THE 1777 CAMPAIGN: A HISTORICAL WARGAME OF THE AMERICAN REVOLUTION

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE
Wargame Design

by

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The campaign of 1777 was a turning point in the American Revolution and set the strategic conditions necessary for the American Colonies to gain their independence. The campaign had two theaters, one centered along the Hudson River and the other around Philadelphia. A study of these two theaters shows the importance of aligning tactical and operational actions to strategic objectives and the obstacles that can frustrate that alignment. The campaign also showcases the importance of lines of communication within an expeditionary army. That tether becomes a critical vulnerability to a force reliant on external support to maintain itself.

This thesis provides a historical understanding and rationale for the modeling decisions made in the development of the wargame. Players will assume the role one of the Department Commanders within the campaign: Washington and Gates for the Continental side, and Howe and Burgoyne for the British. Players will gain an understanding of the historical context of the campaign, the decisions the commanders faced, and the opportunity to make decisions within the framework of U.S. Army doctrine.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE 1777 CAMPAIGN, A HISTORICAL WARGAME OF THE AMERICAN REVOLUTION, by Major John Beynon, 193 pages.

The campaign of 1777 was a turning point in the American Revolution and set the strategic conditions necessary for the American Colonies to gain their independence. The campaign had two theaters, one centered along the Hudson River and the other around Philadelphia. A study of these two theaters shows the importance of aligning tactical and operational actions to strategic objectives and the obstacles that can frustrate that alignment. The campaign also showcases the importance of lines of communication within an expeditionary army. That tether becomes a critical vulnerability to a force reliant on external support to maintain itself.

This thesis provides a historical understanding and rationale for the modeling decisions made in the development of the wargame. Players will assume the role one of the Department Commanders within the campaign: Washington and Gates for the Continental side, and Howe and Burgoyne for the British. Players will gain an understanding of the historical context of the campaign, the decisions the commanders faced, and the opportunity to make decisions within the framework of U.S. Army doctrine.

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ACRONYMS

LSCO – Large Scale Combat Operations

OoB – Order of Battle

CHAPTER 1

INTRODUCTION

The 1777 campaign during the American Revolution proved to be decisive to the eventual outcome of the war. The year saw three significant battles—Brandywine, Germantown, and Saratoga. While the Continental Army was victorious only at Saratoga, the campaign demonstrated the Army's viability to France and Spain, therefore prompting them to enter the war. Despite their qualitative superiority and quantitative parity on the battlefield and their naval supremacy, the British were unable to achieve the decisive war-ending result that General Howe and Lord Germain were eager for. This thesis will examine the campaigns of 1777 and defend the design of a wargame modeling the campaign.

In the wargame, players will take on the roles of the senior military commanders in their Departments: Generals Howe and Washington. By taking on these roles, the players will make decisions with similar constraints, variables, and capabilities as their historical counterparts, enabling them to learn the historical dynamics of the campaign. The players will command their armies in the Middle Department, in the Philadelphia area, struggling for control of the Continental capital and the Delaware River, and also in the Northern Theatre, where the British player has forces coming south from Montreal along Lake Champlain to secure the Hudson River.

Problem Statement

There are many similarities between Limited War in the 1700s and the current operating environment, as the US Army considers Large-Scale Combat Operations

(LSCO). While there are resemblances, the operations during the 1700s were comparatively less intricate and are thus useful for teaching concepts applicable to LSCO. The 1777 Campaign had two mutually supporting theaters, the Northern Department, centered around the Hudson River, and the Middle Department in the vicinity of Pennsylvania and New Jersey. Both Departments were influenced by terrain, the forces available to the commanders, the logistical strains of operating in an "immature" theater, and the political authorities making demands upon them.

Research Questions

How can the 1777 campaign during the American Revolution be effectively modeled into a wargame to educate and train the players on the complexity of Large-Scale Combat Operations?

Secondary Question 1#: What decisions did Washington and Howe make related to the tactical, operational, and strategic levels of war?[1] This question is of vital importance as the players will assume the roles of Washington and Howe, and thus must have access to similar information to them. The researcher must understand why Washington and Howe arrived at their decisions if the same variables are to be modelled into the game. This question is also important as it relates to reaction time. Players should not always be able to react to an opportunity, even if they learn of it. The integration of

[1] Joint Chiefs of Staff (JCS), Joint Publication (JP) 3-0, Change 1, *Joint Operations* (Washington, DC: JCS, 2017), I-12.

this information will create a decision-making cycle for the players, allowing them to make simple decisions with important outcomes.[2]

Secondary Question #2: What factors weighed on Washington and Howe's decisions and what assets could they use to influence those factors? In a campaign that took approximately one year and with the players assuming the roles of the respective commanders-in-chief, the potential options are endless. The decisions and the assets must be focused and simple enough to accurately portray their capabilities without overwhelming the player with micro-management.[3] In investigating this question, the researcher sought out whom Washington and Howe communicated orders to and how often they did so. This communication architecture served as the basis for what Washington and Howe directly controlled and is, thus, what needs to be modeled for players to use as assets.

Secondary Question #3: How does the wargame model events or factors outside of the players' direct control? Since Washington and Howe were both operating in multiple levels of war, their span of influence is expansive. However, they were still constrained by a variety of factors that must be accounted for in the wargame. The factor of terrain and the location of battles was of vital importance in the decision making of the commanding officers and must be accounted for in the game.[4] They were also stymied by

[2] Philip Sabin, *Simulating War* (London: Bloomsbury Publishing, 2012), 17.

[3] Ibid., 67.

[4] Ibid., 76.

political or local events, such as the unexpected murder of a British officer's wife by allied Native troops.[5]

Secondary Question #4: How does the wargame ensure that players knowledgeable with either the campaign or the American Revolution do not have an unfair advantage while maintaining historical accuracy? The goal of this project is not simply to replicate the historical outcome of the campaign, although that must be possible. The goal is to exercise players' decision making processes and have those processes be similar to those of their historical roles.[6] Fog of war and chance will be modelled into the game to force players to have an imperfect understanding of the board state or potential outcomes of combat. Fog of war will be modeled in a way that gives knowledge of the potential presence of enemy forces but limited understanding of their composition.[7] This creates the uncertainty in war that Clausewitz wrote of.[8]

Theories and Frameworks

Two frameworks informed this research and the creation of the wargame. The first is wargaming itself. Peter Perla defines a wargame as "a warfare model or simulation whose operation does not involve the activities of actual military forces, and whose

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[5] Dean Snow, *1777 Tipping Point at Saratoga* (New York, NY: Oxford University Press, 2016), 52-53.

[6] Sabin, *Simulating War*, 110.

[7] Peter Perla, *The Art of Wargaming,* ed. John Curry (Annapolis, MD: Naval Institute Press, 1990), 167.

[8] Carl von Clausewitz, *On War,* ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 101.

sequence of events affects and is, in turn, affected by the decisions made by players representing the opposing sides."[9] Furthermore, wargame research should model the geographical environment, the orders of battle, the capabilities of forces, and the decisions faced by real commanders.[10] The model for this specific wargame is addressed at length in chapter 5, but the macro theory needs to be addressed here. Wargaming is vital to the military profession, both in its history and in current doctrine. From its earliest conception in abstract games such as *Wei Hai* or chess,[11] to the Prussian game of *Kriegsspiel* (war game),[12] to the US Army modern usage of it in the Military Decision-Making Process,[13] wargaming provides utility to military professionals and planners.

The second framework is the decision-making process of the players. As noted, wargaming is included as a technique to analyze courses of action in the Military Decision-Making Process. The framework of the game, including its turn structure, should align with the Operations Process of plan, prepare, execute, and assess.[14] The intent is not to make a player conduct a full MDMP planning session every turn—as without a staff that would be impractical—but rather to put the player inside that mental

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[9] Perla, *The Art of Wargaming*, 164.

[10] Sabin, *Simulating War*, 47-48.

[11] Ibid., xv.

[12] T. N. Dupuy, *A Genius for War: The German Army and General Staff 1807-1945* (Hoboken, NJ: Prentice-Hall Inc., 1977), 51-52.

[13] Headquarters, Department of the Army (HQDA), Army Doctrine Publication (ADP) 5-0, *The Operations Process* (Washington, DC: Army Publishing Directorate, 2019), 2-18.

[14] Ibid., 2-14.

model. The player turn should have the realism of issuing orders and being potentially constrained in options. Once those orders are decided upon or issued, the player should also experience the impracticality of quickly altering them. This creates value in understanding the situation as best one can, reacting to changes, and being able to anticipate the enemy's intentions and future actions.[15]

Assumptions

The researcher made three key assumptions during research and in the construction of the wargame. The first assumption is that the campaign can be modeled into a wargame that is reasonably historically accurate and can answer the primary and secondary research questions outlined above. This assumption allows the researcher to focus all efforts on correctly modelling the game.

Second, the researcher assumes that players will not necessarily have any context for the campaign when they begin to play. Players will be provided a context sheet, in addition to their player card, that details the key events leading up to the campaign, such as the Battles of Long Island, Trenton, and Princeton.

Thirdly, the researcher assumes that all players have no experience in wargames or board games in general. The rules will be simple and straightforward. Acronyms will be spelled out and any terms in which the definition is altered will be fully explained. Additionally, each player card will include strategic notes on how that side should approach the game—such as their side's strengths and weaknesses. This should limit, but

[15] Clausewitz, *On War,* 101-103.

may not eliminate, players feeling frustrated from early and unintentional sub-optimal play that could result in an early defeat.

Definition of Terms

Cohesion: Cohesion represents the will of the soldiers to fight and the discipline and order with which they do so. Cohesion is lost in combat and by certain negative "gain effects" that lower the combat effectiveness of soldiers, such as unseasonable weather. Cohesion is gained by resting, leaders rallying troops during battle, or other gain effects.

Troops: Troops are the abstraction within the model for the number of soldiers within a unit. The troops represent approximately 250 soldiers but should not be considered an absolute. Troops are divided into sub-categories based on the side the troops are on. For example, the British have different troops that represent the British Regulars and the Hessians. The Continentals have Continental Regulars. Both sides have access to light troops.

Supply: Supply is the abstraction of all materials needed to conduct war in the 18th century. Within the game this is most often depicted as food and ammunition, but it covers a wholistic view of the material needs of armies. Supply is used most often to pay upkeep for the units at the end of every turn. Units that are unable to feed or cloth their soldiers properly are forced to surrender.

Events: Events are broken into three sub-groups: Weather, Decision, and Authority. Decision and Weather cards are drawn at the beginning of every turn. The Weather card affects all units and players on the turn that it is drawn. The Decision cards are drawn at the beginning of every turn as well, but each player draws one from their specific deck. Each Decision card contains an Event and an Action, Players have the

option to take the Event, which triggers something that will occur immediately, or they can take the Action. If the Action is taken, the card is added to their hand and may be played later. Authority cards are drawn intermittently throughout the game and provide additional objectives for players to go after to get more victory points.

Fortifications: Fortifications are terrain modifiers that the player can artificially create in an area through orders. Fortifications are entrenchments, parapets, or other such temporary earthworks that give a marked advantage to the defender. These fortifications allow the defender a level of protection during the battle. These modifiers are lost if the defending army attacks in the area or leaves the area completely.

Scope

With the players in the roles of Generals Washington and Howe, the scope of the game is quite large. Both Washington and Howe were present and highly active in all three levels of war, in addition to being the Commanders-in-Chief of their respective armies. Washington and Howe were both tactically engaged during the Battle of Germantown,[16] made operational decisions on the movements of armies,[17] and guided strategic policy, both within their army and with their governments.[18] With those

[16] John Jackson, *With the British Army in Philadelphia 1777-1778* (San Rafeal, CA: Presidio Press, 1979), 42.

[17] Stephen R. Taaffe, *The Philadelphia Campaign, 1777-1778* (Lawrence, KS: University Press of Kansas, 2003), 40, 123.

[18] Bruce Chadwick, *George Washington's War, The Forging of a Revolutionary Leader and the American Presidency* (Naperville, IL: Sourcebooks, Inc., 2004), 102.

considerations, the wargame makes the operational level the focus, with strategic and tactical decisions being much more abstracted.

At the strategic level, players must react to changing goals placed upon them by their higher authority, be it Congress or Lord Germain. This is modeled by certain Decision Event cards and by the Authority Event cards. The players are also trying to achieve military objectives in the game that put their thinking at the strategic level. For Washington, the Continental Army must survive and do well enough on the battlefield that allies will join the cause.[19] Howe was concerned by the possibility of a French alliance with Washington as the majority of the
British regular army was in North America attempting to suppress the rebellion.[20] Howe needed to deliver the 'knockout blow' by defeating Washington's Army and seizing Philadelphia.[21]

At the operational level of war, players make decisions on where to place their units and who commands them. The units are moved region to region and can force enemy units in the same region to fight against them in a tactical battle. The player must struggle with supplying his units and maintaining their carrying capacity for the supply. They are constrained during this part of the turn by the orders they have prepared during the planning phase.

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[19] John Ferling, *A Leap in the Dark, The struggle to create the American Republic* (New York, NY: Oxford University Press, 2003), 117.

[20] Taaffe, *The Philadelphia Campaign,* 30.

[21] Ibid., 31.

At the tactical level, players make decisions about the placement of leaders during the battle, as well as the terrain or tactics that will inform the battle at the onset. During battle, players roll dice and determine the results based on the combat power of the forces engaged. They then inflict casualties or affect the cohesion of the enemy based on the results of those rolls. The fighting continues until either player chooses to withdraw or is routed from the field. The pieces then return to the main map. Players will have some abstract control of the happenings in battle but remain at the conceptual level, away from the tactical minutia of regiments and companies.

