1; E.3.1; E.6.2.

THE AMERICAN CIVIL WAR

Perryville, 8 October 1862

In July 1862, after Major General Henry W. Halleck had become General-in-Chief, his western theater was divided into two commands: the Army of the Tennessee, under Major General Ulysses S. Grant, and the Army of the Ohio, commanded by Major General Don Carlos Buell. General Braxton Bragg, commanding the Confederacy's western theater was worried by the threat that Buell's army posed to Chattanooga. Bragg decided to move most of his forces to southeastern Tennessee and then to throw Buell on the defensive by invading Kentucky.

Late in August Bragg moved north from Chattanooga with an army of about 35,000 men, while his principal subordinate, General Edmund Kirby Smith, advanced on a parallel route northward from Knoxville with about 15,000 men. En route, on 30 August, Kirby Smith overwhelmed a small Union force at Richmond, Kentucky, then occupied the state capital at Lexington. By mid-September Bragg and his army were at Munfordville, Kentucky, while Kirby Smith was still at Lexington. Buell, with about 46,000 men, was west of Bragg at Bowling Green but avoided a battle. As Bragg moved slowly north toward Louisville, Buell marched ahead to that city, arriving on 25 February. For a week he did nothing. Meanwhile Bragg had reached Bardstown, about 45 kilometers south of Louisville.

Buell, warned by Halleck that he was about to be relieved of his command, decided to take positive action. He advanced south from Louisville with 60,000 men on 3 October. Bragg, by this time, had also been reinforced to some 60,000 men, but his units, trying to round up recruits and also to live off the impoverished countryside, were widely scattered. Believing that Buell was heading towards Frankfort, Bragg began concentrating south of that city.

Near Perryville remained about 16,000 Confederates: Hardee's corps, part of Polk's, and some cavalry. The weather was dry, water scarce, and Perryville was a valuable watering point. As the Union troops approached, fighting broke out early on October 8; soon two-thirds of Buell's army -- about 37,000 men -- was hotly engaged with Polk and Hardee.

Early in the battle the Confederate veterans came close to driving the much more numerous but less seasoned Union troops off the field. As

THE AMERICAN CIVIL WAR

Perryville, 8 October 1862 (Continued)

Northern reinforcements moved to the sound of the guns, the Confederate onslaught was brought to a halt. But Buell did nothing to coordinate the activities of his now overwhelmingly superior force. His right flank division, almost 20,000 strong under General Crittenden, was held immobilized for several hours by the brilliant diversionary tactics of some 1,200 cavalry under young Brigadier General Joseph Wheeler, while Polk and Hardee repulsed counterattacks by the Federal left wing.

Perryville was a drawn battle, with most of the honors going to the Confederates, who held off a force more than double their size.

Significance: Perryville only briefly postponed the inevitable Confederate withdrawal from Kentucky. Buell's disappointing performance caused him to be relieved and replaced by Major General William S. Rosecrans.

Sources: A.7; E.2.

THE AMERICAN CIVIL WAR

Fredericksburg, 13 December 1862

The Union Army of the Potomac, commanded by General Ambrose Burnside (who had replaced McClellan on 7 November), faced Lee's Army of Northern Virginia on the line of the Rappahannock river at Fredericksburg, Virginia. Burnside determined to strike directly at Richmond by crossing the river at Fredericksburg and pushing due south to the Confederate capitol. Lee's army blocked the way, securely positioned on the heights west and south of the town.

On 11 December Burnside began to put five pontoon bridges across the Rappahannock, using the massed artillery of his army to cover the work of his engineers. On the 13th the Union army crossed on the bridges and prepared to assault Lee's line. The Union attacks against Lee's left and right flanks were piecemeal, mostly by brigade-sized formations. On the Confederate left alone, fourteen such attacks were counted. Each of these was broken up by artillery and musketry. At no point did the attackers actually get close to the Confederate line.

Union casualties in these assaults were tremendous, but the feckless Burnside had to be persuaded by his corps commanders from renewing the assaults the next day. On the 14th the Union army remained in position on the outskirts of Fredericksburg; on the 15th it was withdrawn to the eastern bank of the river.

Significance: The Battle of Fredericksburg accomplished little other than to add to the casualty lists of both sides. It was, however, a stinging defeat for the fine soldiers of the Army of the Potomac, who deserved better of their leaders. Burnside was replaced by General Joseph Hooker on 23 January 1863.

Sources: E.1; E.6.3.

THE AMERICAN CIVIL WAR

Stones River (Murfreesboro), 31 December 1862-2 January 1863

After several Confederate cavalry raids during December, Union General William S. Rosecrans moved southeast from Nashville to attack the Confederate army commanded by General Braxton Bragg. Bragg's intelligence service detected the advance and he concentrated his forces near Murfreesboro just west of and on both sides of the Stones River, which runs generally north to south in that area.

On 31 December, when the armies met, both commanders were planning to attack their opponent's right wing. Bragg struck first and despite a vigorous Federal defense drove the Union right back about five miles. A desperate defense around a small oak grove called the Round Forest finally checked the Confederate attack. On 1 January, both sides remained in position, with most of the Union army against the west bank of the Stones River, and prepared to renew the battle. On 2 January, Bragg ordered one corps back across the river to seize high ground on the Union left from which enfilading fire could hit the main Union positions on the west bank of the River. The Confederates took the hill, but massed Union artillery fire broke up their attack as they pursued Union troops down the reverse slope. On 3 January, Rosecrans remained in position and that night Bragg withdrew his forces to the south.

Significance: This tactically drawn battle was a strategic victory for the Union since Bragg's withdrawal ended any immediate Confederate threat to Kentucky.

Sources: A.7; E.1.

THE AMERICAN CIVIL WAR

Chancellorsville, 1-6 May 1863

In late April 1863, General Joseph E. Hooker, who had replaced General Ambrose Burnside as commander of the Union Army of the Potomac in December, planned to attack General Robert E. Lee's Confederate Army, south of the Rappahannock River. Leaving part of his army under General John Sedgwick opposite Fredericksburg, Hooker took most of his army west, then south across the river. He planned to swing east to attack Lee's left wing. Lee responded by leaving a small force under Early opposite Sedgwick at Fredericksburg, marching west with his main body toward Chancellorsville, where the two armies met on 1 May. Although Hooker's army greatly outnumbered Lee's, the Union general lost his nerve and went on the defensive, turning the initiative over to Lee.

On the next day, while a portion of his army demonstrated opposite the Union center, Lee sent General Thomas J. Jackson with a larger force around the Union right, where he attacked late in the evening of 2 May. The Confederates rolled up the entire Union right wing, but this success was costly, as Jackson was mortally wounded by friendly fire. On 3 May, the Confederate attack continued, but a strong Union defense prevented breakthrough. Meanwhile Sedgwick had driven Early back at Fredericksburg. Lee, leaving a covering force to hold Hooker, hastened east and defeated Sedgwick at Salem Church on 4 May. Lee now turned back to renew his attack on Hooker. Although Hooker still outnumbered Lee and held strong positions south of the Rappahannock, the Union Army of the Potomac withdrew across the river on 6 May.

Significance: Chancellorsville was tactically and strategically a decisive victory for the Confederates. Lee, using bold tactics and aided by Hooker's inaction, soundly defeated the Union army on the field and ended any threat to Richmond. However, the Confederates did lose the brilliant General Jackson, a loss which could not be replaced.

Sources: A.1; A.7; E.1; E.7.

THE AMERICAN CIVIL WAR

Champion's Hill, 16 May 1863

After forcing Confederate General Joseph E. Johnston to abandon the defense of Jackson, Mississippi, General U.S. Grant marched west toward Vicksburg; his objective was to attack the Confederate forces of General John Pemberton before they could unite with those of Johnston. Pemberton's cavalry patrols informed him of the Union advance; this enabled him to deploy his three divisions on Champion's Hill and an adjacent wooded ridge that extended to the south. On 16 May the leading elements of Grant's Army, the corps of General John McClernand, advanced toward this position on a wide front. Observing the formidable position of Pemberton's force, McClernand, who was with the units on his corps' left flank, preferred to wait for further orders. His left and center thus remained inactive for the remainder of the day. Meanwhile, on McClernand's right, one of his divisional commanders, Brigadier General Alvin Hovey, engaged in an artillery duel with the Confederates on Champion's Hill when Grant arrived with a division from General James B. McPherson's Corps. Grant immediately sent this division to the right to extend the line and to probe the Confederate defenses. At Hovey's urging, Grant then launched Hovey's division forward in a frontal assault on Champion's Hill. Hovey's division took the hill, but Pemberton, seeing that McClernand was inactive on the southern flank, pulled troops from that sector and counterattacked against the Federals on Champion's Hill. The Union forces were driven from the hill, taking heavy casualties. Grant reinforced Hovey with units from McPherson's corps and launched a second attack, which achieved a breakthrough, driving the Confederates pell mell down the hill. Meanwhile the remainder of McPherson's corps was enveloping the Confederate left. Pemberton quickly withdrew the remainder of his forces.

Significance: Although suffering heavy casualties himself, Grant inflicted greater losses on Pemberton's force. The victory at Champion's Hill precluded any possibility that Pemberton and Johnston could join forces to defend Vicksburg. Pemberton was now isolated and encircled strategically.

Sources: A.7; E.3.2.

THE AMERICAN CIVIL WAR

Brandy Station, 9 June 1863

Following the Battle of Chancellorsville the cavalry corps of the opposing armies skirmished frequently along the upper reaches of the Rappahannock River, in westward expansion of the main armies. The Cavalry Corps of the Confederate Army of Northern Virginia, led by General J.E.B. "Jeb" Stuart, sought to protect the approaches to the Shenandoah Valley from central Virginia against the probings of the Union cavalry, which had been reorganized by General Joseph E. Hooker and was commanded by General Alfred Pleasonton. No large scale actions took place until 9 June, when Pleasonton's corps, supported by infantry, crossed the river near Brandy Station in two columns and surprised Stuart's corps in its camp.

Stuart rallied his men and fought the attackers to a standstill in the largest purely cavalry battle of the war (the Union infantry, marching behind the cavalry, did not come up in time to take a significant part in the engagement). At nightfall Pleasonton withdrew across the river.

Significance: The Union cavalry, for the first time, showed itself to be the equal of the vaunted "chivalry" of the Army of Northern Virginia.

Sources: A.14; E.1; E.6.3.

THE AMERICAN CIVIL WAR

Gettysburg, 1-3 July 1863

Lee led his battle-tried Army of Northern Virginia down the Shenandoah Valley into Pennsylvania in June 1863. The Union Army of the Potomac, still under General J.E. Hooker's command, moved parallel to and east of the Confederates, shielding Washington and Baltimore. President Lincoln replaced the inept Hooker with General George G. Meade on 28 June. Shortly thereafter (30 June) detachments of the two armies skirmished at Gettysburg. On 1 July major elements of the two armies encountered each other northwest and west of the town in a meeting engagement that quickly assumed gigantic proportions.

Since the Confederate Army was concentrated closer to Gettysburg than the Union army, Lee was able to feed troops into the first day's fight faster than Meade, and, in the afternoon, the Union right was enveloped and fell back through Gettysburg in some confusion. The Confederates, however, did not press their advantage, and the Union army dug in on high ground just south of the town.

On 2 July, both armies, reinforced, continued the struggle. Lee attacked both flanks of the Union army and came near success on the Union left, which was driven in with severe casualties. Union reinforcements, however, prevented a breakthrough. Lee, encouraged by the remarkable success of one of his divisions against the Union left-center, planned to renew the battle on the 3d by making a large scale attack on the Union center with fresh troops.