The overall game begins during the winter of 1777, while General Washington is encamped in Morristown, New Jersey, and General Howe is in the city of New York. The British player also has forces in Montreal. The first two turns represent the preparation for campaigning during the winter, with a combination of both negotiating with higher command over strategy and reacting to events. These events may range from the smallpox outbreak in Morristown[22] to Howe's decision to send General Clinton to London to give an account of the 1776 campaign and request additional troops.[23] Once the set-up phase turns have ended, the players play from May to November with each turn representing approximately one week of real time.

Finally, the campaign is primarily focused on the land domain. However, both British and Continental supply and water movement is highly dependent on the naval forces of each side. Forts along a major waterway, such as the Hudson or the Delaware,

[22] Chadwick, *George Washington's War,* 90.

[23] Taaffe, *The Philadelphia Campaign,* 33.

will block movement of troops and supply along those routes.[24] Only the Continental player also has the ability to place obstacles in the water to frustrate British naval forces. As the Continental forces lacked a 'blue water' navy, any Continental ships are counted as obstacles along the water routes. In contrast, only the British naval forces are able to reposition British land forces during movement orders.

Limitations

The players, while taking on the role of either Washington or Howe, are not in actuality those commanders. For example, the players benefit from knowing the outcome of the campaign, whereas their historical counterpart cannot. This is mitigated by applying certain rules to the players that provide them with motivation to see things through the eyes of the person they are roleplaying as. For example, General Howe was personally shaken by the loss of life at the Battle of Bunker Hill, both in terms of enlisted and officers.[25] This is represented by special rules for the Howe player to better place them in Howe's headspace.

Another limitation is time. As this is an MMAS Thesis, it must be completed in roughly nine months. Typical development of professional wargames can go on for years. The developers of those games also work on them fulltime, while this thesis is one of many classes while at the Command and General Staff College. While the researcher is satisfied with the work done, the wargame is by no means fully completed or polished.

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[24] Taaffe, *The Philadelphia Campaign,* 112.

[25] David Hackett Fischer, *Washington's Crossing* (New York, NY: Oxford University Press, 2004), 72.

The players are also limited in the options presented to them by the researcher. While the researcher made every effort to create multiple ways to win the wargame, the game remains a closed system that can stifle some creative options. For example, units unable to feed themselves are simply destroyed.

The final limitation of the study is that it is simulating war which cannot be fully replicated outside of the experience of actual combat. In actual combat lives are lost and the associated decisions may cause leaders to make sub-optimal choices in the future. As noted above, General Howe was deeply moved by the loss of life at Bunker Hill and while the researcher can apply a rule in an attempt to simulate that, no model can fully express human emotions' effect on war.[26] The player cannot experience the requisite fear, danger, or fatigue that would have been experienced during the campaign or in battle.[27] While some friction can be simulated through a variety of mechanics, the researcher cannot replicate all aspects of a war when it is fought on paper.[28]

Significance of the Study

Players of the wargame will first and foremost learn about the problems faced by the commanders during the 1777 campaign of the American Revolution. While this is beneficial for historical comprehension, the intent of the game extends beyond that. After playing the game, players will have fought the campaign against a thinking enemy that is

[26] Clausewitz, *On War,* 115.

[27] Perla, *The Art of Wargaming*, 7.

[28] Clausewitz, *On War,* 119.

trying to achieve separate objectives.[29] The players will gain experience maneuvering multiple divisions in two theaters utilizing joint forces.

The players will also learn how to integrate the actions of various areas of operations into a single strategy. The joint elements of land and sea must work together and be mutually supporting in their actions.[30]

The players will be forced to make potentially sub-optimal moves to meet the political or geographical considerations they are facing in the environment. The player will be constrained by the victory conditions placed upon him by their Authority that may cause him to allocate forces away from what the player considers to be their main theater of operations. These constraints and limitations simulate what Clausewitz wrote of regarding the difference between Absolute and Real War.[31]

Summary

This chapter explains the scope and rationale for this research. It covers the research questions and covers some of the limitations and focus areas of the study. Additionally, it provides some definition to terms specific to this research project. The next chapter is a review of the sources that constituted the research itself.

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[29] Sabin, *Simulating War,* 37.

[30] Joint Chiefs of Staff (JCS), Joint Publication (JP) 5-0, *Joint Planning* (Washington, DC: JCS, 2017), IV-1.

[31] Clausewitz, *On War,* 579.

CHAPTER 2

LITERATURE REVIEW

Introduction

The goal of this wargame is to have players placed in the roles of General Washington, for the Continental Player, and General Howe, for the British Player. Within those rolls the players must make a variety of decisions, often with limited understanding of the operational environment, that reflect their significant roles at the strategic, operational, and tactical levels of war. The researcher used that framework as a guide to direct his research in the creation of the wargame. The researcher focused on historical primary and secondary sources for information related to the 1777 campaign. For wargaming theory, reading sources written by the experts in the field proved insightful. Finally, playing and reading about relevant wargames provided the researcher with a deeper understanding of the variety of mechanics that can be used.

Historical Sources

When building a wargame set in a historical time, having an accurate depiction of the history becomes vital. If the players are to be challenged by problems in a historical context, the problems must mirror those problems that their historical counterpart faced or reasonably could have faced.

The researcher could not find a single primary or secondary source that covered in depth the entire scope of the project. The researcher could not find a source that talks about theaters simultaneously in detail. For the Philadelphia Campaign, the researcher

found *Brandywine*[32] and *Germantown*[33] by Michael Harris to be the most insightful. For the Hudson River-Saratoga Campaign, the researcher found *Saratoga by Richard Ketchum to* be of great value.[34]

After the researcher gained a firm understanding of the campaigns, he began looking into more specific aspects that would have weighed on the commanders as they made their decisions. Understanding the fog of war present for both commanders, and the methods in which they gathered information and processed it into intelligence, was a vital aspect that informed how much of the opponent's board state could or should be known to a player. For the Continental player, the source *General Washington's Spies*[35] contributed to understanding the clandestine aspects of the Continental intelligence, and all sources contained various other aspects, such as dispatches from dragoons or light infantry. *The Command of the Howe Brothers during the American Revolution,*[36] *George*

[32] Michael Harris, *Brandywine, A Military History of the Battle that Lost Philadelphia but Save America, September 11, 1777* (El Dorado Hills, CA: Savas Beatie, 2017).

[33] Michael Harris, *Germantown, A Military History of the Battle for Philadelphia October 4, 1777* (El Dorado Hills, CA: Savas Beatie, 2020).

[34] Richard Ketchum, *Saratoga, Turning Point of the American Revolutionary War* (New York, NY Holt Paperbacks, 1997).

[35] Morton Pennypacker, *George Washington's Spies On Long Island and in New York* (New York, NY: Long Island Historical Society, 1939).

[36] Troyer Steele Anderson, *The Command of the Howe Brothers during the American Revolution* (New York, NY: Oxford University Press, 1936).

Washington's War,[37] and *With the British Army in Philadelphia,*[38] were particularly insightful as they provided insights into firsthand accounts of the commanders and their personal interactions. While the period covered is technically outside of the scope of this project, *Washington's Crossing*[39] and *The British are Coming*[40] provided deep analysis of the forces during the Revolutionary War that were still applicable during the Philadelphia Campaign.

Wargaming Literature and Game Rules

The two sources that the researcher primarily used for an understanding of wargames were *Simulating War* by Philip Sabin [41] and *The Art of Wargaming* by Peter Perla.[42] These sources were helpful in gaining a theoretical understanding of wargaming and what components must be present to make a successful wargame. The sources also provided insight into how a wargame can help educate players.

In addition to reading, playing games that were set in the period of the American Revolution and that had aspects of rules that the researcher wanted to replicate was a key

[37] Chadwick, *George Washington's War.*

[38] Jackson, *With the British Army in Philadelphia.*

[39] Fischer, *Washington's Crossing.*

[40] Rick Atkinson, *The British Are Coming, The War for America, Lexington to Princeton, 1775-1777* (New York, NY: Henry Holt and Company, 2019).

[41] Sabin, *Simulating War.*

[42] Perla, *The Art of Wargaming.*

research effort. In that effort, *Supply Lines of the American Revolution*[43] offered ways to show how the period could be simulated in a game. *Nevsky*[44] offered the best model that implemented many mechanics that the researcher was struggling to adapt into the game. This game offered clarity on supply and logistic mechanics as well as moving and organizing at the operational and tactical levels. *Star Wars: Rebellion*[45] and *Twilight Imperium*, 4th edition[46] both offered mechanics for iterative scoring and for asymmetrical objectives that are added over time. These objectives may or may not be known to the opposing player and thereby accurately represent how both Washington and Howe received guidance from their respective political authorities over time. *Napoleon 1806*[47] and *Strike of the Eagle*[48] also offered insight into mechanics that could be used to represent fog of war and combat at the operational level.

Military Doctrine and Theory

As the researcher is modeling the game for professional military use, current military doctrine served as a foundation for theory. The turn was modelled loosely on the

[43] *Supply Lines of the American Revolution*, by Tom Russel (Hollandspiele LLC, 2017).

[44] *Nevsky,* by Volko Ruhnke (GMT Games LLC, 2019).

[45] *Star Wars Rebellion*, by Corey Konieckza (Fantasy Flight Games, 2016).

[46] *Twilight Imperium,* 4th *ed.,* by Corey Konieckza (Fantasy Flight, 2017).

[47] *Napoléon 1806*, by Denis Sauvage (Golden Bell Entertainment, LLC, 2017).

[48] *Strike of the Eagle,* by Brian Bennett, Uwe Eickert, Robert Zak (Academy Games, Inc., 2011).

operations process.[49] Joint doctrine assisted in defining the operating environment between two joint partners, land and maritime.[50] For military theory and concepts, the researcher relied on Clausewitz's *On War*[51] for general theory, and *Fighting by Minutes*[52] by Robert Leonhard for a more modern interpretation of theory and timing in war.

Summary

This chapter covered the research, both literature and theory, that greatly influenced this project. It explains the key research that the researcher conducted to answer the questions outlined in chapter 1. The following chapter will discuss the method used to synthesize and understand the data collected to produce the subsequent chapters.

[49] HQDA, ADP 5-0.

[50] JCS, JP 1.

[51] Clausewitz, *On War.*

[52] Robert Leonhard, *Fighting by Minutes* (Coppell, TX, 2017).

CHAPTER 3

RESEARCH METHODOLOGY

> What makes both professional and recreation wargames 'serious' and not mere abstract diversion is that they attempt to simulate certain key aspects of real armed conflict. Research is thus an integral and indispensable element of wargame design.
>
> —Philip Sabin, *Simulating War*

Introduction

The purpose of this chapter is to explain the methods used to answer the primary and secondary research questions. The intent is to provide the roadmap by which the researcher collected and synthesized the information to answer the questions. The data and the answers will be found in chapters 4 and 5. The researcher used a mixed-method study to complete this paper. The three methods are the historical method, document analysis, and wargame design.

Historical Method

For the historical method, the researcher utilized primary and secondary sources from the American Revolution to gain an understanding of the overall time period, the campaign, and the forces that took part in it. The knowledge learned from the historical method gave insight into secondary questions one, two, and three.

Question #1 was - What decisions did Washington and Howe make related to the tactical, operational, and strategic levels of war? By reading primary and secondary sources, the researcher was able to gain an understanding of the flow of both campaigns and outline them. The concern at this point was not focused on the 'why' but the 'what' of the campaign. This campaign outline provided an understanding of what occurred in

both time and space, which was critical for the wargame design phase of the research. The outline provided an understanding of the campaigning season—generally defined as the summer and early fall months—which served as the basis for the length of the game. While the tactical and operational decisions were limited in the winter and early springtime period, both Generals made several critical political and strategic decisions during these seasons that needed to be accounted for in the game.

Question #2 was - What factors weighed on Washington and Howe's decisions and what assets could they use to influence those factors? The historical method applied primarily to the second aspect of the question—an understanding of the assets the commanders had under their control. This was vital in establishing a historically accurate representation of the American Revolution. The researcher gathered an understanding of the qualitative differences between the Continental and British troops which informed the different statistics applied to their models. A review of the outcomes of battles was also of significant importance. While there were three major battles that took place during the campaign—Brandywine, Germantown, and Saratoga—the researcher also expanded the research aperture to include other battles in the American Revolution and within the historical time period. This understanding allowed an informed model of battle outcomes discussed in the wargaming design section.

Question #3 was - How does the wargame model events or factors outside of the players' direct control? The historical method and the documents studied provided insight into factors that Washington and Howe controlled and those they did not. Events, such as a letter from Lord Germain in London, or the weather, were outside of the generals' direct control and were thus modeled as Events. Other events, such as the death of Jane

McCray were modeled as events that would only occur if the player had made certain decisions, in this case the use of Native troops. The inclusion of these occurrences as Events provides the beginnings of the chance mechanics.

Document Analysis

After the researcher obtained a fundamental understanding of what had occurred during the campaign, the next step was to investigate deeper into additional historical sources to ascertain the 'why' of what had happened. The knowledge learned from the document analysis method gave additional insight into secondary questions two and three.

Question #2—What factors weighed on Washington and Howe's decisions and what assets could they use to influence those factors? Through primary and secondary sources, the researcher was able to better understand some of the commanders' thought processes behind the decisions that they made, or at least the factors that weighed on them and their subordinates. This understanding was vital to the eventual modeling because the mindset of the commanders was the same mindset that the researcher wanted to place the player into. The player should share similar emotions with the commander they're roleplaying as when deciding when and where to give or accept battle. By understanding why a commander would attack an enemy when he does not have a good chance of winning, the researcher can place a player in a similar decision space.

Question #3—How does the wargame model events or factors outside of the players' direct control? Once an understanding of what was and was not under the players' direct or indirect control, the researcher could gain an understanding of how the commanders reacted to these unforeseen occurrences. Primary and secondary sources

were again the primary method of gaining this understanding. The research gathered here informed some of the emotions a player should have when reacting to the various Events or similar occurrences. If there was a prevailing emotion that was felt by both commanders when they received letters from Congress or Lord Germain (Authority Events), then the overwhelming majority of Authority Events should be designed to solicit that emotion from the players.