On 3 July the last climactic Confederate attack of the battle -- the charge of the divisions of Pickett, Pettigrew, and Trimble against the Union center and left-center -- was made in the afternoon. Heralded by a tremendous artillery preparation, the charge was broken by intense simultaneous fire and the massed guns of the Union artillery, commanded by General Henry J. Hunt. Barely 300 survivors of the 15,000 that had begun the charge reached the Union lines, and these were defeated quickly. Meade might have counterattacked, but the sight of the Confederate artillery line opposite his center dissuaded him (he could not have known that the Confederates had expended almost all their artillery ammunition).

THE AMERICAN CIVIL WAR

Gettysburg, 1-3 July 1863 (Continued)

On 4 July Lee, as he had done at Antietam, remained on the field, defying Meade. The Union general did not initiate any combat. On 5 July, having made arrangements for his wounded, Lee withdrew.

Significance: Lee's failure at Gettysburg ended his second great invasion of the North. The Army of Northern Virginia, having sustained massive casualties, thereafter would fight only to defend Virginia. The twin defeats of Gettysburg and Vicksburg a day later were decisive to the Southern cause. Thereafter the fight was to stave off defeat -- not to win the war.

Sources: A.1; E.1; E.5; E.6.3; E.7.

THE AMERICAN CIVIL WAR

Chickamauga, 19-20 September 1863

Following the Battle of Murfreesboro the Confederate Army of Tennessee, commanded by General Braxton Bragg, fell back to Tullahoma, Tennessee. In the subsequent Tullahoma Campaign Union General W.S. Rosecrans's Army of the Cumberland maneuvered Bragg out of Tennessee, across the Tennessee River, and into northwest Georgia. In early September Bragg gave up the important rail center of Chattanooga.

Rosecrans pushed Bragg into Georgia on a very wide front, believing, apparently, that the Confederates were too demoralized to make a stand north of Atlanta. Bragg, however, concentrated behind Missionary Ridge, south of Chattanooga, and prepared to strike at Rosecrans's northernmost elements. On 19 September the Confederates attacked, intending to defeat Rosecrans's separated corps in detail.

Bragg's plan of battle was masterful, but he lost control of his troops almost immediately, and the Confederate assaults, intended to be a coordinated series of hammer-blows, were made piecemeal. The Union forces, fighting stubbornly, were pushed back but not broken. Rosecrans and his staff worked hard to concentrate, to establish a line and reinforce the troops under attack.

On the 20th the Confederates renewed their attacks. The powerful corps of General James Longstreet, on loan to Bragg from Lee's Army of Northern Virginia, struck the Union right center at a point recently vacated by Union units shifted to the left. The blow was irresistible, and the Union right and center were virtually swept from the field. The Union left, however, held firm. General George H. Thomas, the "Rock of Chickamauga," organized a defense on the aptly-named Horseshoe Ridge and repelled all attempts by the Confederates to take it. This fighting covered the withdrawal of the Union army to Chattanooga, Thomas following in turn.

Bragg did not pursue the Union army from the field, and Rosecrans's army settled into Chattanooga, where it entrenched. Bragg, after some delay, moved onto Missionary Ridge overlooking Chattanooga and laid siege to the Army of the Cumberland.

THE AMERICAN CIVIL WAR

Chickamauga, 19-20 September 1863 (Continued)

Significance: Chickamauga was a serious defeat for the Union, but Bragg's failure to complete the victory by pursuit robbed the Confederacy of the fruits of victory. The Army of the Cumberland, however, was immobilized, penned in Chattanooga by the Confederates.

Sources: A.1; E.5; E.6.3; E.7.

THE AMERICAN CIVIL WAR

Chattanooga, 24-25 November 1863

Following the Confederate victory at Chickamauga Union General William S. Rosecrans's Army of the Cumberland was penned in Chattanooga, Tennessee, by the Confederate Army of Tennessee, commanded by General Braxton Bragg. By October the Union troops were on starvation rations, the active Confederate cavalry having largely cut land communications to the beleaguered army.

General Ulysses S. Grant, commander of the Military Department of the Mississippi, arrived at Chattanooga on 23 October and took personal charge of the Union forces there. General George H. Thomas replaced Rosecrans as commander of the Army of the Cumberland. In late October and early November Grant conducted operations that resulted in improved supply arrangements for his army, and Bragg realized that he had lost his opportunity to starve the Union troops out. Both Grant's and Bragg's armies were substantially reinforced.

On 24 November Union troops under the command of General Joseph Hooker attacked the Confederate siege lines on the commanding height of Lookout Mountain southwest of Chattanooga and, after a difficult ascent, captured the position. Major General William T. Sherman, arriving from Memphis with the Army of the Tennessee attacked the northern (right) end of the main position of Bragg's army on Missionary Ridge without success.

On 25 November Grant ordered Thomas's men to make a limited attack on the Confederate center on Missionary Ridge, to draw Confederate manpower away from Sherman's operations on the Confederate right. This attack met with unexpected success, and the Union troops, without orders, continued on up to the top of the ridge and into the main Confederate positions. The Confederate soldiers panicked and fled.

Significance: The strange victory on Missionary Ridge ended Bragg's blockade of Chattanooga. The Union Army gained uncontested possession of a vital communications center, and the stage was set for General William T. Sherman's Atlanta Campaign and March to the Sea.

Sources: E.1; E.5; E.7.

AMERICAN CIVIL WAR

The Wilderness, 5-6 May 1864

In early May 1864 Union General Ulysses S. Grant implemented his plan to operate directly against the Confederate army of General Robert E. Lee deployed west of Fredericksburg, along the line of the Rappahannock and Rappahannock Rivers. Lee, anticipating Grant's advance, concentrated part of his forces west of Chancellorsville in the rugged wooded terrain of the Wilderness, where the armies had fought a year earlier.

On 5 May elements of the Union army advancing southeast through the Wilderness came in contact with Confederate forces on the Orange Courthouse Turnpike west of Wilderness Tavern. The tangled second-growth thickets of the Wilderness led to a confused battle on 5 May, which basically consisted of two indecisive engagements between bewildered units of both sides. The battle line ran in a generally northwest-southeast line through the woods. The Union advance was stopped, and on the next day a renewed attack also was halted in a savage battle marked by determined Confederate counterattacks. During the day and through 7 May, Union and Confederate troops fought brush fires started during the battle and rescued wounded soldiers trapped in the burning woods.

Significance: Taking advantage of the Wilderness's confusing woods, which disrupted the Union advance (and hindered coordination between his own units), Lee had stopped the Union army's initial moves. Grant then shifted his forces east and south against the Confederate right wing, where Lee deployed to meet this new threat against his defensive line.

Sources: A.7; E.1.

AMERICAN CIVIL WAR

Spotsylvania, 8-18 May 1864

Union General Ulysses S. Grant, after being blocked in an attack against General Robert E. Lee's Confederate Army at the Wilderness on 5-6 May 1864, ordered the Army of the Potomac southeast toward the crossroads at Spotsylvania, to attempt to turn the Confederate right flank and continue the Union advance to Richmond. Lee, correctly estimating the situation, rushed a force to block the Union advance northwest of Spotsylvania.

On terrain more open than that of the Wilderness, the Union Army attacked for five days beginning on 8 May in a series of engagements. The Confederate position developed into an immense inverted V, with its apex, the "Bloody Angle," (so named because of the heavy fighting there) pointing roughly north. The opening Union attacks of 9 and 10 May were repulsed by the Confederate left wing. On 12 May Grant attacked the Confederate right flank and broke through, but Lee thwarted this turning movement by skillfully shifting his reserves. A Union attack on 18 May against the new Confederate left wing was defeated.

Following Grant's unsuccessful attempt at Spotsylvania to outflank and cut the Confederate army off from Richmond, the Union army moved southeast in a wide arc in yet another bid to move past the Confederate right. Lee, however, taking advantage of his shorter interior lines, shifted his troops from Spotsylvania to a strong blocking position on the North Anna River before Grant's arrival on 23 May.

Significance: Lee had prevented Grant from moving rapidly to Richmond and maintained a position from which he could move again to head off Grant's next attempt to advance.

Sources: A.7; E.5; E.7.

THE AMERICAN CIVIL WAR

New Market, 15 May 1864

Following Confederate General T.J. Jackson's 1862 Shenandoah Valley campaign the rich, grain-producing valley of western Virginia was not again seriously threatened by Union forces until May 1864, when Union General in Chief U.S. Grant ordered General Franz Sigel to push down the Valley with a small army from Winchester, Virginia. Sigel's offensive was part of Grant's plan to use all available forces to pressure the Confederacy. The Confederate commander in the valley, General John C. Breckinridge, had few resources with which to resist Sigel, but he organized a scratch force, including cadets of the Virginia Military Institute, to oppose the Federals.

The two armies met at New Market on the North Fork of the Shenandoah River. The Union army deployed on Bushong Hill. Its right flank was protected by a bluff and the Shenandoah River; its left flank rested on Smith's Creek, which was impassable after four days of rain. Breckinridge attacked on the afternoon of 15 May, his men carrying the hill in a desperate charge in which the V.M.I. cadets sustained heavy casualties and captured a Union gun.

Significance: The Union army retreated in disorder, and Sigel was relieved of command on 19 May. Breckinridge, assuming correctly that Sigel's force was no longer a threat to the Valley, sent a portion of his force to reinforce Lee's army before Richmond.

Sources: A.7; E.1.

THE AMERICAN CIVIL WAR

Cold Harbor, 3 June 1864

In late May 1864 Lieutenant General Ulysses S. Grant sent the Union Army of the Potomac south across the Pamunkey River in a move to outflank General Robert E. Lee's Army of Northern Virginia. South of the Pamunkey, Grant planned to turn and destroy the Confederate right flank, thus clearing the way for an advance to the Confederate capital at Richmond. One Union army corps from south of Richmond near Bermuda Hundred was directed to reinforce the Army of the Potomac. Lee, however, responded to Grant's move by rapidly shifting his army to the right. After several engagements east of the town of Mechanicsville, both armies were in position north of the Chickahominy River by 2 June. Lee's army had been reinforced and was entrenched between the Army of the Potomac and Richmond.

When the Union attack commenced on the morning of 3 June, it was immediately repulsed, attesting to Union ignorance of the tactical situation. Grant had made no detailed plans for the attack. He ordered only that an assault be made, under the impression that the Confederate lines were thinly held. But Lee had had enough time to reinforce his army, and his soldiers had prepared formidable field defenses sited on key terrain features. The Confederate troops were manning a convex line of defenses facing Grant's troops which gave the defenders interlocking fields of fire covering all attack approaches. As a result, the Union attack was repulsed. At the cost of exceedingly high casualties, it failed to make any serious penetrations of the Confederate line.

Following this debacle, Grant delayed a request for a temporary truce to retrieve the Union casualties caught between the lines until 7 June, and many wounded died for lack of treatment. On 13 June Grant once more ordered the Army of the Potomac around Lee's right and across the James River for a maneuver against Richmond via Petersburg.

Significance: Grant failed to outflank Lee's army and was greatly criticized for an unnecessary attack that incurred unacceptably heavy Union losses. These heavy losses prompted Grant to modify his strategy of wearing down his opponent through attrition.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Kenesaw Mountain, 27 June 1864

In May 1864 Union General William T. Sherman began his advance into Georgia with three armies under his command. Opposing Sherman was the Confederate Army of Tennessee led by General Joseph E. Johnston. In a series of engagements in which Sherman's troops outflanked Confederate delaying positions, the opposing armies moved south toward Atlanta, with Johnston's army staying continually between Sherman and Atlanta. On the night of 17/18 June, Johnston deployed his troops northwest of Atlanta on the high terrain of Kenesaw Mountain, where they constructed a formidable defensive position. Sherman subsequently chose to attack this position frontally. Having failed since the outset of his campaign to meet the Army of the Tennessee in a major head-on attack, Sherman reasoned that a frontal attack on Kenesaw Mountain might at least raise the morale of his foot-weary soldiers if it did not take Johnston by surprise and decisively defeat the Confederates.

On 27 June, Sherman's army attacked Kenesaw Mountain in a two-pronged main assault with diversionary attacks on Johnston's flanks. Johnston's troops were not taken by surprise, and their defenses proved impregnable, as the Union infantry, following a preliminary artillery bombardment, was quickly stopped. While Confederate casualties were low, the attackers suffered high losses.

Significance: The Confederate defense at Kenesaw Mountain only delayed Sherman's drive to Atlanta. Following his disastrous attack of 27 June, Sherman returned to his tactics of maneuver, and in early July Johnston withdrew to a new line along the Chattahoochie River, just northwest of Atlanta.

Sources: A. 7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Peachtree Creek, 20 July 1864

Elements of Union General William T. Sherman's Union Army crossed the Chattahoochie River northwest of Atlanta on 9 July 1864. In response, General Joseph E. Johnston pulled his Army of Tennessee back to the east bank of the river into a line along Peachtree Creek, an eastern tributary of the Chattahoochie, to defend the northern approaches to Atlanta. On 17 July General John B. Hood, an impetuous and bold commander, replaced Johnston, whose successful delaying tactics employed against Sherman during the previous two months did not satisfy Confederate President Jefferson Davis. Hood immediately formulated a plan to attack Sherman's army, which was divided in two parts, with a large gap between them. While a demonstration force screened Sherman's two armies northeast of Atlanta, Hood ordered two corps to attack the westernmost of Sherman's three armies, General George H. Thomas's Army of the Cumberland, which by 19 July had a small bridgehead on the south bank of Peachtree Creek. The other two armies were northeast of Atlanta.

On the afternoon of 20 July, after a delay caused by the shifting of units to cover a gap in his own lines, Hood launched his attack. The Confederates achieved substantial surprise, but by this time Thomas's army was south of Peachtree Creek in force, and it quickly recovered from its initial shock. The left Confederate corps fought well, but the attack failed to achieve any major penetration and Thomas's lines remained secure.

Significance: The first of Hood's attacks against Sherman's army failed, but this did not prevent him from making another one on 22 July.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Atlanta, 22 July 1864

Following the unsuccessful Confederate attack at Peachtree Creek on 20 July 1864, General John B. Hood planned another attack against General William T. Sherman's Union forces. Sherman was extending his lines eastward around Atlanta to sever the vital railroad to Macon, and General James B. McPherson's Army of the Tennessee was leading this encircling movement. On the night of 21 July, Hood ordered his strongest corps, led by General William J. Hardee, from positions on the left wing of his army completely around the Confederate right to strike the open flank and rear of Thomas's army on the following day. Confederate cavalry was to raid the Union supply depot at Decatur, northeast of Atlanta. The remainder of Hood's army was ordered into prepared defenses to cover the northern and eastern approaches to the city.

Hardee failed to move his corps far enough east, and, instead of attacking McPherson's open flank on the morning of 22 July, he struck field entrenchments on the left of the Army of the Tennessee. The Confederates achieved substantial surprise, but the Union troops defended with determination and prevented a major penetration of their lines. Union reserve units had deployed earlier behind the threatened front line positions, and this deployment made it possible to commit quickly troops who were instrumental in stopping the Confederate attack. With the apparent failure of Hardee's flanking movement, Hood ordered an attack against the front of the Army of the Tennessee, but this assault failed. Likewise, Hood's cavalry raid to Decatur was repulsed, and Union stores there were saved from destruction.

Significance: Hood's second attack on Sherman's army failed, largely because Hardee had not moved far enough around the Union right flank. McPherson was killed during the battle, but the Union line held, and Sherman subsequently continued his operations to take Atlanta. A vigorous defense by Hood, however, would prevent the capture of the city until early September.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Petersburg, 15-18 June 1864

On 15 June 1864 Union General William F. Smith's XVIII Corps crossed the Appomattox River as part of General Ulysses S. Grant's move of five corps that had been threatening Richmond south of the James River. Grant had instructed General Benjamin F. Butler, commander of the Army of the James, to take the fortified city of Petersburg on the south bank of the Appomattox. Seizure of Petersburg would sever southern rail lines to Richmond and turn the Confederate right flank, anchored on the city.

On the evening of 15 June, the XVIII Corps attacked the eastern fortifications of Petersburg, but Smith failed to exploit the penetration that his corps had made, although his forces, reinforced by the II Corps, greatly outnumbered the city's garrison. Confederate General P.G.T. Beauregard, commander at Petersburg, called for reinforcements. While Confederate General Robert E. Lee was hesitant to send troops because he didn't know where the Union forces were, one division did arrive to strengthen the garrison. Union assaults on 16 and 17 June took more positions in the Petersburg defenses, but they were not pressed with determination, and the city held. During the night of 17/18 June, Beauregard pulled back his troops to a shorter and more defensible line. Lee, realizing the danger, sent part of his army from Richmond to help Beauregard. Grant too had brought up more troops, and taking command himself, he ordered a massive Union attack on the Petersburg fortifications at dawn on 18 June. This attack was halted with only minor gains. By the time it was renewed in the afternoon, the Petersburg defenses were fully manned by Lee's reinforcements and the attack was repulsed.

Significance: Failing to use initiative and exploit the first penetrations of the Petersburg defenses, Grant's opportunity to take Petersburg easily was lost. Auspiciously begun without Lee's knowledge, Grant's turning movement was foiled. As a result, siege warfare was renewed, now at Petersburg instead of Richmond.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Globe Tavern, 18-21 August 1864

In August 1864, as Lieutenant General Ulysses S. Grant tested Confederate defenses north of the James River at Deep Bottom, a Union reconnaissance in force was launched south of Petersburg. The primary purpose of this attack was to extend the left flank of the Union army across the Petersburg and Weldon Railroad and sever this important supply route into Petersburg. Grant also hoped to draw Confederate forces away from the Shenandoah Valley, where they opposed the operations of General Philip Sheridan's Army of the Shenandoah.

Elements of Major General Gouverneur K. Warren's V Corps attacked on 18 August and, brushing aside a small Confederate cavalry force, quickly reached the railroad. Warren's troops then turned north and advanced up the tracks to a point just beyond Globe Tavern. A Confederate counterattack drove back the corps's leading elements, but the Confederates in turn were pushed back from their newly gained ground by rallying Union troops. By the next day reinforcements had arrived on both sides, and the Confederates, under Lieutenant General Ambrose P. Hill, unsuccessfully attacked to try to break the Union hold on the railroad. On 20 August, Warren withdrew his troops to the south to more easily defended positions where his artillery, bogged down in mud in the initial attack, was deployed. On 21 August the Confederates once again attacked and failed to dislodge the Union troops from their strong position.

Significance: The successful Union attack at Globe Tavern extended the left of the Union siege lines and severed the Weldon Railroad supply route. Supplies to Petersburg had to be hauled in wagons around the break in the line along the final approaches to the city. The Confederates were also forced to lengthen their already overextended defenses to match Grant's new lines at Globe Tavern.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Opequon Creek (Third Battle of Winchester), 19 September 1864

In the summer of 1864, after Confederate General Jubal A. Early led two invasions of Pennsylvania and Maryland from the lower Shenandoah Valley, the Union Army of the Shenandoah under General Philip H. Sheridan was formed to drive Confederate forces out of the Valley and deny the use of the region's resources to the Confederacy. After some initial skirmishing in the lower valley, Sheridan received information that a detachment assigned to Early's command was ordered back to the defense of Petersburg and Richmond. Sheridan immediately planned to attack Early's forces dispersed around the town of Winchester. The Union attack was to be directed at the southernmost Confederate division, located between Winchester and Opequon Creek, on the west side of the creek. While two infantry corps, preceded by one cavalry division, attacked frontally, the remainder of Sheridan's cavalry was to envelop both flanks of the Confederate position. The cavalry on the Union left was to be reinforced by Sheridan's infantry reserve and had the important mission of severing the Confederate escape route to the south. Sheridan's overall plan was to defeat Early's forces in detail, starting with the destruction of one division and followed by the entrapment of the rest of the Confederate forces.

On the morning of 19 September the cavalry on the Union right crossed the Opequon Creek and steadily drove back the Confederate left. In the center, however, the leading infantry corps had brought along its baggage train, which blocked the movement of the following corps on the one road available for the advance. This delay and a determined Confederate defense in the center gave Early time to assemble his troops and counterattack through a gap in the Union line. The Confederate attack drove back the Union center and forced Sheridan to commit his reserve infantry, to renew the Union advance. The attack on the Union left was thus deprived of power, and, as a result, when the Union right and center finally overwhelmed Early's forces and drove them back through Winchester, they were able to make their escape. The cavalry on the Union right flank had been instrumental in driving in Early's defenses by keeping up pressure on its opponent's left and striking the rear and flank of the Confederate center.

THE AMERICAN CIVIL WAR

Opequon Creek (Third Battle of Winchester), 19 September 1864 (Continued)

Significance: Sheridan's victory cost Early nearly a quarter of his forces, losses which he could not replace. The Union victory also marked the beginning of the offensive to drive the Confederates out of the Shenandoah Valley, which culminated in Early's defeat at the Battle of Cedar Creek one month later.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Cedar Creek, 19 October 1864

In October 1864, Union General Philip H. Sheridan began to withdraw his Army of the Shenandoah northward in the Shenandoah Valley, devastating supplies and crops that might aid the Confederate war effort. On 16 October the army was in position facing southwest and west on the east bank of Cedar Creek with its left flank about a mile from the north bank of the Shenandoah River. On the same day, Sheridan set out for Washington for a meeting with Union leaders concerning future strategy. In his absence, Confederate General Jubal A. Early and the senior officers of the reinforced II Corps formulated a plan to attack the Union position. While one cavalry division demonstrated against the Union right and other units attacked the center, the bulk of Early's infantry was to attempt to surprise the Union troops on the open Union left and left-rear by attacking around Massanutten Mountain and across the river and, after driving in the Union corps on the far left, roll up the entire line. One cavalry division would cross the Shenandoah, range far around the Union left and block the Union withdrawal route south of Winchester along the Valley Pike.

Before dawn on 19 October the Confederates attacked and completely surprised the left flank Union corps. The Confederate assault drove in this corps and the next one in line and pushed back a hastily formed defensive line built up around the right flank corps. On the far right, however, numerically superior Union cavalry kept its Confederate counterpart at bay, and the Confederate cavalry on the opposite flank was prevented from sneaking around to the Valley Pike. By late morning the action slackened off. Early halted his attack, believing that his opponents would soon withdraw from the field. At about this time Sheridan arrived from Winchester and immediately began to rally his troops for a counterattack. In the late afternoon this attack was launched with determination. It soon routed the Confederates from their newly-won positions. In addition to retaking Union artillery lost earlier in the battle, the counterattack captured a number of Confederate guns and pushed the Confederate troops back over Cedar Creek.