Wargaming Design

Wargaming design served as the primary method of research. While it was the principal method of research, chronologically it occurred after the previous methods discussed. Wargaming design served as the method to synthesize the knowledge gained and turn it into an effective model. The researcher closely followed the wargaming design methodology laid out by Philip Sabin in his book *Simulating War*.

Geographic Environments: This wargame takes place over a map that represents the American Northeast at the time of the American Revolution. To adequately create this map, the researcher had to understand where the fighting took place, the geographical goals or objectives of the various armies, and the rationale as to why a general would want to fight there. Understanding why battles occurred in certain locations rather than others, and the factors that caused those battles to occur, was the primary driver of the terrain mechanic. The terrain mechanic enables large battles to occur in certain areas, encourages defensive play in some while discouraging offensive play in others. Superior commanders can effectively operate in all terrain, while poor commanders are limited to the options readily available to them. For the model to be accurate, battles had to have a likelihood of occurring in historical locations, while allowing for the possibility of battles

occurring elsewhere.[53] The decision by the researcher to include locations on the map where no fighting occurred expanded the area of operations but allowed for options the historical commanders considered or could have been ordered to enter by their Authority.

Orders of Battle: To inform the tactical unit assets the players would control, understanding how the commanders visualized their OoBs was an important consideration. Knowledge regarding OoBs informed how the player would manage forces at the operational level and what those forces were capable of. The researcher investigated what the generals saw at the HQ level of their OoB (one-level down), and at the level they generated combat power from (two-levels down). This information was put into the doctrinal framework outlined in the Array Forces sub-step during MDMP.[54] In understanding how the commanders organized their forces, the researcher understood how formations were task organized for battle or for a given campaign. This informed the decisions given to the player to change or alter force composition, mentioned later in this chapter. In addition to the combat forces, particular attention was paid to the logistical elements of a given army. The research conducted showed that supply and cohesion were critical aspects that informed commanders as to whether or not they should fight a decisive battle.[55] With that in mind, the researcher investigated what the logistical trains

[53] Sabin, *Simulating War,* 53.

[54] Headquarters, Department of the Army (HQDA), Field Manual (FM) 6-0, Change 2, *Commander and Staff Organization and Operations* (Washington, DC: Army Publishing Directorate, 2014), 9-19.

[55] Snow, *1777 Tipping Point at Saratoga,* 345.

of the armies looked like and how they sustained themselves both in garrison and, more importantly, while conducting operations.

Generic Capabilities: In addition to the framework for how the armies were organized, the researcher studied the capabilities of the various armies. This study focused primarily on their performance on the battlefield. With this information, various statistics were able to be applied to the assets the player would command and to determine their effectiveness on the battlefield. This research informed the probability odds that formed the basis of cohesion and combat capability mechanics. This portion of wargame design relied on the information collected about the troops in the British and Continental Armies. An assumption the researcher entered the project with was that a generic British formation was 'better' than a generic Continental one. This general assumption is somewhat ubiquitous across historians, with some going so far as to say the British were 'the best' in the world at the time.[56] If this statement on the quality of the forces is true, the researcher needed a quantifiable number to calculate the relative qualitative superiority of one force over the other.

Decision Environment: The decisions the players would have to make was already informed by research conducted to investigate secondary questions one, two, and three. This included the emotions felt by the players when being informed of the decisions and in making the decisions. Once the decisions had been identified, the frequency and iterative nature of the decision environment formed the basic construct for

[56] Fisher, *Washington's Crossing,* 33.

the elements constituting a turn. Portions of the turn were separated by the types of decisions or information the players would be receiving at a given time.

Wargaming as a Model

This research differs significantly from a historical case study of the campaign because it seeks to immerse the reader/player in the setting. They become an active participant rather than a passive observer. The wargaming model was selected as the primary for two major reasons: the interplay between the two commanders and the deeper need to quantify general terms used by historians and military professionals alike.

War is not a set outcome that follows the 'most likely course of action.' If that were the case, the inferior Continental Army would have been defeated by the superior British Army and American history would be radically different. By placing players into their historical roles, the researcher allows for players to make decisions in the environment of the campaign. It allows for the interactive nature of warfare to be made manifest on the board.[57]

Secondly, the wargame model attempts to quantify the intangible aspects that made the respective armies better or worse than the other. A purely historical study could stop at the statement, 'A British Regiment was better than a Continental Regiment.' While there is nothing inherently wrong with that statement, it does not lend itself to a deeper understanding of how or why battles unfolded as they did. The wargame research had to answer: 'If a British Regiment was better than a Continental Regiment, by how much was it better, or what about it made it better?' Being able to create a model, even if

[57] Sabin, *Simulating War*, 61.

the model is mostly incorrect, provides utility to the greater professional community in that these topics must be considered when assessing relative combat power of friendly and enemy forces.

Summary

This chapter sought to examine the methodology used by the researcher as they investigated the topic of a 1777 Campaign wargame. It explained the different methodologies: historical, document analysis, and the primary—wargaming. This chapter included which questions the differing methodologies sought to inform and how wargaming served to synthesize the variety of information gained. Finally, this chapter included an explanation as to why wargaming was specifically selected as the primary method for this project. The subsequent chapters will investigate the historical factors relevant to the wargame model and how those factors were modelled into the wargame itself.

CHAPTER 4

ANALYSIS

Introduction

This chapter is organized into six sections. Each section focuses specifically on a factor that is modelled into the wargame. These sections are Authority and Victory Conditions, Events, Areas and Connections, Sequence of Play, Units and Generals, and Battles.

For each section, the researcher will define what the aspect in question is, explain why it is an important factor to be modeled into the wargame, how the aspect is modeled into the game, and the historical factors that informed the model.

Authority and Victory Conditions

While the simulation is designed to teach players about military decision making, tactics, etc., merely learning creates too much of an academic or instructional aspect to the game. There must be a way to "win" the simulation. It gives the players something tangible to orient their play on and objectives to achieve,[58] similar to how military forces are oriented on objectives.[59]

Historically for the Continental Army, the objective was to force Britain to accept the independence of the colonies. The Continental Congress made an important step by issuing the Declaration of Independence on July 4, 1776. The governmental and societal

[58] Sabin, *Simulating War*, 123.

[59] HQDA, ADP 5-0, 3-18.

importance of the document notwithstanding, it stated the war goal was indeed independence rather than an eventual return to British rule with new or affirmed rights or privileges.[60] After the string of defeats in 1776, Washington realized that he could not win the war by fighting a direct European-style war with the British.[61] Washington adopted a more Fabian Strategy, where he sought to fight only when it was advantageous to him or when necessary. Even when in a battle, preserving the integrity of the army was of the utmost importance. This is displayed at Germantown, where Washington calls for the audacity he had at Trenton, advances more cautiously, and is not willing to risk the destruction of the army to achieve a victory.[62]

To model this, two of the Continental Campaign Authority cards are based around the Fabian strategy, with one directly taking the name. This provides the Continental player that option to gain Victory Points by continuing to not be destroyed over time. The Continental player will eventually have to fight, particularly if Burgoyne follows his historical path from Montreal, but it allows for a stalemate to turn into victory. This models to the time it would take to convince the European allies to join the war. Other strategies are available to the Continental Player as well, showing that Washington and Congress might not have learned their costly lessons in New York and wish to continue to fight the British more directly.

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[60] David McCullough, *1776* (New York, NY: Simon & Schuster, 2005), 136.

[61] Harris, *Brandywine,* 24.

[62] Taaffe, *The Philadelphia Campaign*, 101.

The British had to reimpose control over the colonies, either politically or militarily. To further complicate the matter, the British had several other adversaries they had to contend with on the world stage. The Seven Years War left Britain as the undisputed superpower and gave them colonial holdings all over the globe that it had to defend. Their rivals, France and Spain, were eager to see Britain brought low. The constant threat of the American Revolution becoming a coalition war against Britain weighed heavily on the decisions made by British policy makers.[63]

The goal expressed by Lord Germain was to quickly bring the war to a close. Germain himself believed the war was wrapping up after Howe's success in the fall of 1776. Howe disagreed with the assessment and this is reflected by his requests for thousands of more troops.[64] Howe's initial plan, which was drafted before Trenton, called for the quick strike west, over land, to take Philadelphia. Once the rebel capital was secure, Howe could consolidate and join Burgoyne's forces moving south to secure the Hudson.[65] Howe and Germain exchanged a series of letters where Howe expressed his doubts that he could do both with his current troop level (post-Trenton), and recommended that he not be required to support Burgoyne's expedition.[66] Howe also expressed his belief that Philadelphia was of the utmost importance to the campaign. He stressed its importance in terms of population, industry, and as the seat of the Continental

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[63] Harris, *Brandywine,* 15.

[64] Ibid., 12.

[65] Anderson, *The Command of the Howe Brothers*, 227.

[66] Ibid., 228.

Congress.[67] Some of Howe's detractors noted Howe's shift in thinking coincided with a gala in early February in which a large number of Loyalists from the Pennsylvania area made Howe's acquaintance. It is likely that during their conversations, the Loyalists were able to put some of these ideas before Howe.[68] Howe eventually received his final instructions from Germain in late May, after Howe had already engaged Washington near Woodbridge, and had begun aligning his forces to move to Philadelphia by sea.[69]

To model the British goals, the researcher attempted to create an Authority Card for the key ideas proposed among Howe, Burgoyne, and Germain. Germain historically would have argued for the card "Crush the Rebels" as he saw this as the last campaign for the war. Howe oscillated between the need to capture Philadelphia and to control the major population centers. Burgoyne was relatively set on the Hudson campaign as that was within his area of operations and the express orders of Germain.

The model for the victory conditions allows for a variety of outcomes in the game. A British player with the "Crush the Rebels" card while the Continental player has the "Fabian Strategy" card will be a very different game than if both players were seeking to control the populations of North America. This, in conjunction with the recon and fog of war mechanics, models the uncertainty in the early months of the 1777 Campaign.

Victory in the wargame is achieved by a player reaching the required number of Victory Points. The idea of victory points was found in several games mentioned in

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[67] Anderson, *The Command of the Howe Brothers*, 214.

[68] Harris, *Brandywine,* 20.

[69] Ibid., 32.

chapter 2. Furthermore, how those victory points are gained allows for asymmetrical games as players could find themselves competing over territories that do not give them points but instead block their opponent from gaining points, and thus struggle with decisions on how to assign resources.[70]

This section sought to explain the historical factors that informed the campaign goals of the opposing sides in the 1777 Campaign. These goals were modeled into the way players win the game through earning Victory Points. It explains the necessity of victory conditions from a practical wargaming perspective and from a doctrinal perspective. By providing the players with the ability to influence the way they win, it models the ambiguity and uncertainty present in the early weeks of the campaign and provides more player decisions that they must grapple with. The next section will cover events.

Events

Events are the abstraction of the events outside of direct player control. The Events are further broken into Winter Events, Weather Events, Player Events, and Authority Events. Each event type will be discussed in a subsequent section.

The lack of player control over the events is modelled by the events revealing themselves through a variety of shuffled card decks. There are more cards per season than turns per season so there is that element of additional randomness, even for a player who has played this game several times. Thus, the Continental Player may never draw "Hamilton as Chief of Staff," which is one of the better cards in the Continental spring

[70] Sabin, *Simulating War,* 123.

deck, and it cannot be counted upon for Hamilton to find himself in this position.[71] The researcher will now go into depth on each type of deck.

Winter Events

The first two turns of the game are "Winter Turns" and provide variables at the beginning of play allowing players to make decisions on how they will start the game. They also give time for the players to begin forming their strategy without being pressed for combat in the first turn. This variable start further increases the ambiguity of the game. If the British player drastically increases the number of troops in North America, perhaps the Continental player's strategy of defeating the British may no longer viable. These turns, and the authority decks that are a part of them, allow for the exchange of letters and ideas between the commanders and their authority, which historically occurred during the months of December-April.[72]

The Winter Events provide insight into some of the historical events and associated decisions that occurred during the winter of 1776-1777. While some of the letter writing occurred before the end of December 1776 as mentioned in the Authority section,[73] the game begins after the events of Trenton and Princeton. The battles are assumed to have happened historically for the purpose of this model. Including them as variable would present the player with options that are outside of the scope of the Winter Phase.

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[71] Chadwick, *George Washington's War,* 107.

[72] Anderson, *The Command of the Howe Brothers*, 226-229.

[73] Ibid., 226.

For the Continental player, his non-authority Winter Events focus on rebuilding or preserving the Continental Army, specifically in the Middle Department. The Continental Army had just taken a significant manpower loss as a large number of enlistments from veteran soldiers expired.[74] These losses left Washington with a hollow army of only a few thousand men. To reconstitute the Army, Washington had to appeal to Congress and the various state governors to provide troops, supply, and other material. Congress, under the advice of Washington, had decided that the short-term enlistments, some lasting only a few months, needed to be replaced with a much longer enlistment system. This was not popular with government officials but was of vital necessity to the army. The new enlistments were for three years or the duration of the war depending on the state.[75] Washington spent a considerable amount of time courting politicians to gain their support and to increase bounties or provide militia directly to Continental service.[76] These efforts are reflected in the Winter Event card "Support from Governors."

For the British player, Winter Events focus on setting conditions for the 1777 campaign. The British player may be able to massively increase the number of troops available to him. Historically, Howe did propose such an increase to Lord Germain who negotiated to a more reasonable and financially manageable number.[77] While the British player is presented with the ability to get more troops, it comes at the cost of Victory

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[74] Chadwick, *George Washington's War,* 98.

[75] Ibid., 120.

[76] Ketchum, *Saratoga,* 54.

[77] Anderson, *The Command of the Howe Brothers*, 182.