Significance: In an extraordinary display of personal leadership, Sheridan turned a near Confederate upset into a stunning victory for his Army of the Shenandoah. The back of southern resistance in the Shenandoah Valley was broken.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Franklin, 30 November 1864

In September 1864, after Union General William T. Sherman's army captured Atlanta, Confederate General John B. Hood, Sherman's principal opponent in Georgia, made plans for an invasion of Tennessee. Hood's objective was to draw Sherman away from his proposed march to the sea to destroy the war-supporting economy of Georgia. When Hood's entire army began to move into Tennessee, Sherman sent reinforcements, including the IV and XXIII Corps, to Tennessee, where General George H. Thomas was organizing the defense of the state. General John M. Schofield, commanding the IV and XXIII Corps, was ordered by Thomas to delay Hood to give the Union general at Nashville time to build up an army around his core of veteran troops. By 30 November, Schofield, after slipping away from Confederate enveloping forces at Columbia and Spring Hill, was in prepared positions at Franklin, on the south bank of the Harpeth River, 24 kilometers south of Nashville.

On the afternoon of 30 November, Hood launched an attack against the Franklin defenses, seeking to seize the crossing points on the Harpeth and destroy Schofield's forces. The Confederate attack quickly swept aside two brigades mistakenly left astride the north-south Columbia Pike outside the main Union defenses. The center of the Union line was then penetrated, but reserve units were rushed up and plugged the hole. Union artillery from high ground on the opposite bank of the Harpeth poured a devastating fire into the Confederate ranks on lower open ground. Hood did not call off his attack until well after dark, but by this time the main Confederate assault and a cavalry attack to the east of Franklin had been completely stopped.

Schofield moved his forces safely across the Harpeth on the night of 30 November and withdrew to Nashville.

Significance: Schofield's delaying actions had given Thomas additional time to organize his command, and the safe arrival of the IV and XXIII Corps added strength to his forces at Nashville. Hood, his army greatly weakened by the attack at Franklin, followed Schofield and on 2 December positioned his army just south of the city. His move had not drawn Sherman away from Georgia.

Sources: A.7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Nashville, 15-16 December 1864

Following Confederate General John B. Hood's unsuccessful attempt to destroy Union forces at Franklin on 30 November 1864, he moved his Army of the Tennessee to positions just south of Nashville. At Nashville, Union General George H. Thomas was rebuilding an army for the defense of Tennessee, and his strengths in men and equipment outnumbered those of Hood's army. Hood therefore planned to await reinforcements before attacking, or if necessary defend against a Union attack. During the first two weeks of December, Thomas, urged by his superiors to attack Hood, slowly prepared for a decisive assault on the Confederates, delayed by last minute details and poor weather which hampered troop movements. Finally, on 15 December Thomas launched his attack in good weather. His basic plan called for a holding attack against the Confederate right, with a massed attack on the left, screened by cavalry, which was also to sever Hood's withdrawal routes.

The Union attack struck the over-extended Confederate lines on the morning of 15 December and proceeded basically as planned. The Confederate right held, but superior Union strength on the left smashed Confederate defenses. During the night Hood pulled back his army to a shorter and more defensible line. On the afternoon of 16 December, Union troops once again attacked the Confederate right, and, although they were repulsed, Confederate reinforcements were sent to bolster this section of the line leaving the Confederate left dangerously weakened. When Thomas's main attack struck these weakened positions, the Confederate line collapsed, and Hood's army fell back in confusion. Dismounted Union cavalry fighting on the far left pressed home the attack. The Confederates withdrew in confusion.

Significance: Already outnumbered, Hood's army received a blow from which it would not recover. The Confederate threat to Tennessee was ended. As a result, Union commanders in Virginia and Georgia could operate without concern that a Confederate victory in Tennessee might upset the overall Union strategy of defeating enemy forces in the east.

Sources: A. 7; E.1; E.3.3; E.6.4.

THE AMERICAN CIVIL WAR

Bentonville, 19-21 March 1865

Union General William T. Sherman's "March to the Sea" ended with the capture of Savannah, Georgia, in late December 1864. Early in 1865 he marched his army north into the Carolinas, with an eventual link up with Union forces in Virginia as his ultimate objective. Heavy rains slowed the advance of Sherman's army, but by mid-March it reached Fayetteville, North Carolina. Meanwhile, Confederate General Joseph E. Johnston, brought back from retirement in February 1865, was appointed to command Confederate forces in the Carolinas. Sherman's army reached Fayetteville in mid-March. Another Union army, under General John M. Schofield, was advancing west from the Carolina coast. Johnston elected to attack Sherman before the two Union armies met.

On 19 March the left wing of Sherman's army, consisting of two corps under General Henry W. Slocum, was attacked just south of Bentonville by a large Confederate force assembled and led by Johnston. Slocum's troops were driven back, but the Union veterans rallied and held off a series of determined Confederate attacks. Johnston, unable to crack the Union line, withdrew to defensive position for the night. On 20 March, Sherman concentrated his entire army to attack Johnston, and on the night of 21/22 March Johnston pulled his forces back to the northeast.

Significance: Johnston's unsuccessful attempt to defeat the left wing of Sherman's army only delayed Sherman's link up with Schofield. On 23 March the two Union armies met at Goldsboro and Sherman paused to rest his troops. As it turned out, Bentonville was the last major engagement in the Carolinas Campaign, since Lee's surrender to Grant on 9 April led to Johnston's capitulation later that month.

Sources: A.7; E.1; E.6.4.

AMERICAN CIVIL WAR

Dinwiddie Courthouse and White Oak Road, 29-31 March 1865

Arriving south of the Confederate lines outside Petersburg on 26 March 1865, General Philip H. Sheridan, with one corps each of cavalry and infantry, joined Union forces under General Ulysses S. Grant. On 29 March, Grant sent three divisions of cavalry under Sheridan west toward Dinwiddie Courthouse to outflank the Confederate right. Simultaneously, two corps of Union infantry were to attack the Confederate right just to the east of Sheridan. Confederate General Robert E. Lee countered Grant's turning movement by sending an infantry/cavalry force under General George E. Pickett to stop Sheridan's advance. In addition to protecting his flank, Lee sought to hold open the Southside Railroad, running southwest from Petersburg, for a possible link up with Confederate forces in North Carolina.

North of Dinwiddie Courthouse on 31 March, Pickett's troops struck Sheridan's left flank and drove back the Union cavalry. Meanwhile, to the east, the Union infantry attack also was pushed back by a counterattack against the Union flank on White Oak Road. On the night of 31 March/1 April Sheridan's force was reinforced with cavalry and infantry, and Pickett, faced with superior numbers, withdrew toward Five Forks.

Significance: Lee temporarily delayed the Union turning movement around the Petersburg defenses' right flank by shifting his forces to meet the threat. But Sheridan was reinforced, and on 1 April he pressed forward at Five Forks and tore open the entire Confederate right flank.

Sources: A.7; E.1; E.6.4.

THE AMERICAN CIVIL WAR

Five Forks, 1 April 1865

After successfully delaying a Union turning movement on 31 March 1865, Confederate General George E. Pickett withdrew under pressure from numerically superior Union forces and had his troops dig in at Five Forks along the east-west White Oak Road. Pickett's position was on the extreme right of the Confederate defenses, covering the southern approaches to Petersburg. On 1 April a Union attack by cavalry under General Philip H. Sheridan, who had been stopped on the previous day, and an infantry corps struck the Five Forks defenses. Union cavalry kept up pressure on the left and opposite the center of the Confederate position while the infantry advanced against the right flank. The infantry attack was too far to the right and inadvertently outflanked the Confederate lines, which covered less than two kilometers of the White Oak Road. Outflanked on their left and threatened to the front, Pickett's men were doomed by a Union cavalry penetration that cut off their retreat route along the Ford's Church Road.

Significance: The Union attack at Five Forks cracked Pickett's defenses and exposed the entire right of the Confederate line. This penetration proved to be the key to ending the static warfare conditions around Petersburg and Richmond, for on the following day Grant ordered a general assault that drove Lee's army out of its trenches and west to Appomattox and defeat.

Source: A. 7.

THE AMERICAN CIVIL WAR

Selma, 2 April 1865

In March 1865, Union General George H. Thomas, commander of the Army of the Cumberland, dispatched General James H. Wilson to lead a cavalry raid into Alabama. Wilson's mission was to divert Confederate forces from General E.R.S. Canby's attack on Mobile, Alabama, by raiding in the area of Tuscaloosa and Selma to the north of Mobile. Advancing from northwest Alabama, Wilson's troopers reached Selma, an important Confederate supply depot, after brushing aside troops under General Nathan B. Forrest manning several delaying positions.

On 2 April, Wilson's cavalry, fighting on foot, assaulted the fortified works of Selma on the north bank of the Alabama River. Forrest's troops fought well, but the Confederate militia were routed and the Union attack carried the fortifications. Many prisoners and the town's large supply of stores were seized. Wilson's force remained in Selma for one week. After destroying the town's foundries, ammunition dumps, and stores he continued advancing toward Georgia.

Significance: Wilson's successful raid into Alabama, although it did little to hasten the end of the war, was another defeat for the Confederates in the spring of 1865 which they could not afford.

Sources: E.1; E.6.4.

THE AMERICAN CIVIL WAR

Sayler's Creek (Saylor's Creek), 6 April 1865

By 3 April 1865 the Confederate army of General Robert E. Lee had been driven from fortifications around Petersburg and Richmond by a Union assault from the southwest. Lee led his army westward in a desperate attempt to link up with General Joseph E. Johnston's army in North Carolina. Union General Ulysses S. Grant, blocking Lee's move, marched his army west -- south of and parallel to Lee's line of retreat. On the night of 5/6 April Lee's exhausted army set out toward Rice's Station, to resupply and possibly outmaneuver the western elements of the Union army. Union cavalry harassed the flanks of Lee's retreating columns, and on the morning of 6 April Confederate units in the middle of the retreat stopped to let the vulnerable Confederate supply train get safely across the Appomattox River. The leading Confederate units, unaware of this halt, continued on ahead.

Union cavalry seized this opportunity and cut off the center of the Confederate retreat column from its route to the west, and Union infantry moved up to attack from the opposite direction. Despite a briefly successful counterattack that penetrated the center of the infantry attack, the two-sided Union attack overwhelmed the Confederate defense along the line of Sayler's Creek. To the north, the rear units of the retreating Confederates, following part of the supply train, were soundly defeated by Union infantry.

Significance: Lee lost a sizable portion of his already depleted army in the actions of 6 April, losses which he could not afford. He continued his retreat west to Appomattox where he surrendered to Grant on 9 April after a brief final battle.

Sources: A. 7; E.1; E.6.4.