Points and making it easier for the Continental player to win. This reflects Germain's concerns with more troops going to America. If more Germans were sent, it was a large financial cost and, if British troops were sent, these regiments would have to come from elsewhere in the Empire, making France more likely to join the war to reclaim these vulnerable colonies.[78]

The British player is also able to send General Clinton to England to negotiate directly with Lord Germain on the direction of the campaign. Howe did this in part in the hope that Clinton would be given an independent command, thereby ridding him of his subordinate, but also to advocate directly for his Philadelphia centric strategy.[79] The Event Card that reflects this deprives the British player of General Clinton (the commander with the highest tactical acumen) but allows the selection of the Authority Card and more options for Victory Points. While the player may reap the benefits of this action, Howe repeatedly disregarded the guidance that Clinton brought with him, specifically that Germain wanted the junction of Howe and Burgoyne to take priority, rather than an attack on Pennsylvania.[80]

[78] Fischer, *Washington's Crossing*, 43.

[79] Ketchum, *Saratoga*, 86.

[80] Anderson, *The Command of the Howe Brothers*, 184.

Weather Events

Weather can have a profound effect on military operations. Sun Tzu tells us that it is one of the five strategic assessments, second only to political/military alignment.[81] Even in the age of industrial and informational armies, commanders struggled to grapple with mud, rain, and temperature. It follows then that weather must be modelled into the campaign. This subsection will explore the weather effecting the campaign and how it was modelled into the game.

Weather needed to be a random element as it is somewhat unpredictable. To model randomness, the researcher opted for a deck of cards. However, given that the campaign takes place from May until November, the variety of seasons must be accounted for, so that snow does not show up in July, which is outside historical norms. To account for this, weather decks are separated into Spring, Summer, and Autumn decks, roughly abstracted in 10 turn intervals defined as seasons. In determining weather, the researcher opted for weather to affect the entire game and not be confined to a region. While this is somewhat ahistorical, it allows for ease of play, and the players are still forced to make decisions against a variable that cannot be wholly predicted.

Weather primarily effected soldier's ability to move, their fighting spirit, and the resources they had access to. Several weather events deal with precipitation and its effects on the force. In all seasons, rain is highly probable in some form. With the rudimentary roads that existed in the area in 1777, and with the rain, came the inevitable mud. This slowed down the speed at which troops marched and had a devastating effect

[81] Sun Tzu, *The Art of War: Complete Texts and Commentaries*, trans. Thomas Cleary (Boston, MA: Shambhala, 2003), 41-42.

on the wagons and animals that pulled the supplies.[82] To model the rain and mud, several Weather Events exist that make movement slower and potentially cost more Supply Capacity as wagons and their associated animals are damaged.

In addition to precipitation, temperature effected soldier morale. During the pursuit of St. Clair from Fort Ticonderoga in early July, the British and German troops had to slow their rate of march due to the humidity with which they were unaccustomed.[83] The light infantry under Brigadier General Fraser were not as effected due to modifications they had made to their uniforms out of necessity.[84] Continental soldiers were more acclimated to the heat and humidity and while they were certainly not enjoying the heat, their clothing and constitution allowed them to be only moderately affected by it.[85] To model this disparity, some Summer Events inflict a higher movement restriction on the British player than the Continental player.

Weather was not always a hinderance to military operations. While precipitation and temperature are generally restrictive in nature, other Weather Events are either neutral or positive. In every deck, there are Weather Events that have no effect on the game. These provide the players some potential relief and provide windows of opportunity for military operations.

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[82] Harris, *Brandywine,* 63.

[83] Ketchum, *Saratoga*, 194.

[84] Ibid., 131.

[85] Ketchum, *Saratoga*, 194; Harris, *Brandywine*, 151.

Decision Event and Action Event Cards

While the players are the Department Commanders and in charge of all military operations within their area of operations, the world continued to influence the war, sometimes in a small and innocuous way, and other times in a profound and dynamic fashion. The Decision cards seek to model this. Decision Events enable the players to become immersed in the narrative of the model. These cards account for the decisions, activities, and capabilities that fall somewhat outside the control of the player. Some of these happenings must occur at specific times, such as during a battle, while others occur in the background of the scenario the players operate in, such as unexpected supplies arriving from Europe. For this model to be effective, Decision Events are twofold. Each card has two options on it, one that occurs immediately and one that can be stored for a later time. The former is a Decision Event, and the latter is an Action and will be explained in that order.

Decision Events are generally defined as the decision that others make that effect the player. These cards deal with arrivals of new troops, such as the arrival of Daniel Morgan's riflemen into the Middle Department [86] or the late but much anticipated New Hampshire regiments. [87] They can show the outside word having an influence on the campaign, such as colonial families forming a network of billets to house colonial troops

[86] Taaffe, *The Philadelphia Campaign*, 38.

[87] Ketchum, *Saratoga*, 56.

moving to the front[88] or a Tory spy gaining information for Burgoyne.[89] While the generals, and thus the players, had to react to these happenings, they did not have direct control. As such the cards are shuffled to add an element of randomness.

Action Events provide a mechanism for players to have events that they can shape and influence through the capabilities or activities of their troops. These account for such activities as when the Royal engineers rebuilt bridges in support of Howe's movement[90] or when Burgoyne had his Indian scouts conduct a series of raids to disrupt operations near Fort Ticonderoga.[91] Other Decision Action cards show innate traits of various units that are witnesses occasionally but are extremely profound when they do. These are happenings such as when Morgan's rifleman decimates the officers in the lead units at Saratoga[92] or the numerous examples of British resolve in the face of withering fire.

To ensure that the cards are balanced, events that negatively affect a player are assigned to the other player. For example, there are accounts of German soldiers pillaging homes during the Jersey campaign and this caused additional militia support to arrive for Washington.[93] This event should not be a "British" event even though it effects British player troops. If it were it a British event card, it would never be selected, and the other

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[88] Ibid., 154.

[89] Ibid., 51.

[90] Anderson, *The Command of the Howe Brothers*, 241.

[91] Ketchum, *Saratoga*, 157.

[92] Snow, *1777 Tipping Point at Saratoga*, 130.

[93] Taaffe, *The Philadelphia Campaign*, 45.

option would be selected even if it were suboptimal. Additionally, no British commander decided to have the Hessians pillage. They may have sent them out to forage knowing such a thing may occur, but the decision is not deliberate. By giving the card to the Continental player to activate, it creates the ambiguity present historically. The British commander may send the Germans to forage, it may go poorly, and then he will have to deal with the political repercussions.

In this section, the Event cards are described both for their historical context and how they are modelled into the game. The cards provide the political, social, geographical narrative that is occurring simultaneously with the campaign and the player's decisions. The cards also provide a mechanism to introduce special capabilities that the historical commanders had that appeared only so often in a decisive way, such as engineers. The choices, based on the different abilities, on the cards provides players another opportunity to make decisions, modelling how the historical commanders had to decide what to do when they received news, or as events outside their control transpired. The next section will discuss areas and connections.

Areas and Connections

18th century, western armies were limited in where they could move and nowhere was this more prevalent than on the American Continent. Armies naturally adapt to the environment they will be operating within. Europe at the time, compared to the Eastern United States, was well developed. Road networks provided quartermaster Departments ease of access and towns and fortresses provided magazines and places to collect and distribute supplies.

Areas are locations that armies can assemble, fight, or march through with relative ease. By using the roads as they existed, the researcher was able to create a box-and-connection map to represent the American Colonies from Baltimore to Quebec. By limiting the locations to which a player can move their armies, the researcher models the restrictions the historical commanders had on where they could place their armies. The choice of using abstract areas also facilitates the operational level view that the researcher wants the players to maintain; as the minute detail is generally below what the commanders looked at.[94] The method selected allows for players to focus on the orderly arrangement of forces and military operations oriented against objectives.[95]

In the wargame, as in real life, not all areas are created equally, and thus modifiers have been applied to certain areas to distinguish them from others. Along with modifiers, every area has two attributes associated with that area. The modifiers are city, town, port, landing, river, and ocean. The attributes are supply and terrain. Each will be discussed in depth.

Attributes

The two attributes that are associated with each area are supply and terrain. Supply is defined as the net industry and agricultural output of the region. Units passively gain access to this output by having their unit physically reside in the area at the end of the turn. This mechanic shows the passive foraging that soldiers on both sides conducted

[94] Sabin, *Simulating War*, 40.

[95] Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-0, Change 1, *Operations* (Washington, DC: Army Publishing Directorate, 2017), 2-15.

in conjunction with their operations. When accessing supply this way, there is the inefficiency of soldiers collecting supplies and conducting operations simultaneously.[96] This inefficiency is shown by only half of the supply collected from the area to offset the upkeep of the units. When a unit dedicates its time to finding supply, such as during a forage order, the unit has the potential to get the area's full supply based on the logistical score of the general. Historically, this was observed by Howe after landing at the Head of Elk, when he dedicates whole brigades to collecting supplies from the local area before moving aggressively against Washington.[97] In the Hudson area, the lack of forage along the main avenue of approach prompted General Riedesel to conduct a raid into Vermont to secure more supplies from there.[98] Finally, the lack of food in the area north of Saratoga, and thus Burgoyne's inability to feed his army, was the biggest factor in his surrender.[99] Thus with how important supply is, and how tied supply is to a geographical area, areas must have a defined supply attribute.

The second attribute is terrain. A high score in the terrain attribute represents a location that would furnish the defender a multitude of options during the defense. The score denotes the number of Terrain cards that a player can draw at the beginning of battle. The more complex terrain produces more options for the player. When determining the number of cards to draw, the commanding general's tactical score is

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[96] Anderson, *The Command of the Howe Brothers*, 218.

[97] Taffee, *The Philadelphia Campaign*, 180.

[98] Ketchum, *Saratoga*, 312.

[99] Snow, *1777 Tipping Point at Saratoga*, 271.

compared to the terrain attribute. The higher number determines the number of cards to draw. This models how a superior commander will make better use of terrain than a poor commander.

Modifiers

Cities are vital parts of the terrain of an area, its economic viability, and its cultural importance. It is natural that military operations and military objectives will be oriented on them to achieve strategic goals. This wargame has nine cities represented in it: Boston, Providence, Hartford, New York, Albany, Philadelphia, Baltimore, Montreal, and Quebec. In each authority, specific points are applied to cities in general and to certain cities, depending on the strategic goal. Cities have a higher than usual supply attribute showing that while the city may not produce supply in a traditional sense, supply naturally collects at cities from the surrounding area. Given the city's dependency on the outside rural area to feed it, cities suffer a -2 supply rating for each area outside of it that has an enemy unit. This shows that even if the army cannot block every route into the city, the civilian traffic will decrease significantly due to combat operations. This lack of supply is what forced Howe to abandon Boston in 1776 once it became clear he could not contest the Continentals and the artillery gathered on the hills outside the town.[100] Additionally, with the loss of outside food arriving in the city, the city's occupants will be less willing to sell what food they do have and will hide remaining supplies from the

[100] Atkinson, *The British Are Coming*, 161.

occupying army.[101] Mechanically, this functions as a siege. Players can not have a large army occupy a surrounded city or any area indefinitely.

Towns are smaller population centers but can be important hubs, specifically to the Continental player. Towns function similarly to normal areas but allow for the Continentals to establish their Commissary Supply Depots there. The British are unable to leverage these more rural population areas. Historically, the loyalists were centered in the major cities, with the rural areas being more sympathetic to the Continental cause.

The American colonies were important fixtures in the mercantile trade network of the British Empire. The raw resources in the form of wood, tobacco, iron, and grain allowed the home island to focus on manufacturing these resources into refined goods. It naturally followed that ports and their associated cities were of vital importance economically. Cities that maintain a port have, therefore, the port modifier associated with them. Certain British Authority Cards assign Victory Points specifically for controlling ports. For the British player, ports are of vital importance disassociated from the Victory Points they may receive. Ports are the conduit through which supplies arrive in their respective Departments. The British had hoped that eventually, the armies operating in America would be able to be self-sufficient through foraging and requisitions.[102] This dream was never realized, and the British under Howe and Burgoyne were tied inexorably to the sea for their sustenance.[103] This is reflected mechanically by

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[101]Taaffe, *The Philadelphia Campaign*, 280.

[102] Ketchum, *Saratoga*, 105.

[103] Ibid., 107.

the British Department Commanders establishing their Lines of Communication (LOCs) to ports or landings (landings are discussed below). To move inland or to de-link themselves from a port should be a deliberate decision. As noted, Burgoyne's logistical problems were exacerbated the further he moved away from his base in Montreal.[104]

In addition to their economical and logistical value, ports are of value for the army to rapidly move with the Royal Navy. Ports allowed for the rapid debarkation of large numbers of troops easily and safely.[105] As the Continental forces had no navy to oppose them, the British were uncontested in this domain and could transit forces with impunity. This capability allowed the British to preserve their forces during the evacuation of Boston in 1776 and allowed General Henry Clinton to make a raid into South Carolina in the same year, before returning for the New York campaign.[106]

Landings offer the middle ground between a port and a normal sea adjacent space. Landings offer no intrinsic economic benefit. However, they allow for soldiers to be disembarked from ships rapidly. In determining which areas to deem landings, the researcher looked at places that navy forces had landed or considered landing in the age of sail. The landing at the Head of Elk, where Howe brought his army ashore in July of 1777, is represented in the game, along with the landings available in the Delaware Bay.[107] Howe considered both locations as viable due to their strategic locations, but also

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[104] Ketchum, *Saratoga*, 256.

[105] Fischer, *Washington's Crossing*, 156.

[106] Atkinson, *The British Are Coming*, 231.

[107] Anderson, *The Command of the Howe Brothers*, 143.

for the currents, their ability to get large ships close to the shore, and the natural protection storms provided by the bay.[108] Moving north along the coast line, near Barnegat Bay (North of modern day Atlantic City), Howe considered landing his army. This was discounted because it required a long overland route to Philadelphia, with no ability to resupply.[109] During the invasion of New York in 1776, Howe and Clinton landed troops in New York City and along Long Island, and these landing locations are represented on the map.[110] Finally, near Boston, the Plymouth Bay/Cape Cod area was deemed a landing for purposes of the game. While not used for a military context within the American Revolution, it was identified as a suitable landing site for the Pilgrims. In addition to the ability to bring units ashore, landings allow the British player to use them as bases of supply for their lines of communication, facilitating the navy bringing additional supplies via the ocean.

Rivers played an important part in the campaign. In the Northern Department, the purpose of Burgoyne's movement south was to secure the Hudson, thereby breaking the colonies in two. This action would isolate Boston, which Germain and King George believed was the epicenter of the rebellion.[111] To gain control of the river for purposes of Victory Points, a player must control both the head (where the river starts), the mouth

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[108] Taffee, *The Philadelphia Campaign*, 96.

[109] Harris, *Brandywine,* 71.

[110] Atkinson, *The British Are Coming*, 173.

[111] Walter R. Borneman, *American Spring, Lexington, Concord, and the Road to Revolution* (New York, NY: Little, Brown, and Company, 2014), 320.

(where the river meets the ocean), and have an uninterrupted line of river connections between the two.

Finally, given the importance placed on naval berthing locations, the concept of oceanic movement and areas must be addressed. Naval movement is initiated with the sail order. The sail order is available only to the British player as the British are the only side that possess a formal navy capable of transporting large quantities of soldiers over water. Naval areas depict the estimation of where naval forces could be with the connections denoting the time it would take to move from one area to another.

Connections

When studying the terrain in which the 1777 campaign was fought, it is insufficient to look exclusively at the locations in which it was fought. It is also important to look at the routes by which the forces arrived at the battlefield. General Burgoyne learned this the hard way. As he wrote *Proposal*, his proposal for the invasion from Montreal to Albany, he noted the distances involved, the enemy he would face, and the requisite number of troops and supplies for mission success.[112] What he largely omitted, to his detriment, was that the route he proposed moving through was nearly untouched wilderness, with few trails capable of supporting his army. His proposal was that the expedition would be complete within six weeks, from departure to Albany. He made it only as far as Saratoga by October 6th, a full 19 weeks later.[113] Given the clear importance of routes, the researcher modeled this into Connections. Connections

[112] Ketchum, *Saratoga*, 79.

[113] Harris, *Germantown,* 281.

represent the routes between areas through which armies can move. Connections are broken down into five subcategories and will be explored at length below.

Improved Connections show well established routes between locations in which the terrain favors movement. There are minimal obstructions between destinations. Generally, these are found between or near major population centers, such as New York or Boston. As noted in the discussion on civilian traffic bringing supplies into cities naturally, it follows that these routes would be established and maintained by local civil authorities. Routes between the major city and their outlying towns (or areas) are easily found and observed on contemporary maps of cities.[114] The most obvious and direct routes are what are represented on the map the players operate on. Certain game effects make routes easier to move along. An example of this would be when General Howe brought a local loyalist with him during the Battle of Brandywine and was able to exploit little known trails to mass his army effectively.[115] Improved Connections also allow rapid movement of troops, and players do not have to worry about losing Supply Capacity due to wagons or animals becoming disabled during movement. Improved Connections are annotated by a black line between areas.

Restricted Connections are the opposite of Improved Connections and are on the opposite end of the spectrum. Restricted Connections denote difficult, but not impossible, terrain to move through. They may also denote terrain that has an established route but

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[114] J. De Costa, "A Plan of the Town and Harbour of Boston. and the Country Adjacent with the Road from Boston to Concord Shewing the Place of the Late Engagement," American Antiquarian Society, accessed March 26, 2021, https://americanantiquarian.org/earlyamericannewsmedia/items/show/34.

[115] Harris, *Brandywine* 314.

crosses a significant obstacle, such as a major waterway or mountain range. This rivers and mountains are treated as fords or passes, respectively. On the game map, restricted routes are primarily in the northern portion of the map, reflecting the lack of established routes near the Great Lakes, around Lake George, and through Maine and Vermont. These areas had not been extensively settled and proved difficult for armies to move through.[116]

In addition to the northern area, the connections around Morristown, New Jersey, are difficult to access. When observed as a straight-line distance, it is only 25 miles from New York to Morristown, which should be able to be marched within a single game turn of seven days. However, at the time there were no roads directly connecting these two areas and separating them are three natural obstacles. The first is a series of waterways, depending on the debarkation point, that include the Upper Bay, the Newark Bay, and the Passaic and Hackensack Rivers. Next, you have the Great Swamp, which is a series of swampy basins that would interdict and canalize movement. Finally, the Watchung Mountains, a series of 400–500-meter ridges that run north-south, perpendicular to the desired route.[117] With no established route, Howe opted to take the indirect route to threaten Morristown during the opening moves of the campaign rather than try and push through the area. However, it is possible and thus the player must be able to attempt it if so desired.

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[116] Ketchum, *Saratoga*, 328.

[117] Harris, *Brandywine*, 41.

To represent the difficulty in crossing these types of locations, the player will incur several penalties when moving along restrictive connections. The first is that units can not move rapidly, thereby slowing the time to move from place to place. Units are restricted to moving one connection at a time through restricted terrain. This reflects how difficult it was for armies to move through terrain with their supply wagons and animals. Related to the precarious nature of the route for wagons, players must roll a die to determine if Supply Capacity is lost during the movement. This roll is augmented by the general's logistics score, showing his potential prowess, navigating difficult terrain, and his willingness to listen to advice.

The third connection is the Unimproved Connection. This connection is marked as a brown line. Unimproved Connections are between improved and restricted in terms of their ability to support the movement of armies. Unimproved roads represent areas that can be trafficked but must be done so slowly. This could be due to a single bridge or ferry existing across a body of water, such as crossings along the Hudson at the time.[118] It could also cover moving through trafficable but broken and indirect routes such as the north-south running corridors in the vicinity of Morristown. Players moving along these types of connections suffer a movement penalty, like the Restricted Connections. However, they do not have to roll a die to determine if their wagons or animals suffer to such an extent that they lose Supply Capacity. Due to the canalization inherent with moving along Unimproved Connections, these are ripe for ambushes or other types of game effects. There are several Event or Decision cards that allow players to downgrade

[118] Snow, *1777 Tipping Point at Saratoga*, 130.

Unimproved Connections into Restricted Connections. This shows what the Continental Army did during the retreat from Fort Ticonderoga where they felled trees across trails, dammed streams to create bogs, and generally created as many obstructions as they could to frustrate British movement.[119] Conversely, roads can be improved through the same game effects, such as Royal Engineers constructing or repairing bridges for Howe in northern New Jersey.[120]

Finally, Water Connections must be addressed. Water Connections between land areas represent significant rivers that ships or bateaus could sail on. On the map, these are primarily two rivers: the Hudson and the Delaware. Water Connections assist with moving supplies inland from a landing or a port. While there are a few other rivers on the map, they function identically to the Hudson and Delaware but are less important.

The other Water Connection is the Ocean Connection, and it functions similarly to other connections, except only the sail order allows players to move naval units. Sailing allows you to move two ocean areas in one turn. While not all connections represent similar distances above due to terrain, and the inherent difficulty of moving along it with 18th century armies, no such terrain exists on the ocean. Thus, movement on the ocean is somewhat more uniform in the base rules and in the model, however the speed can be influenced by weather cards. The average rate of sailing during this period for the ships of the line or troop transports was approximately 3-4 knots.[121] When

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[119] Ketchum, *Saratoga*, 247.

[120] Taaffe, *The Philadelphia Campaign*, 241.

[121] Roger Knight, *The Pursuit of Victory. The Life and Achievement of Horatio Nelson* (New York,NY: Perseus Books Group, 2005), 231.

modelled onto the map, the means that, for example, within the Boston-Delaware Bay connections, a player must be able to move the distance within one turn. This distance between the two areas is just under 400 nautical miles (nm). At a rate of 3.5 knots, it would take just under five days to make the journey. This is reflected on the map with the area representing Boston Harbor and the area representing the Delaware Bay being two spaces apart.

The other significant naval movement on the board is from Boston to Quebec. The distance is approximately 1,200 nm and would thus take just over two weeks to accomplish. That timeframe means that on the third turn the ships could disembark the troops. While this may not seem long, in a game sense it takes troops out of play for 10 percent of the game. Furthermore, this assumes the location of the British troops are in Boston, which starts the game under the control of the Continental player. The decision to conduct strategic movement rather than tactically maneuver the armies over land was a contentious decision historically and should be a similarly difficult decision for the player.[122]

This section explains the decisions made by the researcher related to areas and connections, along with the general layout of the map. The map, with the areas and connections represented on them, are made to enable player decisions at the operational and strategic levels of war. The researcher designed the map to put the players in the headspace of the historical commanders, but not force them to follow the same route or make the same strategic decisions. Players should be able to take the impossible, difficult,

[122] Harris, *Brandywine,* 62.

or improbable route to their objective, even if it is a sub-optimal play. In the next section, the researcher will discuss the sequence of play.

Sequence of Play

Given the importance of enabling player decisions at the strategic and operational level, it is imperative to explain how this was accomplished by the sequence of play. In this section, sequence of play will be discussed as it relates to time, decision making, and how those are modelled into the game. Each sub-section will address a different phase of the game in the order the players encounter them. They are Winter, Event, Planning, Execution, Assess, and Reset.

The sequence of play is designed around the Army's model of the operations process: Plan, Prepare, Execute, Assess.[123] The phases are generally named after the step they are associated with. The goal of the researcher here was to replicate the operations process for the players and increase their iterations within the Army's paradigm.

Winter Phase

The Winter Phase encompasses the time after the start of the new year, January 1777, until the first week of May. While the month of April could hardly be considered a winter month, it is aggregated into the Winter Phase because it generally constituted the time in which armies prepared for the coming campaign without moving forces.

During the Winter Phase, players determine their Campaign Authority cards by drawing two each turn. They then discard one from play and return one to the bottom of

[123] HQDA, ADP 5-0.

the deck. At the end of the Winter Phase, they will have a deck of three cards, two they have selected and one they have not and therefore have not seen. These cards are shuffled and then a card is drawn from this deck of three. The back-and-forth nature of this represents the written exchanges between Howe and Washington and their higher authorities during the winter period. Howe was formulating a strategy in which he would remain in the greater New York area and thus be able to support Burgoyne in a direct way. As the winter went on, he altered his plan and determined he would head to Philadelphia instead, all but abandoning Burgoyne's Hudson campaign.[124] From a gameplay standpoint, on turn 1 the Howe player selected a card that would focus on the riverways. On turn 2, he selected a Philadelphia or population focused card. Washington made the same type of decisions while headquartered in Morristown. He spent a large portion of his time writing Congress and various governors about his plans for the next campaign season.[125] While Washington's campaign was not derailed by this decision, it could have been if the Congress had forced Washington to act or had called his leadership into question, as they would at the end of the 1777 campaign.[126] Within the model, Washington received the Campaign Authority Card that he wanted the most.

The second activity that occurs during the Winter Phase is the Winter Events cards. These cards are more potent and game-changing than normal events on Decision cards. Each player will draw a total of two and those two cards enable an asymmetric

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[124] Jackson, *With the British Army in Philadelphia*, 76.

[125] Chadwick, *George Washington's War*, 140.

[126] Ferling, *A Leap in the Dark*, 207.

start for the players. The British, for example could request more troops from England, as Howe did in December of 1776. The request was denied by Lord Germain at the time.[127] However, the card allows the request to be approved and the British player must determine to what extent they want to take advantage of the request. A higher request makes it easier for the Continental player to win, as the troops are pulled from across the Empire, potentially emboldening France or Spain. The Continental player has the potential to receive supplies from France, or at least the cash with which to buy them.[128] The events are randomly drawn from a deck of cards to provide variable starts for the players and to force players to adapt their strategy to the cards they are given.

Event Phase

After the Winter Phase is complete the first reoccurring phase in the main game is the Event Phase. During this phase players react to two different cards, Weather and Decisions. The cards have been discussed at length in the Event section of chapter 4. In short, players draw a Weather card appropriate to their current season. The effect of this card is felt in all areas of the map. The player on each side then draws a card from their associated deck and then decides between the Event and the Action on the card. If the player decides on the Event, the effect occurs immediately unless otherwise stated. If the player decides on the Action, then the card is added to that side's hand and can be played during the phase written on the card.

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[127] Harris, *Brandywine*, 18.

[128] Chadwick, *George Washington's War*, 155.

Planning Phase

During the Planning Phase, players select which orders they will be executing during the subsequent Execution Phase. The number of orders that may be selected for the Department is based on the Operations Score of the Department Commander. The player selects from three different categories of orders: Maneuver, Sustainment, and Intelligence. The player is not bound to a specific order within the category but is restricted to the category once selected. This allows some flexibility but only in the micro sense of the type of operation.

This models some of the limitations in communication inherent to the 18th century, but it also reflects the inherent friction with changing plans rapidly that is a timeless military challenge. Historically, this is most evident during the New Brunswick campaign at the beginning of the 1777 campaign. Howe departed New York and attempted to provoke Washington to come down from Morristown and fight him. Washington did not move from his advantageous position, and Howe was not prepared to conduct a frontal assault into the mountains. Given that, Howe began to withdraw back to New York City, leaving some forces behind to forage in the countryside for supplies and screen his movements. Washington observed the disposition of the British and sent Greene's Division to harass the rearguard elements. With Washington doing exactly what Howe had originally wanted. Howe sent an order for Cornwallis to countermarch and fight against Greene. Cornwallis replied that he could not as he had already redeployed and was marching toward New York per Howe's instruction.[129] From a game

[129] Harris, *Brandywine,* 41.

perspective, Howe had already spent his Maneuver Orders and did not have one left to move Cornwallis back into the area occupied by Greene.