1. IDENTIFICATION
War: Franco-Prussian War, 1870-1871

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
Weissenburg, France	A 4 Aug 1870 D	Metz	Ger Third Army Fr I Corps (-)	Friedrich Wilhelm Douay	1	2.5
Froeschwiller (Woerth), France	A 6 Aug 1870 D	Metz	Ger Third Army Fr Army of Alsace	Friedrich Wilhelm MacMahon	1	8.0
Spichern, France	A 6 Aug 1870 D	Metz	Ger First Army (+) Fr II Corps	Steinmetz Frossard	1	6.0
Mars la Tour, France	A 16 Aug 1870 D	Metz	Ger First & Sec. Armies Fr Army of Lorraine	Moltke Bazaine	1	12.0
Gravelotte-St. Privat, France	A 18 Aug 1870 D	Metz	Ger First & Sec. Armies Fr Army of Lorraine	Moltke Bazaine	1	16.0
Sedan, France	A 1 Sep 1870 D	Sedan	Ger Sec. & Third Armies Fr Army of Alsace	Moltke MacMahon (Wimpfen)	1	13.0
Coulmiers, France	A 9 Nov 1870 D	Orleans	Fr Army of the Loire Bav I Corps	Aurelle Von der Tann	1	10.0
Orleans, France	A 2-4 Dec 1870 D	Orleans	Ger Second Army Fr Army of the Loire	Friedrich Karl Aurelle	3	60.0
Le Mans, France	A 11-12 Jan 1871 D	Loire	Ger Second Army Fr Army of the Loire	Friedrich Karl Chanzy	2	25.0
Belfort, France	A 15-17 Jan 1871 D	Belfort	Fr Army of the East Ger Army of the South	Bourbaki Werder	3	25.0

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Franco-Prussian War, 1870-1871

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Weissenburg	A D	HD	RgM	WLT	ST	Y	x
Froeschwiller (Woerth)	A D	HD	RgM	WLT	ST	N	--
Spichern	A D	H/PD	RgW	WLT	ST	N	--
Mars la Tour	A D	HD	RM	DST	ST	N	--
Gravellote-St. Privat	A D	HD	RM	DST	ST	N	--
Sedan	A D	HD	RM	DST	FT	N	--
Coulmiers	A D	HD	RM	WLC	FT	N	--
Orleans	A D	HD	RM	WLC	WT	N	--
Le Mans	A D	PD	RM	WLC	WT	N	--
Belfort	A D	PD	RM	WLC	WT	N	--

3. STRENGTHS AND COMBAT OUTCOMES

War: Franco-Prussian War, 1870-1871

Engagement	Strength			Battle Casualties			Arty. Pieces Lost			Success	Advance (Km./Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day	Total	%/Day		
Weissenburg	A 51,000 D 6,000	3,100 900	? 18	1,600 2,100	3.1 35.0	0 1	0 5.6	x	x	2.4	--
Froeschwiller	A 82,000 D 41,000	5,600 6,000	300 131	10,700 20,300	13.0 50.0	0 33	0 25.2	x	x	3.2	--
Spichern	A 42,000 D 28,000	4,500 3,500	108 90	4,900 3,100	11.7 11.1	0 0	0 0	x	x	1.0	--
Mars la Tour	A 63,000 D 113,000	11,000 14,000	486 228	16,000 14,000	25.4 12.4	0 1	0 0.4	x	x	2.4	--
Gravelotte-St. Privat	A 187,000 D 113,000	21,000 13,000	732	20,200 12,800	10.8 11.3	0 0	0 0	x	x	4.0	--
Sedan	A 200,000 D 120,000	24,000 12,000	701	9,000 38,000	4.5 31.7	0 ?	0 --	x	x	0.8	--
Coulmiers	A 60,000 D 20,000	? 5,000	? 100	1,800 1,800	3.0 25.0	0 2	0 2.0	x	x	3.2	--
Orleans	A 86,000 D 116,000	14,800 16,000	459 432	6,300 28,000	2.4 8.0	83 83	6.4	x	x	8.0	--
Le Mans	A 72,000 D 88,000	? ?	? 324	4,000 26,000	1.9 9.8	0 17	0 ?	x	x	? --	--
Belfort	A 110,000 D 40,000	9,000 4,500	146 364	8,000 2,000	2.4 2.5	? ?	--	x	x	0	--

4. INTANGIBLE FACTORS
War: Franco-Prussian War, 1870-1871

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.
Weissenburg	A	C	x	C	C	N	x	C	x	x	2.4	7
	D					x	0	C	x	x	--	4
Froeschwiller	A	C	x	C	C	N	x	0	x	x	3.2	7
	D					x	0	C	x	x	--	5
Spichern	A	C	C	C	C	N	N	C	x	x	1.0	6
	D					x	N	C	x	x	--	6
Mars la Tour	A	C	x	C	C	N	N	C	x	x	2.4	8
	D					x	N	C	x	x	--	4
Gravelotte- St. Privat	A	C	x	C	C	N	x	C	x	x	4.0	8
	D					x	N	C	x	x	--	3
Sedan	A	C	x	C	C	O	N	N	x	x	0.8	9
	D					x	N	C	x	x	--	3
Coulmiers	A	C	C	x	C	N	N	N	x	x	3.2	6
	D					x	N	N	N	x	--	4
Orleans	A	x	C	x	C	N	C	C	N	x	8.0	7
	D	0	0	0	0	C	C	C	N	x	--	3
Le Mans	A	D	x	C	x	O	O	C	O	x	?	7
						x	O	C	N	x	--	3
Belfort	A	D	0	0	x	0	0	C	O	x	0	8
						x	x	x	N	x	--	3

FACTORS AFFECTING OUTCOME

War: Franco-Prussian War, 1870-1871

CONEAT FORCES AND RESOLUTION OF CONFLICT

War: Franco-Prussian War, 1870-1871

Engagement	Plan and Maneuver		Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack		
Weissenburg	A D	F, EE D	--	X WD
Froeschwiller	A D	F, EB D	--	X WD
Spichern	A D	F, EB D	--	X WD
Mars la Tour	A D	F, E(LF) D/O	--	P WD
Gravelotte-St. Privat	A D	F, E(LF) D/O	--	P, S WD, S
Sedan	A D	F, EE D/O	--	X A B
Coulmiers	A D	F, E(LF) D	--	X WD
Orleans	A D	F D	--	X WD
Le Mans	A D	F, E(LF) D	--	X WD
Belfort	A D	F D	--	R, WD X

THE FRANCO-PRUSSIAN WAR

Weissenburg, 4 August 1870

In a meeting engagement at Weissenburg on the Lauter River a powerful column of Prussian Crown Prince Friedrich Wilhelm's Third Army surprised an unsupported division of French Marshal Marie de MacMahon's Army of Alsace. The French division, commanded by General Charles Abel Douay, defended a position centered on the town. The Germans, attacking with superior numbers strongly supported by artillery, forced their way into the town and enveloped both flanks of the French force. In a matter of hours the French were forced to retreat in confusion.

Significance: MacMahon's vanguard division was defeated; the French marshal pulled back and concentrated defensively on a wooded plateau fronting the Lauter River.

Sources: D.11; D.15.

THE FRANCO-PRUSSIAN WAR

Froeschwieler (Wœrth), 6 August 1870

In yet a second meeting engagement the German Third Army concentrated against the right wing of MacMahon's Army of Alsace, which it outnumbered two to one in men and better than two to one in guns, near the village of Wœrth in Alsace.

The Germans attacked all along the line and enveloped both flanks of the French army. The French fought doggedly to maintain their position, relying on the accuracy and volume of fire of their superior Chassepot rifle. MacMahon used his cavalry to attempt to resist the German envelopments, but the gallant, suicidal charges of the French horsemen were easily defeated by the fire of the German infantry and artillery. Finally, German numbers told, and MacMahon ordered a withdrawal after nightfall.

Significance: The victory of the Crown Prince pierced the Vosges Mountains barrier; MacMahon retreated to Chalons-sur-Marne (7-14 August). The road to Paris opened, and the German Third Army advanced methodically toward the Meuse.

Sources: A.1; D.15.

THE FRANCO-PRUSSIAN WAR

Spichern, 6 August 1870

On 2 August 1870 three German armies, totalling nearly 400,000 men approached the French frontier from the north and east. The boundary between two of these armies, the First (commanded by General K.F. von Steinmetz), and the Second (under Prince Friedrich Karl), ran through Saarbrucken. That day elements of the First Army, west of Saarbrucken, encountered elements of the French II Corps, commanded by General C.A. Frossard, advancing to the frontier from the south. An inconclusive engagement halted the German advance, and caused the French, unaware of the proximity of the Germans, to fall back south of the frontier.

As the German advance continued slowly south of the frontier, the left wing of the Prussian First Army and the left wing of the Third Army encountered Frossard's corps in a very strong defensive position in rugged, forested country, centered on the dominating plateau of Spichern. In uncoordinated action the Germans immediately attacked, but for several hours were repulsed by the French in their strong defensive positions. However, during the day more German units, "marching to the sound of the guns," arrived on the field, while several unengaged French units, not far from the battlefield, stayed in their positions, since they had received no orders. Frossard's appeals for reinforcements went unanswered.

By evening the Germans had built up overwhelming superiority on Frossard's flanks, on either side of the nearly impregnable plateau, and were threatening to encircle the II Corps. After dark, therefore, Frossard withdrew.

Significance: Although Spichern was unquestionably a German success, the French had fought well, and inflicted casualties at a greater rate than they suffered. What was significant, however, was that the Prussians, unlike the French, operated in accordance with an overall, coordinated concept.

Sources: A.7; A.15; D.11.

THE FRANCO-PRUSSIAN WAR

Mars-la-Tour, Vionville, and Rezonville, 16 August 1870

In mid-August 1870 French Marshal Achille F. Bazaine, commander of the newly organized Army of the Rhine, had been driven back to Metz by the German armies, which were threatening his line of communications to Paris. On 16 August he attempted to break out to the west toward Verdun in hopes of linking up with the army of Marshal Marie E.P.M. MacMahon at Verdun. Facing Bazaine's army to the south and southwest were the German First and Second armies. The Second Army, crossing the Moselle River at Pont-a-Mousson threatened to sever the French withdrawal route to the west, and by 15 August Bazaine concentrated his forces facing south between the Moselle and Orne rivers, with his left flank anchored on the fortified town of Metz.

On 16 August the leading corps (the III) of the German Second Army, moving north across the Verdun-Metz highway, unexpectedly collided with the French. Boldly attacking the entire French army, the III Corps was followed by other German units, and what had started as a meeting engagement soon developed into an all-out battle. Bazaine concentrated his troops in the left wing, to keep open his communications with Metz, while the Germans were cutting the French escape route to the west by concentrating against the French right wing. In the afternoon, successive cavalry charges on both sides resulted in a tremendous cavalry melee until both sides broke off in exhaustion. Finally the Germans pushed an attack into Rezonville on the French left, and the Germans consolidated their positions for the night.

Significance: Although the French had not been decisively defeated on the field, they had been cut off from Verdun by Bazaine's insistence on keeping open his communications with Metz and neglecting his right wing. Two days later the decisive battle of Gravelotte-St. Privat forced the French into Metz, where they were besieged.

Sources: A.2.4; A.7.

THE FRANCO-PRUSSIAN WAR

Gravelotte-St. Privat, 18 August 1870

Following the battles of Mars-la-Tour, Vionville, and Rezonville on 16 August 1870, French Marshal Achille F. Bazaine drew up his army, which was west of the fortified town of Metz, cut off from French forces at Chalons. Opposite the French line to the west were the German First and Second armies under Marshal Helmuth C.B. von Moltke.

On 18 August, von Moltke launched an attack against the French line, which was facing generally west on a ridge between the Moselle and Orne rivers. On the German right, east of Gravelotte, the German First Army was held most of the day by a determined French defense. At one point German forces panicked, and an all-out French counterattack might have reopened an escape route to the west. In fact, a half-hearted counterattack was checked only by German artillery fire and von Moltke's personal efforts. But Bazaine failed to take the initiative and did not exploit the German right wing's setback. To the north on the German left, the battle raged primarily around the walled village of St. Privat la Montaigne. A valiant defense by Marshal Canrobert's VI Corps against overwhelming numbers was finally outflanked by a German penetration at Roncourt to the north, and the remnants of the VI Corps were forced to withdraw. Late on the night of 18 September Bazaine's army was withdrawing from the field into Metz, which the Germans immediately besieged.

Significance: Lacking boldness and initiative, Bazaine had conceded victory to the Germans, who certainly did not get the best of the French on the battlefield. Individual French corps commanders led their troops well, but Bazaine did not possess the leadership qualities to coordinate the overall defense. His decision to retire to Metz led to the investment of the fortress and its eventual capitulation on 27 October 1870.

Sources: A.1; A.7; D.11.