Execution Phase

In the Execution Phase, players conduct the orders that they planned during the Planning Phase. During this phase, the majority of the actions of the game will take place. The players may execute them in any order for the Departments, but they must execute all orders or discard an order to pass their turn. The player with the initiative, which is determined by the player with the most points, may decide to go first or pass, allowing the other player to go first. Players alternate giving orders until they are both out of orders. In the sub-section discussing the Planning Phase, the separate categories of orders were mentioned but will be discussed at length below. The categories are: Maneuver, Sustainment, and Intelligence.

Maneuver Orders focus on moving forces around the battlefield and actions related to protecting the force. The researcher created two separate move orders, *march to* and *march from*, to provide the player with some efficiencies of how to maneuver forces. The inspiration for that is based on the actions taken by Washington at the end of the Battle of Brandywine. The day after the battle, Washington scattered the Continental Army along multiple routes to prevent its destruction by the British if Howe conducted a vigorous pursuit. Once Howe had captured Philadelphia and quartered his forces at Germantown, Washington converged his disparate forces for the attack.[130] Functionally,

[130] Harris, *Brandywine,* 261.

the former represents a *march from* order given to the defeated army, and the latter is a *march to*.

The Maneuver Order that should be addressed is the *dig-in* order. Fortifications were an important part of 18th century warfare. Vauban-style forts dominated key terrain across Europe.[131] While none of the forts in the American colonies were as complex as those in Europe, forts and fortifications were a major focus in the 1777 campaign and had already been so during the American Revolution. The Americans had scored a heavy blow to British morale at the Battle of Bunker Hill. Even though the Continentals were eventually driven off the hill, the British lost more than 1,000 men to do so.[132] Comparatively, that accounts for more battlefield casualties than those suffered by any side during this campaign, despite the size of the forces growing rapidly. Fortifications allow players to represent battlefield preparations from a hasty earthen redoubt thrown up, such as at Saratoga, to hastily constructed forts, such as those on the Delaware, to Fort Ticonderoga, which, despite its poor positioning, was still an imposing obstacle.

The next category is Sustainment Orders. This category focuses on providing endurance to armies, either for Supply, Supply Capacity, or Cohesion. Foraging and rest orders enable the player to rebuild some cohesion lost in battle or forage consumed. Some cohesion and supply are accumulated passively, as explained in the Reset Phase, but Sustainment orders represent a deliberate action on behalf of the players.

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[131] T. N. Dupuy, *The Evolution of Weapons and Warfare* (Indianapolis, IN: The Bobbs-Merrill Company, 1980), 102.

[132] Fischer, *Washington's Crossing*, 27.

Forage was an important part of the 1777 campaign, with the various skirmishes in May called the Forage War by some of the participants. Howe and Washington both deliberately paused combat operations to gather supplies for, either in the lead up to or the aftermath, the Battle of Brandywine.[133] The Battle of Bennington also occurred because Burgoyne detached a battalion of Hessians to acquire supplies in the agricultural area around Bennington, Vermont.[134]

The only order not related to feeding or resting soldiers is the Council of War order. This order represents a deliberate meeting between at least one general and the Department Commander. The order allows for a Decision Card to be added to the player's hand, with the model being that the Action portion of the card is the output of the meeting. Several of these types of meetings occurred throughout the 1777 campaign historically, most notably between Burgoyne and his subordinates prior to the Battle of Saratoga.[135] However, other such meetings occurred or could have occurred, and the player must have the option of actualizing such meetings.

The final category is the Intelligence Orders. These orders are the method that players gain, spend, and remove intelligence network points. The intelligence network represents the resources available to the player for them to better visualize and understand the battlefield. Spending points is the abstraction of players taking the information they may have gained and transforming that into actionable or relevant

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[133] Taaffe, *The Philadelphia Campaign*, 54.

[134] Ketchum, *Saratoga*, 351.

[135] Ibid., 391.

intelligence. The orders are given to specific units and the Intelligence Score of the general of that unit can assist in maximizing the result.

Assess Phase

During the Assess Phase, players score points based on their Campaign Authority Cards. Most of these requirements are one-time opportunities, such as gaining control of a new city, and the players can only lose these points if they lose that city. Other requirements are awarded per turn. These are noted on the card with the text *Per Turn.*

The other way players can score Victory Points during the Assess Phase is through Authority Cards. Some Authority Cards can only be achieved at the end of a season, but all others occur here. If the turn is at the end of a season, each player must action all held Authority Cards, or they are considered to have failed them.

Players score Victory Points in initiative order. If a player meets their Victory Point Requirement, they win the game instantly.

Reset

If no player has won the game and there are remaining turns in the game, players conduct the Reset Phase. The focus of this phase is administrative in nature. Players update the various trackers as noted in the rules. Additionally, every unit that has not conducted an action requiring it to be activated gains one Cohesion if it is deficient any Cohesion. This represents soldiers recovering and drilling at the small unit level while their generals are performing the orders, such as Council of War, or Build Intelligence Network.

The other key activity during the Reset Phase is the paying of Upkeep. Upkeep is the amount of Supply that is consumed each turn by units. In the simplest sense, it is soldiers eating food and refilling their ammunition pouches. It also represents the general consumption of other military supplies, such as cloth to patch uniforms or tents, and wood to repair wagons. Units consume Supply at a rate of one Supply cube per two brigades. This loss represents of the inherent inefficiency of resupplying soldiers. The cause of this could be poor reports from the front so extra food goes forward and spoils, or it could be a problem with the supply system originating at the quartermaster or commissary level. A historical instance of this is the continual dispute among the Royal Navy, the Logistics Department, and General Howe, over the number of supplies needed and at what intervals.[136] This mechanic is functionally similar to the Wastage mechanic in the game *Nevsky,* with food potentially spoiling or being lost due to inefficiencies in pre-industrial warfare.[137]

To offset the upkeep costs of units, players have access to supply bonus. Supply bonus comes passively to all units, and through Lines of Communication from the Commissary Department. Each area that has not been foraged provides half of its supply attribute to be used for upkeep for units in the area. This represents the passive foraging that soldiers may conduct on their own, such as Continental soldiers going to a local pub while in defensive positions near the Brandywine.[138] It could also be more hostile in

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[136] Ketchum, *Saratoga*, 107.

[137] *Nevsky*.

[138] Harris, *Brandywine,* 223.

nature, such as the Hessian Jaegers and Indians scouts plundering the small villages they passed prior to attacking Fort Ticonderoga.[139]

Supply bonus can also be gained through the Commissary Department and Lines of Communication. The location of the Commissary Depot adds supply bonus equal to half the supply attribute, as normal. It also increased the supply bonus by two. Furthermore, this supply can be spread among units that are both within the Lines of Communication of the Department Commander and if the Depot is within the Lines of Communication of the Department Commander. This models the Quartermaster units of the Commissary Departments bringing supplies to the front line. The British relied on this critical resupply during the initial landing at the Head of Elk. Their inability to establish the Depot at Philadelphia via the Delaware river is what ended up costing the British the campaign.[140] Burgoyne also suffered from being too far away from his commissary and not being able to be supplied from Canada or Britain which was a contributing factor in his surrender.[141]

If units cannot be fed, then they are forced to surrender and are destroyed. While this is somewhat extreme it is modeled after the problems faced by Burgoyne after the Battle of Saratoga. Without the ability to feed his soldiers and with no hope of being able

[139] Ketchum, *Saratoga*, 157.

[140] Taaffe, *The Philadelphia Campaign*, 272.

[141] Ketchum, *Saratoga*, 423.

to do so, he had no other choice.[142] Had Howe remained in Philadelphia much longer than he did, his army might have suffered a similar fate.[143]

Units

Units is a broad term used for sub-commands under the Department Commander. Depending on the player choices, these units could be as small as a single battalion or an independent army of several brigades. The variety of size in the units corresponds to the variation that the historical commanders employed. Burgoyne dispatched LTC Baum, who commanded only his battalion, for the raid that resulted in the Battle of Bennington.[144] In the Middle Department, Howe left Clinton in New York with several thousand troops, both in garrison and in the field, enabling Clinton to take independent action as he saw fit.[145] This sub-section will discuss the various resources, abilities, and troops that are tracked at the unit level. These are Troops, Cohesion, Supply, and Supply Capacity. Each will be discussed below.

Troops

In the game, Troops are the building block of armies and represent various types of soldiers depending on the color of the cube. Historically, armies were comprised primary of regiments of foot, or infantry in the modern parlance. Regiments differed in size and structure between the various combatants and thus modelling the regiment would

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[142] Ibid., 424.

[143] Taaffe, *The Philadelphia Campaign,* 273.

[144] Ketchum, *Saratoga*, 351.

[145] Ferling, *A Leap in the Dark*, 66.

not be uniform across factions. While never specifically stated in the game, the size of one Troop cube is approximately 250-300 men. Each type of Troop will be addressed below along with a description of how they were modelled into the game.

The British, and the Hessians, formed their armies around the nucleus of the regiment. Regiments consisted of 811 soldiers and officers. Regiments were commanded by a colonel; however, he was rarely present at the battlefield and did not tactically command his unit. The colonel was an administrative position. He made a contract with the King to field and equip a regiment for His Majesty's use and was paid a sum from the Crown to do just that.[146] Tactical command of the regiment was at the battalion level. These terms were synonymous at the time because every regiment had only one battalion. Battalions were commanded by a Lieutenant Colonel. Within each battalion, there were eight battalion companies and two flank companies. Battalion companies were all identical units and formed the majority of the British/Hessian armies. The flank companies were a company of grenadiers and a light infantry company. The grenadier company was the pride of the regiment; selected for their height, physical prowess, and bravery. These units would often be combined with other grenadier companies to form a grenadier battalion. These units would form the center of determined assaults.[147] One example of this was during the Battle of Bunker Hill, where Howe utilized a combined grenadier battalion to attack the most difficult portion of the Continental line.[148]

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[146] Fisher, *Washington's Crossing*, 39.

[147] Ibid., 35.

[148] Atkinson, *The British Are Coming*, 107.

The Continental regiment was similar in concept to the British regiment with a few key differences. The first was there was no "administrative" command. The colonel commanded the regiment tactically and did not own his regiment in the sense that a British colonel did.[149] This is not to say that Continental officers were not involved in the recruitment and mustering of their future commands. For example, Major General Stark actively recruited his own men once he received his commission and guidance to create a regiment to defend Vermont.[150] The regiments were owned by the state that they originated from and were numbered and named accordingly. Continental regiments also lacked the flanking companies of their enemies. The Continentals maintained light infantry units, such as Daniel Morgan's riflemen, but these units were not associated with a regiment of foot.[151]

The various German Principalities that provided troops to the British Army are commonly referred to as Hessians. This is because the two Principalities that furnished troops first were Hesse-Cassel and Hesse-Hanau. However, by the war's end a variety of states had been contracted by the British government to provide troops for the war.[152] The Hessians provided regiments to the British that were similar in form and function to their own. They had a similar number of companies, complete with flanking

[149] Harris, *Brandywine,* 157.

[150] Ketchum, *Saratoga*, 285.

[151] Harris, *Brandywine,* 37.

[152] Fisher, *Washington's Crossing*, 12.

companies.[153] The regiments came with leadership to provide command and control of the formations and these quality officers often commanded British troops in addition to their native German troops. General Howe mixed his Hessians and his British troops, while Burgoyne did not. The decision for which model to follow rests with the players.

The British, Hessian, and Continental troops are modelled similarly in terms of function, size, and movement. They differ in the key aspect of how fast they suffer Cohesion loss. Cohesion and combat will be discussed in detail later. Continental troops are more likely to suffer Cohesion losses from combat than their British or Hessian adversaries. During this period of warfare, discipline in the face of volley fire, rather than the fire itself, is what broke formations. This is shown by the similar number of causalities between armies, regardless of the victor. British and Hessian troops were renowned for their discipline in the face of fire, and this was achieved through rigorous training.[154] At the time of the 1777 campaign, the majority of the soldiers in the Continental Army was experiencing battle for the first time and lacked the discipline of their opponents.[155]

Finally, Troops are formed into brigades. A brigade is any group of one to four Troops that are not already part of a brigade. The number of brigades a unit has determines the number of dice it rolls during rounds of combat. For a brigade to be active, and thus be able to contribute its die to combat, it must have at least one Cohesion.

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[153] Harris, *Brandywine*, 311.

[154] Fischer, *Washington's Crossing*, 19.

[155] Harris, *Brandywine*, 354.

Cohesion

Cohesion and working together is a critical element of soldier's lives, regardless of the time period. As such an indispensable element, it must be modeled into this game in some form or fashion. Cohesion in the game represents the soldiers' ability to effectively fight together. It is an amalgamation of espirt d'corps, fatigue, and fighting ability. As noted above, a brigade must have cohesion to fight in combat.

Units can lose cohesion in a variety of ways. The primary way is through combat. Units that roll a given number inflict a cohesion loss on their enemy. Overtime, this can take brigades out of the fight. Battles in the time were often decided by who broke first, rather than units being destroyed. In fact, commanders often preferred to be fired upon first and then fire upon a reloading and disorganized enemy. They believed the fire would have a better effect against their morale. This is most famously portrayed during the Battle of Fontenoy in 1745 when guards' units from France and Britain goaded each other into firing first on the battlefield.[156] To reflect this, the primary indicator that a battle is going against a player will be the loss of their units' cohesion.

Additionally, terrain can inflict cohesion loss during battle. Certain battle cards inflict a cohesion loss on units at the beginning of the battle, mainly against the attacker. Prior to the Battle of Brandywine, Washington placed himself with the Brandywine river between himself and the advancing British. While attempting to cross the river, the British units lost their momentum temporary in the difficult and canalizing terrain.[157]

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[156] Antoine Henri Jomini, "The Art of War." in *Roots of Strategy,* Book 2, ed. J. D. Little (Harrisburg, PA: Stackpole Books, 1987), 494.