THE FRANCO-PRUSSIAN WAR

Sedan, 1 September 1870

After the French defeat at the Battle of Gravelotte-St. Privat on 18 August 1870, Army of the Rhine commander Marshal Achille F. Bazaine fell back into the fortress of Metz, which the German First Army and elements of the Second Army proceeded to invest. Meanwhile, French Marshal Marie E.P.M. MacMahon, commander of the Army of Alsace, responded to the appeals of the French government and moved out on 21 August from Chalons, west of Metz, to relieve Bazaine. Choosing a northerly approach route to Metz, MacMahon left his forces open to a German turning movement. After several clashes along the Meuse River in late August, MacMahon's army was surrounded by the German Third Army and part of the Second Army (the Army of the Meuse) at Sedan on the north bank of the Meuse near the Belgian border. On 1 September the French forces attempted to break out of the German encirclement. MacMahon was wounded early in the battle, and his place was taken by General Emmanuel F. de Wimpfen. By noon the French were surrounded. A desperate French cavalry charge to the north was shattered by German infantry fire, and German cavalry charges in turn were repelled by French mitrailleuses, early machine guns. Following another unsuccessful breakout attempt late in the afternoon, this time to the southeast, the French fell back to Sedan. Early the next morning French Emperor Napoleon III, accompanying the Army of Alsace, surrendered to King Wilhelm of Prussia. At the same time the army capitulated.

Significance: This defeat meant that almost all of France's regular field forces were either besieged in Metz or prisoners of war. Only a handful of French fortresses and their garrisons stood between the German army and Paris, which itself came under siege on 19 September.

Sources: A.2.4; A.7.

THE FRANCO-PRUSSIAN WAR

Coulmiers, 9 November 1870

After destroying the only remaining French field army at Sedan, the German armies advanced on Paris, which they encircled, beginning formal siege operations on 19 September. To cover the southern approaches to their siege lines, the I Bavarian Corps, commanded by General von Der Tann, was sent south toward Orleans, which he occupied after a brief fight on October 11.

Meanwhile, only partly suspected by the Germans, the new French Third Republic, with its capital in Tours, was making heroic efforts to raise new armies. The Germans first became aware of this when General Louis J.B. d'Aurelle de Paladines advanced toward Orleans from north of Tours in early November with an army of 100,000 men. At the same time another strong French force was advancing up the Loire from Gien toward Orleans. Von Der Tann, in danger of being encircled, withdrew from Orleans the night of 7 November, and advanced toward Aurelle early the next morning. However, soon realizing he was outnumbered, that night von der Tann took up a defensive position at Coulmiers, about 15 kilometers west of Orleans.

At about 0900 hours the next morning, cold and overcast, the French advanced eastward on a broad front. While Aurelle's right wing engaged von Der Tann's main force, his left advanced further north, and threatened to envelop the Bavarians. Had this envelopment been pressed more vigorously, the Bavarians would undoubtedly have been overwhelmed, and perhaps encircled. As it was, by dusk, at 1600 hours von Der Tann realized his danger, and withdrew.

Significance: Orleans was recaptured by the French. Most important, they had learned that the Germans were not invincible. However, they failed to realize that their victory was due more to overwhelming numbers, and unimaginative Bavarian leadership, than to the elan of the newly raised, undisciplined French troops.

Sources: A.7; A.15; D.15; D.21.

THE FRANCO-PRUSSIAN WAR

Orleans, 2-4 December 1870

After the defeat of the Bavarians at Coulmiers Moltke realized that the security of his army, and his ability to sustain the siege of Paris, were gravely threatened by the growing French strength, particularly to the south. Because of the surrender of Metz, however, on 27 October, he now had another field army available, the Second under Prince Frederick Charles. That army, about 90,000 strong, began to move south from the vicinity of Fontainebleau toward Orleans on 27 November. By 1 December they had reached a line extending generally from Chateaudun in the west of Pithviers in the east, a front of about 60 kilometers, and about 35 kilometers north of Orleans. Moltke ordered Prince Frederick Charles to advance on Orleans on 3 December.

At this time the French army of the Loire, under General L.J.B. d'Aurelle de Paladines numbered close to 200,000 men, in six corps. However, the troops were almost totally untrained and inexperienced.

The battle began, however, in bitterly cold and snowy weather, early on 2 December with an attack of the French left-hand corps, under General A.E.A. de Chanzy, against the German right near Loigny. The Germans, surprised by the attack, were briefly thrown back. However, they quickly recovered and repulsed Chanzy with heavy losses. There was little action elsewhere along the line, as Aurelle was waiting to hear that Chanzy had been successful before ordering a general advance. Early the next morning, however, in heavy snow, the Germans attacked all along the line, their main effort in the center. The French were thrown back and large numbers of troops began to flee the battlefield. As the German advance continued the next day, Aurelle ordered a general retreat. That night the French rear guard commander surrendered the city of Orleans to the Germans.

Significance: The defeat of the French Army of the Loire made clear to both sides that the new levies of Republican France could not hope to repeat the achievements of the Republican levies of 1792. Although the French government did not yet accept the fact, the Battle of Orleans assured an early end of the war.

Sources: A.7; A.15; D.11.

THE FRANCO-PRUSSIAN WAR

Le Mans, 11-12 January 1871

The French General Antoine Chanzy, leading the provincial Army of the Loire, made a strategic offensive in the Loire Valley southwest of Paris; Chanzy's objective was to relieve the besieged French garrison of Paris. The German Second Army, commanded by Prince Friedrich Karl, marched against Chanzy, who at once retreated to prepared defenses in front of Le Mans. There, in bitterly cold weather, with many snow flurries, the Germans attacked on 11 January.

During the day the Germans smashed the French right when Chanzy's unreliable Breton Gardes mobiles (militia), which held the French right flank, panicked and fled. This panic was soon communicated to Chanzy's reserves, which were in training camps to the rear. However, because of the weather, and because the French left held firm, the Germans did not realize the extent of their success. That night Chanzy ordered a general withdrawal. But German pressure made it difficult for the French to extricate themselves, and it was afternoon before they were able to break contact. Chanzy withdrew to Laval.

Significance: Chanzy's desperate offensive was defeated, but he rebuilt his army and remained a threat to the Germans in the Loire Valley. However, popular enthusiasm for resistance in the French provinces was beginning to wane.

Sources: A.1; A.7; D.11; D.15.

THE FRANCO-PRUSSIAN WAR

Belfort, 15-17 January 1871

Shortly after the investment of Bazaine's army in Metz, in August of 1870, a German force invested the strong fortress town of Belfort in southeastern Alsace. The French garrison was commanded by Colonel Pierre Denfert-Rochereau, who repulsed several assaults by the German VI Corps under General Karl W. von Werder.

Meanwhile the French high command produced an unrealistic plan to relieve the siege of Paris by cutting Moltke's lines of communication. An army of over 100,000, under General Charles D.S. Bourbaki, would advance northwestward from Bourges to recapture Dijon, to relieve Belfort, and then drive northward into Lorraine to cut the German lines of communication. On 30 December 1870 Bourbaki began to advance toward Belfort from just south of Dijon and Besancon. Werder hastily pulled back his small garrison from Dijon, and prepared to meet the French threat on the Lorraine River, just west of Belfort. Meanwhile Moltke created a new Army of the South from two corps near Orleans, under the command of General Edwin von Manteuffel, which was to march eastward to fight Bourbaki.

On 14 January Bourbaki reached Werder's line along the Lorraine River. Bourbaki now had about 110,000 men, Werder barely 40,000. Despite bitter cold, and considerable snow, Bourbaki attacked on the 15th, with his main effort on his left (north) flank. However, his inexperienced officers and men were unable to coordinate their efforts, and were repulsed all along the line. The next day, however, the French forced a crossing of the Lorraine in the center, and came close to a complete breakthrough. But they were so disorganized that they were unable to exploit this success. Werder, who had used up all his reserves, was nonetheless able to plug the gap. On the 17th Bourbaki ordered a renewal of the attack, but the exhausted, frozen troops were unable to respond more than half-heartedly. Bourbaki gave orders to withdraw.

Significance: This was the last major battle of the war. As Manteuffel's army approached from his rear, Bourbaki took his entire army (83,000 men) to internment in Switzerland on 1 February. Werder renewed his efforts against Belfort, but though close to collapse the garrison held on until the war was ended with an armistice on 15 February, when Denfert-Rochereau (under orders from his government) was authorized to surrender with full honors of war.

Sources: A.7; D.11; D.15.

1. IDENTIFICATION
War: Zulu War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (km)
I sandlwana, Zululand	A 22 Jan 1879 D	Zululand, 1879	Zulu Army Br 24th Regt. (+)	Mavumengwana, Tshingwayo Pulleine	1	4.0
Ulundi, Zululand	A 4 Jul 1879 D	Zululand, 1879	Zulu Army Br Army	Cetewayo Chelmsford	1	1.5

War: Transvaal Revolt

Majuba Hill, Transvaal	A 27 Feb 1881 D	South Africa, 1881	Boer Army Br Army	Suidt Volley	1	1.4
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War: Egypt and the Sudan

Tel el-Kebir Egypt	A 13 Sep 1882 D	Egypt, 1882	Br Army Eg Army	Wolseley Arabi	1	?
Omdurman, The Sudan	A 2 Sep 1898 D	The Sudan, 1898	Mahdists Br Army	Abdullahini Kitchener	1	4.8

War: Italo-Ethiopian War 1895-1896

Adowa, Ethiopia	A 1 Mar 1896 D	Ethiopia, 1896	Eth Army It Army	Menelik II Baratieri	1	?
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2. OPERATIONAL AND ENVIRONMENTAL VARIABLES

War: Zulu War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
I sandlwana	A D	HD	RGB	ST	Y	X	substantial
Ulundi	A D	HD	RB	DST	N	--	--
War: Transvaal Revolt							
Majuba Hill	A D	H/PD	RgB	DSH	ST	N	--
War: Egypt and the Sudan							
Tel el-Kebir	A D	PD	FB	DST	FTR	Y	substantial
Ondurman	A D	HD	FB	DST	FD	N	--
War: Italo-Ethiopian War 1895-1896							
Adowa	A D	HD	RM/RgB	DST	WTR	Y	substantial

3. STRENGTHS AND COMBAT OUTCOMES

War: Zulu War

Engagement	Strength			Battle Casualties			Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day			
Isandlwana	A 20,000	? 0	3,000	15.0	0	--	--	x	1.8	--
	D 1,800	450 2	1,445	80.3	2	100.0				N --
Ulundi	A 20,000	? 0	1,500	7.5	0	--	--	x		
	D 5,317	899 12	1,100	1.9	0	--				

War: Transvaal Revolt

Majuba Hill	A 1,200	0	?	6	0.5	0	--	x	3.0	--
	D 350	0	0	284	81.1	0	--			

War: Egypt and the Sudan

Tel el-Kebir	A 17,401	2,785	61	469	2.7	?	--	x	?	--
	D 20,000	? 75	2,500	12.5						
Omdurman	A 55,000	? 0	30,700	55.8				x		
	D 25,800	? 80	482	1.9						

War: Italo-Ethiopian War 1895-1896

Adowa	A 120,000	17,000	42	17,000	14.2	0	--	x	?	--
	D 20,251	0	64	9,678	47.8	64	100.0			

4. INTANGIBLE FACTORS
War: Zulu 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 Accom-p.
Isandlwana	A	C	C	C	N	N	x	x	x	x	1.8	9
	D	x	C	C	C	N	x	x	N	N	--	4
Ulundi	A	C	C	C	N	N	N	x	N	x	N	4
	D	x									--	8