[157] Harris, *Brandywine,* 11.

Cohesion can also be altered through events. Weather can create cohesion and inflict cohesion lost. Summer heat and rain made life miserable for soldiers in both armies. The heavy uniforms and packs made soldiers fatigue more quickly and require more rest.[158] This loss of combat effectiveness is modelled as cohesion loss. The loss is rarely substantial, but to units on the verge of losing brigade cohesion it can be significant. Additionally, over time and without rest, weather could significantly affect the combat readiness of an army. This loss can be seen with Anthony Wayne's division during its retreat during heavy rain and thunderstorms prior to the Battle of Paoli.[159] Good weather can also quicken the recovery rates of soldiers. The pleasant weather in the spring helped soldiers recover from the intense skirmishing in New Jersey at the beginning of the 1777 campaign.[160]

Supply and Supply Capacity

The quote, "An army marches on its stomach," is often attributed to Emperor Napoleon Bonaparte or to Fredrick the Great. Whichever great captain said it, the sentiment remains true: armies are reliant on a support network to provide it with all the material necessary to conduct combat and to live. Supply and supply capacity are important elements in the 1777 campaign. Each will be explained below in what they represent and in how they are modelled into the game.

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[158] Harris, *Brandywine,* 278.

[159] Harris, *Germantown*, 89.

[160] Taaffe, *The Philadelphia Campaign*, 25.

Supply is an abstraction of anything that armies needed to continue to survive. Primarily it is used to represent food and forage, as that was an ever-present concern for commanders. The quantity of food available for man and animal determined the operational pace that commanders could move at. When Howe finally landed at the Head of Elk, his primary concern should have been seizing terrain rapidly due to his unexpected arrival. However, he spent more than a week foraging the area to collect food and animals to replace what had been consumed while abord the ships.[161] The same operational paused occurred after Burgoyne seized Fort Ticonderoga. With the sudden fall of the fort, the Northern Department was in complete disarray and could not have provided much resistance to a deliberate offense by the British. Unfortunately for Burgoyne, he could not do so as he needed to bring up additional supplies to prevent over extension of his already tenuous supply line.[162]

Supply is acquired primarily through foraging, using a Sustainment order. Depending on the logistics score of the general commanding of the unit, the player may have a better chance of gaining access to the full supply attribute of the area rather than half. Functionally, this means that generals who have a higher logistics score will have a better success at securing more supply. General Gates was well known as a quality logistician and administrator in the Northern Department. Additionally, despite the rapidly growing size of the army under his command, the troops were well supplied and

[161] Harris, *Brandywine,* 178.

[162] Ketchum, *Saratoga*, 351.

equipped.[163] On the British side, General Fraser expressed serious concerns with the logistics of Burgoyne's army as far back as Montreal and commented early to his commander that the Vermont area around Bennington would be an advantageous location to gain more supplies. However, Burgoyne selected General Riedsel to oversee the doomed expedition.[164]

Supply capacity deals with the ability to move supplies once they have been acquired. This represents two resources: wagons and animals to move them. Animals to move the wagons were of the highest importance and forced the historical commanders to make unpleasant and potentially unpopular decisions. Once such decision was Howe's order for his cavalry to fight on foot after landing in Pennsylvania. Several battalions of dragoons were stripped of their remaining horses and fought as infantrymen until horses could be acquired for them. Several cavalry companies remained on foot as late as the Battle of Brandywine.[165] Burgoyne faced similar difficulties acquiring draft animals and made similar decisions with regards to cavalry troops.[166] The Continentals were equally troubled with the problems associated with capacity. The loss of the wagons at the Battle of Paoli troubled commanders more than the loss of troops or the position of General Wayne's division.[167]

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[163] Ketchum, *Saratoga*, 254.

[164] Ibid., 295.

[165] Harris, *Brandywine,* 192.

[166] Ketchum, *Saratoga*, 227.

[167] Harris, *Germantown*, 104.

Functionally, supply capacity serves as a cap on the supply that players can have on hand. It slows the tempo of the game as players must balance seizing the initiative after a battle and ensuring that their army can survive. This operational pause occurred once Howe landed at the Elk River. Without the restrictions of supply, he could have taken Philadelphia before Washington could march his army into position. However, due to the limited amount of food Howe had on hand, he had to pause and take food from the countryside until his LOC could be established once more.[168]

Generals

While units and their associated resources, such as troops and supply, are the building blocks of armies in the game, these units are commanded by generals. The researcher primary decided to identify groups of soldiers' primarily as units and the general officer as a person, as a general. This functions that not all units have generals within the definitions of the model, such as naval units or garrisons which have no defined commander. Generals provide specialization to the units they command through their five attributes: Combat Capabilities, Tactical, Logistics, Intelligence, and Operations or Prestige.

Combat Capabilities

Combat capabilities will be addressed at length in the discussion on battles and how those are modeled into the game with respect to the numbers chosen. For the generals, the combat capabilities represent the attributes of the soldiers on his command.

[168] Harris, *Brandywine,* 117.

This is determined by the side the general fights for, with one notable exception: General Edward Mathew, who commanded the Guards Brigade of the British Army. The Guards brigade was formed of companies from the three guards' regiments, the Grenadier Guards, the Coldstream Guards, and the Scots Guards, all of these troops were known for their elan and discipline in battle.[169] The Guards had been selected to lead several key attacks since they arrived in 1776, notably during the Long Island campaign at Kips Bay where they were decisive in breaking the Continental line.[170] For these reasons the Guards are slightly better than other brigades and have a much higher cohesion capacity.

Tactical Score

The next attribute is the general's tactical score. The tactical score represents two traits. The first is actual tactical ability such as selecting terrain conducive to the battle or maneuvering troops in battle. This number is modified by the terrain attribute assigned to each area to determine the number of Tactics or Terrain cards that will be drawn if the general is leading a battle in that area. The researcher determined the score by how the general performed historically when they were free to make their own decisions. For example, General Wayne selected poor terrain to camp his division after the Battle of Brandywine and neglected to push security elements out to detect an enemy advance. His division paid dearly for this mistake at the Battle of Paoli.[171] On the positive end of the spectrum, General Greene fought an impressive rearguard action at the Battle of

[169] Harris, *Germantown*, 225.

[170] Atkinson, *The British Are Coming*, 393.

[171] Harris, *Germantown*, 106.

Brandywine that allowed for the withdraw of the Continental Army in comparatively good order. His moved his cannons quickly and they were always supported by infantry to prevent them from being overrun.[172]

The next element of the tactical score focuses on the rally action during battle. A strong tactical score here represents the General's ability to raise the morale of soldiers who may be attempting to flee the battle or are on the cusp of breaking. Generals in the 18th century were often very close to the frontline to direct their troops. The higher the general's tactical score the more likely it is that he will help his unit regain cohesion and remain combat effective. This action can save battles from defeat or steady a faltering army. Historically, this occurred on both sides during the Battle of Saratoga. At the decisive point of the battle, Generals Arnold and Fraser and their troops fought around the wheatfield between the two redoubts that anchored Burgoyne's left. The Continentals had achieved success in the morning and had driven the British back. Fraser rode forward and extoled his men to rally and he prevented the 24th Regiment from routing. They reformed and stopped the Continental assault. As the Continental's momentum began to wane, Arnold rode to the front and began directing fire to certain locations in the British line where he believed the line to be weakest. He reorganized all troops in the area, even some not under his original command, and formed a cohesive front. His actions regained the moment and solidified the victory for the Continentals.[173]

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[172] Harris, *Brandywine,* 356.

[173] Ketchum, *Saratoga*, 402.

This proximity to the frontline makes the action of rallying dangerous. While integral to the result of the battle, Fraser and Arnold were both injured within minutes of each other. Fraser's injury was mortal, and he died the following morning while Arnold had a long and painful recovery.[174] The mechanics of targeting general officers and rallying is covered in depth in the section on battles.

Finally, while the relationship between tactical acumen and battlefield presence was often linked, there is a notable exception that required special modifications to be modeled correctly. General Washington was not particular well known for his tactical ability. The minor wins at Trenton and Princeton notwithstanding, 1776-1777 saw a string of defeats for the Continental Army and the loss of both New York and Philadelphia. Within each lost battle, there are a few key points in which Washington made a tactical error, such as leaving his flank exposed at Long Island or not reconnoitering routes to his north at Brandywine.[175] Some of these contributed to the Conway Cabal that attempted to have Washington replaced as Commander and replaced with General Gates. Thomas Conway, a French volunteer with the Continental Army, called Washington a weak general and a bad councilor who would bring the ruin of the country.[176] Part of the worry for the Continental Congress, and Washington's critics, was the immense popularity Washington had with the troops and the population at large. The near deification of a military hero deeply concerned members of Congress, including

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[174] Ketchum, *Saratoga*, 401-403.

[175] Harris, *Brayndwine, 281.*

[176] Ferling, *A Leap in the Dark*, 205-206.

John Adams to referred to Washington as a Demi-God.[177] Washington's presence on the battlefield was awe inspiring. His presence steadied the line at Princeton and solidified the Continental victory. Furthermore, men were simply in awe of the way he carried himself in meetings and in interactions with his subordinates. Washington's battlefield image influenced his enemies as well. During the Battle of Brandywine, a British artillery sergeant placed an officer in his cannon's sights but was struck by the way this officer acted on the battlefield. He later wrote "it was not pleasant to fire at an unoffending individual who was acquitted himself very coolly of his duty, so I let him alone." Sergeant Ferguson only later discovered that it was Washington but stood by his decision to not fire on the officer.[178] This was not the only time Washington survived by mere luck. As a younger man at the Battle of Fort Duquesne, Washington had several horses shot out from under him and his coat was pierced by several bullets, but he remained unharmed.[179]

Finally, with regards to Washington, the researcher created a special card that is attached to Washington at the beginning of the game. This card improves Washington's ability to rally by providing a positive modifier. It also makes Washington harder to kill or wound when he is exposed to enemy fire. This essentially improves his Tactical score

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[177] Ferling, *A Leap in the Dark*, 207.

[178] Harris, *Brandywine*, 243-244.

[179] Fred Anderson, *Crucible of War, The Seven Years' War and the Fate of Empire in British North America, 1754-1766* (New York, NY: Random House, 2000), 754.

without making him a better tactician, which more correctly models an important and influential character in the game.

The next attribute on the general's board is logistics. The logistics score represents the administrative skill of the general as it relates to keeping soldiers feed, rested, and clothed. This skill helps players gain more supply or cohesion when issuing related orders. Various Decision cards and other game effects reference this score as well. When determining the score for various generals, the researcher looked at reports or incidents in which the general's soldiers were noted for being well fed, orderly, or when the general himself expressed concern over the sustainment aspects of the army. As an example, General Gates was well known for being a great administrator and record keeper in the Continental Army. During the end of the Saratoga campaign, his army grew considerably and at an increased pace due to militia arriving and reinforcements arriving. However, the Northern Department was well fed and meticulously organized by all accounts.[180] An example of sound camp organization is how General Howe arrayed his camp near Germantown in October 1777. The camp was organized to prevent Soldiers from getting sick and gave them access to different supply routes to draw rations from.[181] The camp was not in a good defensive position and the separation between units allowed them to be attacked in detail if the Continentals attacked. That data point however, would be related to Howe's Tactical score, which is lower than his logistical score. Had

[180] Ketchum, *Saratoga*, 254.

[181] Harris, *Germantown,* 216.

Washington not attacked Howe, it is likely that Germantown would have been a pleasant camp for the British to rest in after the Brandywine campaign.

The Intelligence score associated with each general is not a measure of their intellectual ability but more in line with "tasks and systems that facilitate understand the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment."[182] The score makes intelligence orders more effective and makes it harder for your enemy to gain information. A high score in this attribute is an indicator that the general, or his personal staff, has an aptitude for reconnaissance and security operations, or in spy craft. The two primary drivers of intelligence during 18th century warfare was information gained from scouts and from spies, or what today would be considered Human Intelligence. Burgoyne had an entire wing (division) dedicated to these types of operations that being the advance guard under General Fraser.[183] General Fraser's intelligence score represents this, as well as the fact that he starts with a comparatively large number of Light Troops.

While Fraser was successful at intelligence operations because of his task organization and his personal actions, other officers have a high intelligence scores because of the spy rings they cultivated. General Washington kept a strong network of spies that directly reported to him. He gained a respect for human intelligence after the Battle of Trenton. Personal contacts between Washington's staff and locals had provided the intelligence that the Hessians were isolated and from the main British Army and

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[182] Headquarters, Department of the Army (HQDA), Army Doctrine Publication (ADP) 3-0, *Operations* (Washington, DC: Army Publishing Directorate, 2019), 5-4.

[183] Snow, *1777 Tipping Point at Saratoga*, 18.

could be attacked in detail.[184] Washington capitalized on this success and continued to cultivate spy-rings throughout the remainder of the war.[185]

Prestige is the mechanism for determining who is in command if the Department Commander is not present during a battle. The officer who is in charge governs the scores that will affect Tactics and Terrain Cards. Prestige is a relatively simple score to determine for the Continental Army. The Continental Congress was constantly concerned with ensuring that there was equity in general officers across the Continental Army with respect to state of origin. This was done to ensure that one region did not dominate the military ranks but also to rally support across the colonies. While this had the intended effect with the local legislators it did not sit well with some of the officers who were disadvantaged. Brigadier General Arnold was passed over for promotion to Major General because Connecticut already had its allotment, despite Arnold being one of the more capable officers within the Continental Army.[186] The British Army had a comparatively more fluid command structure. Burgoyne was able to transfer from one Department to another and gain command of that Department through political maneuvering.[187] The British Army also had the rank of Lieutenant General that was able to help stratify the rank structure, whereas the Continentals had a large quantity of Major Generals.

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[184] Fisher, *Washington's Crossing*, 202.