War: Transvaal Revolt

Majuba Hill	A	x	x	C	C	N	N	N	C	x	3.0	9
	D										--	4

War: Egypt and the Sudan

Tel el-Kebir	A	x	x	x	C	N	N	C	x	x	?	10
	D										--	3
Omdurman	A	x	x	x	C	N	N	N	N	x	--	4
	D										2.7	9

War: Italo-Ethiopian War 1895-1896

Adowa	A	C	x	C	C	C	O	N	x	C	x	?
	D										--	5

Engagement	A	N	x	x	N	N	N	N	N	N	Depth
Isandlwana	A	N	x	x	N	N	N	N	N	N	Portfolios
	D										front

Engagement	A	N	N	N	N	N	N	O	N	N	Surprise
Ulundi	A	D	x								Mass, Never,
	D										front Mass,

War: Transvaal Revolt

Majuba Hill	A	N	N	N	x	N	N	O	N	N	Planning
	D										slip Leader-

War: Egypt and the Sudan

Tel el-Kebir	A	x	N	N	N	N	N	x	N	N	Force Prepon-
	D										derancé
Omdurman	A	x	N	N	N	N	N	x	N	N	Weather

War: Italo-Ethiopian War 1895-1896

Adowa	A	N	x	x	x	N	N	O	N	N	Operations
	D										front

7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: Zulu War

Engagement	Main Attack and Scheme of Defense		Plan and Maneuver		Success	Resolution
			Secondary Attack			
Isandlwana	A D	EE D	F --		X	B, Ps
Ulundi	A D	F D/O, F	-- --		X	A R, WD Ps
War: Transvaal Revolt						
Majuba Hill	A D	F D	-- --		X	B A
War: Egypt and the Sudan						
Tel el-Kebir	A D	F D	-- --		X	P, Ps WD
Omdurman	A D	F D/O, F	E(RF) --		X	R, WD Ps
War: Ethiopian War 1895-1896						
Adowa	A D	EE D	F --		X	B, Ps WD

1. IDENTIFICATION
War: Boer War

Engagement	Date(s)	Campaign	Forces	Commanders	Duration (days)	Width of Front (Km)
Modder River, South Africa	A D 28 Nov 1899	Kimberley	Br Army Boer Army	Methuen Cronje & De La Rey	1	4.0
Magersfontein, South Africa	A D 11 Dec 1899	Kimberley	Br Army Boer Army	Methuen Cronje	1	5.0
Colenso, South Africa	A D 15 Dec 1899	Ladysmith	Br Army Boer Army	Buller Botha	1	9.5
Spion Kop, South Africa	A D 24 Jan 1900	Ladysmith	Br Army Boer Army	Buller Joubert	1	3.5
Paardeberg, South Africa	A D 18 Feb 1900	Ladysmith	Br Army Boer Army	Roberts Cronje	1	?
War: Spanish-American War						
San Juan-El Caney, Cuba	A D 1 July 1898	Santiago	US V Corps Sp Army	Shafter Linares	1	2.5

2. OPERATIONAL AND ENVIRONMENTAL VARIABLES
War: Boer War

Engagement	Defender Posture	Terrain	Weather	Season	Surprise	Surpriser	Level Surprise
Modder River	A D	PD	FM	DSH	Spt	Y	minor
Magersfontein	A D	PD	FB	WHT/DSH	Spt	Y	substantial
Colenso	A D	PD	F/RB	DSH	Spt	N	---
Spion Kop	A D	PD	RB	DSH	ST	Y	minor
Paardeberg	A D	PD	FM	DSH	ST	N	---
War: Spanish-American War							
San Juan-El Caney	A D	PD	RgM	DSH	ST	N	---

3. STRENGTHS AND COMBAT OUTCOMES
War: Boer War

Engagement	Strength			Battle Casualties		Arty. Pieces Lost		Success	Advance (Km/Day)
	Total	Cavalry	Arty. Pieces	Total	%/Day	Total	%/Day		
Modder River	A 8,000 D 3,500	0 0	16 9	468 150	5.9 4.3	0 0	-- --	x	1.5 --
Magersfontein	A 15,000 D 9,000	? ?	29 ?	948 236	6.3 2.6	? ?	-- --	x	N --
Colenso	A 13,411 D 5,500	836 500	44 ?	1,126 50	8.4 0.9	10 ?	22.7 --	x	N --
Spion Kop	A 24,000 D 5,000	? ?	40 10	1,734 335	7.2 6.5	0 0	-- --	x	N --
Paardeberg	A 15,000 D 4,000	? ?	32 6	1,270 350	8.5 8.8	0 0	-- --	x	0.5 --
War: Spanish-American War									
San Juan-El Caney	A 15,065 D 1,592	? ?	38 4	1,572 850	10.4 53.4	0 2	-- 50.0	x	1.6 --

4. INTANGIBLE FACTORS

War: Boer War

5. OUTCOME

Engagement	CE	Leader-ship	Training/ Experience	Morale	Logis-tics	Monen-tum	Intelli-gence	Tech-nology	Initia-tive	Victor	Distance Advanced (Km/Day)	Mission Accom-p.
Modder River	A D	C X	X	O	N	N	C	N	X	X	1.5 --	5 4
Magersfontein	A D	C X	X	C	N	N	O	C	N	X	N --	3 8
Colenso	A D	C X	X	C	C	N	O	C	N	X	N --	2 8
Spion Kop	A D	C D	X	C	N	N	O	C	O	X	N --	2 7
Paardeberg	A D	C X	X	O	O	O	N	C	X	X	0.5 --	7 5
War: Spanish-American War												
San Juan El Caney	A D	C	C	C	N	N	N	N	O	C	X	1.6 --
												6 4

6. FACTORS AFFECTING OUTCOME

War: Boer War

Engagement	Quality of force	Reserves	Mobility Superiority	Force Preparation- destruction	Weather- Roads	Planning	Surprise	Maneuver, Mass,	Narrow front	Logistics	Effi- ciencies	Depth
Modder River	A D	X	N	N	N	X	N	N	N	X	X	N
Magersfontein	A D	X	N	N	N	N	N	N	N	X	X	N
Colenso	A D	X	X	N	N	O	N	N	N	X	X	N
Spion Kop	A D	X	X	N	N	O	N	N	N	N	O	N
Paardeberg	A D	N	N	O	N	O	N	N	N	N	O	N

War: Spanish-American War

San Juan-El Caney	A D	N	N	N	N	N	N	N	N	N	N	X
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7. COMBAT FORMS AND RESOLUTION OF COMBAT

War: Boer War

Engagement	Plan and Maneuver			Success	Resolution
	Main Attack and Scheme of Defense	Secondary Attack			
Modder River	A D	F D	--	x	R MD
Magersfontein	A D	F D	--	x	R, MD --
Colenso	A D	F D	--	x	R, MD --
Spion Kop	A D	F D	E(LF) --	x	P, MD --
Paardeberg	A D	F, EE D	--	x	R --
War: Spanish-American War					
San Juan-El Caney, Cuba	A D	F D	--	x	P MD

THE ZULU WAR

Isandhlwana, 22 January 1879

In December 1878 Great Britain demanded a virtual protectorate over Zululand, an African nation that had been ruled by the Zulu King Cetewayo since 1872. When Cetewayo ignored the British demands, British General F.A. Thesiger, Viscount Chelmsford, organized a force of British and native troops, which he led into Zululand in three widely separated columns on 11 January 1879.

On 22 January, the center column, which had advanced from Rorke's Drift, was encamped without the protection of field fortifications near Isandhlwana. While Chelmsford was away on reconnaissance, a large force of Zulus surprised the British camp and virtually annihilated it. Chelmsford returned to the devastated camp and then withdrew his party to Rorke's Drift.

Significance: The overwhelming Zulu success at Isandhlwana, part of Cetewayo's aggressive strategy, upset British plans to subdue Zululand. Consequently, more time and fighting would be required to defeat the Zulus.

Sources: D.16.

THE ZULU WAR, 1879

Ulundi, 4 July 1879

By May 1879 reinforcements from England had arrived in sufficient numbers in southern Africa for use in subduing Zululand and its leader Cetewayo. At the end of May, British General F.A. Thesiger, Viscount Chelmsford, began another campaign to capture the Zulu royal kraal at Ulundi, his first expedition in January 1879 having failed.

On 4 July Chelmsford reached the vicinity of the Zulu capital. There, the British were attacked by a large force of Zulus. The British infantry, however, formed a hollow square and, with well-placed artillery, broke up numerous Zulu assaults. British cavalry, initially inside the square, charged the disorganized Zulus and the Zulu attack was dispersed.

Significance: Zulu military power was virtually ended by the British victory at Ulundi, and Cetewayo was captured and exiled. In 1887 Zululand was annexed by the British crown.

Source: D.16.

TRANSVAAL REVOLT, 1880-1881

Majuba Hill, 27 February 1881

In December 1880 a Boer republic was established in the Transvaal region of South Africa, and the Boers there rebelled against the British, who had annexed the region in 1877. Pretoria was besieged, and a Boer force under General Petrus Jacobus Joubert invaded the British colony of Natal. British General Sir George Colley moved a small force to meet the invasion and was defeated at Laing's Neck in the Drakensberg Mountains on 28 January 1881. On 27 February, part of Colley's force was in position atop Majuba Hill, which overlooked the principal pass through the mountains. A force of Boers attacked the position, and while accurate rifle fire pinned the British down, a storming party overran the position.

Significance: This Boer victory brought about peace negotiations, and on 5 April 1881, the Treaty of Pretoria was signed, granting limited independence to the Boer South African Republic.

Sources: D.2.

EGYPT AND THE SUDAN, 1882

Tel el Kebir, 13 September 1882

In 1881 Egyptian Army Colonel Ahmed Arabi (Arabi Pasha) led a nationalist revolt against increasing European influence in the Egyptian Government and administration. This revolt threatened the financial interests of the European powers, particularly Great Britain. In a show of strength, a combined Franco-British naval squadron demonstrated at Alexandria (May 1882). However, anti-European agitation in Egypt continued, and a riot in Alexandria (June) left 50 Europeans dead. Britain prepared to intervene with military force.

A small British expedition commanded by Lieutenant General Sir Garnet Wolseley landed at Port Said in late August and prepared to attack Egyptian forces defending the eastern Nile Delta and Cairo. Arabi, who commanded the Egyptian army, had prepared defenses at Tel el Kebir on the Sweetwater Canal and rail line, about midway between Ismailia and Zagazig.

Since the Egyptian trenches commanded a level, bare plain, Wolseley planned a night approach march and surprise attack; this was initiated at 0130 hours, 13 September. At 0500 hours the British attacked, achieving surprise, and overcoming all opposition by 0730. The Egyptians were driven from the field in disorder and pursued by the British.

Significance: The British victory broke the back of Arabi's revolt; Arabi surrendered and was exiled. Egypt was placed under a British administration.

Source: D.2.

EGYPT AND THE SUDAN, 1898

Omdurman, 2 September 1898

Beginning in 1883 the Sudan and the middle Nile River region were torn by a Mahdist uprising against Anglo-Egyptian influence in that area. In 1885, after a siege of 10 months, the Mahdists captured Khartoum, and massacred the British garrison and its commander General Charles George Gordon. In 1896 British Major General Sir Horatio H. Kitchener commenced a methodical reconquest of the Sudan with a mixed force of British and Egyptian troops, supported by a river gunboat flotilla. In 1898 Kitchener's expedition arrived near Omdurman, just north of Khartoum, where the Mahdist leader Abdullahini had assembled his forces.

On 2 September, the Mahdists attacked the Anglo-Egyptian army on the plain north of Omdurman. British rifle and machine gun fire smashed the first of the Mahdists' massed assaults. The defenders then counter-attacked, only to be struck on their right flank by another mass of Mahdist troops. British and Egyptian infantry defeated this threat, however, and the Mahdists dispersed in confusion. British and Egyptian cavalry pursued. Then Kitchener and his troops marched triumphantly into Omdurman.

Significance: Kitchener's victory restored Anglo-Egyptian control in the Sudan and also demonstrated the awesome military potential of the machine gun. Mahdist losses in the battle were extremely high due to the firepower superiority of Kitchener's troops.

Sources: D.2; D.5.

ITALO-ETHIOPIAN WAR, 1895-1896

Adowa, 1 March 1896

Border disputes between Ethiopia and Italy, whose colony of Eritrea on the Red Sea bordered Ethiopia, led to war in 1895. The Italians were defeated in several minor actions, and in 1896 the Italian commander, General Oreste Baratieri, put together a large army and marched against Addis Ababa, the Ethiopian capital, determined to defeat the Ethiopian army in one decisive battle.

At Adowa, in northeastern Ethiopia, Baratieri's force was surprised by a large Ethiopian army led by the Emperor Menelik II. The leading elements of Baratieri's army were isolated and very quickly overwhelmed by the Ethiopians. Baratieri's main body never had a chance to form a coherent defensive line, and it, too, was surrounded and destroyed. The Ethiopians, who were very well armed, used tactics of fire and movement and envelopment cleverly; their victory was overwhelming.

Significance: Adowa was the worst defeat inflicted on a European power by an African nation. In October 1896 Italy and Ethiopia concluded the Treaty of Addis Ababa, by which Italy recognized the independence of Ethiopia.

Sources: A.2.4; D.1.

THE BOER WAR, 1899-1901

The Modder River, 28 November 1899

In November 1899, following the investment of Kimberley by Free State Boer forces, a British relief expedition under General Lord Paul Methuen moved northeast from Cape Town. Brushing aside Boer delaying forces at Belmont and Graspan, the British reached the south bank of the Modder River, where it meets the Riet River, on 28 November. Here, a combined force of Free State Boers and Transvaalers had prepared defenses to the north and south of the two rivers to stop the British.

In the early morning of 28 November, the British were taken under fire at a range of about one kilometer by anxious and nervous Boer riflemen. This action opened the battle and also eliminated any chance for an ambush of the British at closer ranges. Throughout the day the bulk of the British infantry was pinned down by Boer rifle and artillery fire, while the Boers were subjected to heavy fire from the more numerous British artillery pieces. Finally, on the Boer right (western) flank, British troops forced their way across the Modder at Rosmead, a riverside village with a ford and a dam across the river, which was inadequately covered by Free State Boers demoralized from the defeats at Belmont and Graspan. A counterattack contained the British bridgehead, but during the night the Boers, outflanked and outnumbered, withdrew.

Significance: General Methuen's victory permitted the continuation of the Kimberley relief expedition, but it also taught the Boers lessons in defensive tactics which they incorporated in preparing new defenses at Magersfontein Hill, ten kilometers north of the Modder.

Sources: A.2.4; D.18.

THE BOER WAR, 1899-1901

Magersfontein, 11 December 1899

After driving the Boers from their positions along the Modder River on 28 November 1899, British General Lord Paul Methuen paused to regroup his forces before resuming his advance to relieve the besieged town of Kimberley. Meanwhile, Boer General Jacobus H. De La Rey, who shared the command of the Boers north of the Modder River with General Piet A. Cronje, ordered field defenses constructed just south of Magersfontein Hill. The defenses were skillfully camouflaged and located at the base of the hill where the British did not expect them.

On the afternoon and evening of 10 December, British artillery pounded the hill while a Scottish brigade moved forward in a night approach march to attack the Boer position. After marching in the dark and in heavy rain, the brigade, in mass formation, approached the still undetected Boer trenches at dawn. Less than a half kilometer from the trenches, the Scots were struck suddenly by heavy rifle fire from the Boer position (which had hardly been touched by the British artillery preparation). Soon the brigade was pinned down. A gap in the left center of the Boer line might have been exploited, but the defenders quickly closed it, and the few British infantrymen who had penetrated it were lost. In the early afternoon, an order for several small units to fall back for defense against a Boer threat to the British right precipitated a general withdrawal which disintegrated into a rout. The Boers did not pursue but remained in their positions and continued to block the route of the relief expedition.

Significance: The relief of Kimberley was delayed by this defeat, which, combined with another British setback at Colenso on 15 December, led to a shake up in the British command in South Africa.

Sources: A.2.4; D.18.

THE BOER WAR, 1899-1901

Colenso, 15 December 1899

The town of Ladysmith in northwest Natal was besieged by Boer forces on 2 November 1899. General Sir Redvers Buller, commander of British forces in South Africa, personally took command of a relief expedition from the south and, in December 1899, drew up his forces just south of Colenso on the Tugela River. At Colenso, Free State General Louis Botha had prepared formidable defenses, primarily along the north bank of the Tugela, to stop Buller's advance. Although outnumbered in men and guns, Botha carefully spread his command over a wide front, with artillery on the high ground north of the river and infantry in well-camouflaged trenches closer to the river bank. Buller's plan of attack was to make two infantry assaults at fords in the river, both preceded and supported by artillery fire. British intelligence of the location of the Boer positions was sketchy.

Following a two-day artillery bombardment, which had little effect on the Boer positions, the British moved out on the early morning of 15 December. One brigade on the left lost its way and blundered into a loop of the Tugela, where rifle fire from three sides trapped it. This brigade withdrew later in the day after suffering heavy losses. On the extreme right, an attack to take a hill east of the Tugela, where artillery positions were to be established to enfilade the Boer left, gained no ground. The British main effort to take a crossing in the center of the Boer line failed to materialize when supporting artillery was moved too close to Boer defenses and neutralized by rifle fire. In the afternoon Buller called off the attack, and the British infantry, weary from exposure in the hot sun, withdrew. An attempt to save the stranded British artillery pieces retrieved only two guns; the rest were captured by the Boers.

Significance: Buller's failure to break through the Colenso position delayed the relief of Ladysmith and cost him the command of the British army in South Africa.

Sources: A.2.4; A.7; D.18.

THE BOER WAR, 1899-1901

Spion Kop, 24 January 1900

Although Lieutenant General Sir Redvers Buller lost overall command of British forces in South Africa after his defeat at Colenso, he remained in command of the Ladysmith relief force. In January 1900, reinforced by the British 5th Division, he renewed his efforts to break through Boer defenses to reach Ladysmith, this time upstream on the Tugela River from Colenso. On 16 January, Buller's troops crossed the Tugela at Potgieters Drift, and Buller formulated a plan for a two-pronged attack on the Boer defenses. Lieutenant General Sir Charles Warren's 5th Division was to make the initial assault northwest of Potgieters Drift, after which Buller was to attack with the remainder of the British force, outflanking Boer positions near Potgieters. Warren, however, delayed the attack on the hill of Spion Kop, his primary objective, until the night of 23/24 January, when a night march brought British troops to the hill's summit. In heavy fog the British failed to prepare adequate defenses, and no British artillery reached the hilltop. As a result, when the Boers shifted troops to meet this unexpected penetration, the British were caught in enfilading fire at daybreak on 24 January and outgunned by Boer field pieces. All day long the battle raged along the western edge of Spion Kop, and the British did not advance either on the hill or at Potgieters Drift. A British diversionary attack to the east of Spion Kop at one point threatened the entire Boer position, but this success was not exploited. So, after dark on 24 January, the British commander on Spion Kop ordered his troops back down the hill.

Significance: Another attempt to break through to Ladysmith had failed, because of the British command's lack of initiative and the determined resistance of the Boers. However, the attack had so weakened the Boer defenses that had it been pressed on 25 January it might have cracked the Boers' line.

Sources: A.7; D.18.

THE BOER WAR, 1899-1901

Paardeberg, 18 February 1900

After the besieged town of Kimberley was relieved on 15 February 1900, British forces under Field Marshal Frederick, Viscount Roberts, pursued Boer General Piet A. Cronje's Boer army eastward along the general line of the Modder River. Cronje was attempting to reach Bloemfontein to aid in the defense of that town. On 17 February, near Paardeberg, a British cavalry contingent blocked Cronje's route. On the next day, the main body of Roberts's army, temporarily commanded by General Sir Horatio H. Kitchener, came up and attacked Cronje's troops, who were entrenched along the north bank of the Modder.

Kitchener's attack plan called for a three-pronged piecemeal assault on the Boer laager: one division to attack from the south across the Modder against the front of the Boer position, and other units to attack the Boers' flanks to the north of the River. Lacking adequate cover, the British infantry suffered heavy casualties and made no significant gains, although the British artillery damaged the Boer laager. A small force of Boer cavalry, moving north to aid Cronje, seized a commanding position overlooking the battlefield. However, Cronje's refusal to abandon his supply train and break out ultimately doomed his force.

Significance: Following the British repulse on 18 February, Field Marshal Roberts besieged the Boer camp, and on 27 February Cronje capitulated. This was a decisive British victory. It eliminated the Boer military presence in the western Orange Free State.

Sources: A.2.4; A.7; D.18.

THE SPANISH-AMERICAN WAR

San Juan and El Caney, 1 July 1898

After landing southeast of Santiago, Cuba, on 22 June 1898, the US V Corps, led by Major General William Shafter, marched through rugged jungle terrain to the eastern defenses of Santiago. On 28 June, after receiving information that Spanish reinforcements were moving to Santiago, Shafter ordered his command to prepare to attack three objectives: the Spanish positions on Kettle and San Juan hills and a detached outpost to the northeast at El Caney. The plan called for swift defeat of the garrison at El Caney, after which the US troops would hurry southwest to assault Kettle and San Juan hills.

The attack on El Caney began early on the morning of 1 July. Poorly coordinated, and improperly supported by artillery, the detachment failed to overcome stubborn resistance and take the outpost until late in the afternoon. Meanwhile, the US troops deploying for the attack on San Juan and Kettle hills had been detected and fired upon by the defenders. Thus the battle began without the El Caney contingent. Fighting was confused, until, late in the day, US infantry and dismounted cavalry finally charged the Spanish positions, supported by artillery and Gatling guns, and seized the two hills.

Significance: In spite of Shafter's weakening his force by dividing it, all objectives were taken, and the Spanish defenses east of Santiago were breached. When the US Navy defeated the Spanish squadron defending Cuba, the Spanish surrendered Santiago, on 15 July. In these ground battles the Spanish were using smokeless powder, which gave them an advantage over the US troops, with their black powder.

Sources: A.7; A.11; A.17.

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ANALYSIS OF FACTORS THAT HAVE INFLUENCED OUTCOMES OF BATTLES AND WARS: A DATA BASE OF BATTLES AND ENCLASSEMENTS. VOLUME 3
WARS FROM 1805 THROUGH 1900. PART 1. WARS OF THE 17TH, 18TH, AND 19TH CENTURIES.

ABSTRACT

(U) IN THIS REPORT PREPARED BY THE HISTORICAL EVALUATION AND RESEARCH ORGANIZATION (HERO) FOR THE US ARMY CONCEPTS AND LYSIS AGENCY, HERO HAS COMPILED DATA ON 600 MAJOR BATTLES OF MODERN HISTORY FROM THE BEGINNINGS 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 CONSIST OF SEVEN TABLES WHICH PRESENT ALL OF THE SIGNIFICANT STATISTICAL DATA AVAILABLE ON THE BATTLES AND HOW 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. THIS VOLUME COVERS BATTLES FROM 1805-1900.

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DATA ON 600
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VOLUME 3

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WARS

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
the period from 1805-1900.*