[185] Pennypacker, *George Washington's Spies*, 6.

[186] Snow, *1777 Tipping Point at Saratoga*, 18.

[187] Ketchum, *Saratoga*, 164.

As Prestige determines who is in charge of each battle if the Department Commander is not there, the Department Commanders have no use for it. In its place, Department Commanders have an Operations Score. The Operations Score determines the number of orders that can be executed per Department per Execution Phase. This determines the pacing of the game and the number of actions a player can undertake. In modeling this, the researcher focused on the tempo of activity the various commanders had and how that effected their commands. In a four-player game, where one person commands each Department, the operations score forced a level of personality on the player. For example, General Gates spent a fair amount of his time writing political letters to Congress or dealing with unruly subordinates.[188] Thus, his Operations Score is lower than most to reflect this level of distraction.

The other outlier is General Howe and his mix of lethargy and manic energy. Either one of these traits would be fairly easy to model but when they exist within the same person, it becomes more nuanced. Howe's inactivity came from two areas. The first was his appreciation for comfort. Howe delayed several operations in New Jersey because he was holding parties and galas for his officers and local loyalists. Some of these activities were of a professional nature. General Howe did make the acquaintance of Joseph Galloway, who would prove valuable once Howe arrived in Pennsylvania.[189] However, some of it was frivolous, such as Howe's ongoing affair with Mrs. Elizabeth Loring, the wife of a local loyalist. These types of operational delays are modeled by

[188] Ketchum, *Saratoga*, 345.

[189] Anderson, *The Command of the Howe Brothers*, 176.

Decision Events available to the Continental player, predominantly in the Spring Season, which is when they historically occurred.

The other cause for Howe's delays was his aversion to casualties and bloodshed. This is an interesting trait for a commanding general but it was informed by Howe's political position and his previous combat experience. Howe initially considered declining the offer to command in the American Revolution due to his personal politics being more in line with the Whig party, which was somewhat sympathetic to the rebellion.[190] Howe was also slowed by his concern for casualties and the desire to not waste lives. Howe was the tactical commander at the Battle of Bunker Hill in 1775, where he was ordered by General Gage to conduct a series of frontal attacks at prepared Continental positions. During the battle, the British suffered over 1,000 casualties, including every member of Howe's staff.[191] Howe himself was reported to have been covered in so much blood that no white remained on his uniform.[192] This event shook Howe and informed his conduct during the remainder of the war. In the early days of the 1777 campaign, Howe did not attack Washington's Morristown positions despite Howe having the superior force. While Howe did not leave us a specific answer, this hesitation can be attributed to his desire to not have a repeat of Bunker Hill.[193]

To effectively model this hesitation to lose troops, the card "Howe's Conscience"

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[190] Fischer, *Washington's Crossing*, 72.

[191] Atkinson, *The British Are Coming*, 210.

[192] Fischer, *Washington's Crossing*, 69.

[193] Taafee, *The Philadelphia Campaign*, 61.

is attached to Howe at the beginning of the game. The more casualties that Howe suffers, the lower his operational score. This number rebuilds over time as Howe shakes off the memory, and it effectively puts the player in the headspace of Howe by incentivizing low casualties without restricting the player's options.

Battles

Battles are the flashpoints of the 1777 campaign and should serve as the decisive moments of the game, as they were historically. This sub-section will address how the sequence of the battles was modelled and the historical events that informed the model.

Battles can begin at the beginning or end of a player's Execution Round. For a battle to begin, players must have at least one unit in the same area as an enemy unit. In this regard, battles are optional. Players could coexist within the same area for an indefinite amount of time. However, this has a negative effect on cohesion due to living so close to the enemy. Soldiers after the Saratoga battles wrote in the journals about the perils of living within a mile of each other as they would encounter enemy patrols while conducting normal business.[194] For this reason, players suffer a cohesion loss per unit per round they do not either initiate combat or move.

Once a player opts to begin the battle, they become the attacking player and the other player becomes the defender. If the Department Commander is present, he becomes the Commanding General. If he is not, the general with the higher prestige becomes the commander. The commander is important because it is his score that will be used to determine Terrain and Tactics. The commander's tactical score serves as the baseline for

[194] Ketchum, *Saratoga*, 379.

Terrain and Tactical cards. If the commander is the defender, then they draw cards equal to the terrain attribute or the commander's tactical score, whatever is higher. This represents how good commanders can make use of or find terrain where poorer commanders could not. An example of this would be Washington defending in the Watchung Mountains near Morristown. Defending in this terrain provides a myriad of good options (Terrain Cards) and it does not take a tactical genius to leverage them. The same could be applied to Gates near Saratoga.

In the same vein of thinking, a good commander can see tactical options during the offense that others may miss. This is represented in two instances where Howe outmaneuvered Washington. The first is during the Battle of Brandywine. Howe had superior intelligence of the terrain in the area and he found a route that Washington had not defended against. This avenue of approach became the axis that Cornwallis used to outflank the Continental position and thereby collapsed their line.[195] The second is a nearly identical move by Howe in 1776 at Long Island. Washington had not identified the Jamaica Pass as key terrain to his defense. Howe exploited that and turned Washington's position, which defeated the Continentals.[196] The better tactical commander will draw more tactics cards (options) than poorer, less trained officers.

However, identifying the option and executing it are separate activities. A poor commander in the offense may perceive of a brilliant attack but lacks the tactical or operational acumen to see it executed properly. This disparity is modeled with the

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[195] Harris, *Brandywine,* 275.

[196] Atkinson, *The British Are Coming*, 353.

Tactical Difficulty score on every tactical card. To execute the tactic, and thereby get the modifier on the card, the attacking player must roll a d10 and add the Commanding General's tactical score to the roll. If the total meets or exceeds the requirement, the action on the card occurs as written, if not the general gains no bonus and is assumed to conduct a frontal assault.

Historically, this represents two instances of Washington conducting offensive operations. At the Battle of Trenton, Washington conducted an attack from converging axes of advance, and achieved success; surprising the Hessians by attacking them with multiple elements concurrently.[197] With the game, this models Washington rolling high enough for the effect to take place, despite his low Tactical Score. However, Washington ordered a similar maneuver at Germantown, where he had three columns attempt to converge on Howe's camp. This failed to achieve the desired effect on Howe's army due to weather, lack of discipline, poor route selection by his subordinates, and the distances involved.[198] Given that Washington's tactical score is a constant, it is these variables that are abstracted though the die rolls and are the things they player can not foresee or count on, such as thick fog descending on the battlefield the morning of the battle.[199] As an aside, Washington did achieve some level of surprise against Grant's division at the onset

[197] Fischer, *Washington's Crossing*, 234.

[198] Harris, *Germantown,* 257-260.

[199] Ibid., 259.

of the battle, but this was a local effect.[200] These more local surprises or tactical happenings are abstracted through Action based Decision Events.

At this point in the battle, the defender, if they are Continental, would roll to determine if, and in what form, the militia arrive to help. The militia were a constant variable to the Continental Regular Army. At times, their presence was decisive and useful, such as during the Battle of Lexington and Concord or Bunker Hill.[201] However, they often proved to be unreliable, such as at Ticonderoga, and even when they arrived in great number, lacked the discipline and training for complex maneuvers, which frustrated Washington's plans at Germantown.[202] This variable is modelled by the Militia Readiness tracker, which determines the condition and number of the militia that may join the Continental Army for the battle. The militia readiness score interacts with several event cards by providing the Continental player options for their employment. The player may opt to not bring them to battle, but rather have them harass British supply lines or disrupt roads and bridges, as Washington had them do prior to the Battle of Brandywine.[203] Regardless of their employment, the Continental player will know the condition of their militia troops before they make the decision to fight or withdraw. The British player will not know this number before making the same decision, although the

[200] Harris, *Germantown,* 286.

[201] Borneman, *American Spring*, 285.

[202] Harris, *Germantown,* 391.

[203] Harris, *Brandywine,* 138.

Militia Readiness Score is public knowledge so the British player can predict the number of militia that could turn out.

As noted above, players have the option of looking at their terrain card, militia turn out, or any other factor and decide to refuse battle. If the defending player refuses battle, the player must move away from the direction in which the attacking player advanced towards their Department Commander or Commissary Depot, whichever is closer. 18th century battles were often predictable affairs. Armies would march within a certain distance of each other and have battle the following day. Both battles of Saratoga, Brandywine, Long Island, and Kips Bay followed this paradigm. Howe expressed disappointment that Washington disengaged near the Schuylkill River during the period of darkness from September 19-20. However, from Washington's point of view, the conditions were not set for him to have a successful battle, due to weather, militia, or his army's recovery from the previous battle.[204]

If both players accept battle, then the battle begins properly. At the beginning of each turn, players can place their generals on the battleline to assist troops with either of two actions, combat or rallies. Generals may not do both. The combat action allows the players to add +1 to a die roll of their choice and the rally allows for the general to attempt to restore cohesion for their troops. These actions were explained under the section on generals. As noted there, these actions are not without risk as generals on the battleline run the risk of being wounded or killed.

[204] Harris, *Germantown,* 82.

For each cohesive brigade present, the player will roll one d10 die. Both rolls from the players occur simultaneously or at least before the results are applied to the respective sides. This models that the fighting is occurring simultaneously on all parts of the battlefield. The result of the rolls is determined by the combat capabilities of each side. Each side's capability is identical, except the Guards under Brigadier General Mathew for the British, and the Continental Militia. Those dice should be rolled separately if those units are present. The roll required to hit is a 10, regardless of the faction. Historically, the average losses for killed or wounded represented about 10 percent of the present troops. There are outliers, such as the 35 percent casualty rate of the Battle of Bunker Hill for the British.[205] Another is the Battle of Trenton, that saw nearly no losses for the Continental Army.[206] These notwithstanding, the killed and wounded on each side were comparable. The decisive factor was what side broke and ran first. As noted, this intangible will to resist is abstracted into cohesion.

Cohesion losses differ per faction. The Continental player scores a Cohesion Hit on a 9, while the British score it on an 8. This models two distinct but equally important concepts on the battlefield. The first is that the British were renowned for their discipline in battle.[207] Several journal entries from Continental veterans note that despite the musket fire and the terrain, they could not stop the British attacks across the river and up

[205] Fischer, *Washington's Crossing*, 72.

[206] Ibid., 255.

[207] Ibid., 38.

Birmingham Hill at the Battle of Brandywine.[208] The Continentals believed they were inflicting heavy casualties on the British due to the number of Redcoats they witnessed falling. This, however, did not account for the British tactic of having the vanguard of a hill assault lay down once effective fire had been placed on them from cannons or musket. This enabled the second line to move into position and fire their volley unopposed.[209] Nevertheless, the British could take a large amount of musket fire before breaking into confusion, and this is modeled by the Continental's have a higher dice requirement than the British to make a cohesion hit.

The Continentals on the line of fire were easier to break. Captain Archibald Robertson wrote that "The Rebels were Drawn up upon very Strong ground and seem'd determin'd to stand but impetuosity of our Troops was irresistible." Another officer in the same fight noted that at the approach of the British Grenadiers the Continentals broke and ran.[210] This is not to say that the Continentals were universally cowardly. In the same battle, General Greene inspired his troops to stand and fight during the rearguard action despite determined British pressure.[211] There are also accounts of resolute bravery of the Continentals at other times during the various battles, but these specific instances are modeled by event cards specific to what caused the spike in motivation and elan. When it was present, it had resounding effects, for, as Henry Dearborn, a major present at

[208] Harris, *Brandywine,* 311.

[209] Ibid., 240.

[210] Ibid., 312.

[211] Ibid., 324.

Saratoga, wrote? said? “we had something more at stake than 6 pence a day.”[212] After the rolls have been made and the various hits identified, those hits are assigned against enemy units. The owner of the unit divides the hits equally across all units.

Once that round is complete, players have the option of retreating. Either player may retreat and if they do they become the retreating player. This action triggers another round of combat, called the Rearguard Round, in which light troops become more effective. Cohesion losses during this phase are doubled as it is easy just as easy to lose control of a pursuing as a retreating unit. Howe suffered localize events such as this at the end of Brandywine. Knyphausen crossed the Brandywine and his troops verbed their way as they pursued the fleeing Continentals.[213] Similar confusion was witnessed on both sides during the retreat from Ticonderoga and light infantry, regulars, and native scouts collided in the woods to the south of the fort.[214]

If no retreat occurs, players may rally their troops if they have a general on the battleline who did not direct fire. The general section on the functionality of the tactical score discussed the historical relevancy and modeling of the rally action. It is sufficient to say that this action models the general restoring order to his troops through his presence and personal exultation.

At the close of the turn, players note the passing of the turn on the battle card. If the battle is over, they take appropriate actions to end the battle, otherwise the battle

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[212] Ketchum, *Saratoga*, 369.

[213] Harris, *Brandywine,* 357.

[214] Ketchum, *Saratoga*, 184.

resets and players can again decide what to do with their generals before the roll for combat is made.

In the 1777 Campaign there are three different types of battle outcomes: Decisive, Major, and Minor. Decisive victories are defined as when one player no longer has any unit with cohesion remaining in the battle. These types of maneuver centric victories were rare in 18th century warfare, and even more so in the American Revolution. There are a few cases, such as the Battle of Trenton and the Battle of Cowpens, however, these battles were small in tactical scale. As such, the conditions of the Decisive Victory are rare but the player is generally rewarded more for them, based on their Campaign Authority Cards.

The next is the major victory. This type of victory occurs when a player retreats during the battle. These battles are still major milestones in the campaign and are the more common type of battle found in history. The Battles of Paoli, Brandywine, Saratoga, Long Island, and Bunker Hill, are examples of when a side retreated from the enemy after engaging them due to losses, lack of positioning, or any other reason. Most Campaign Authority Cards reward players considerably for gaining such a victory. From a geographic position, this type of victory is important because it forces the defeated player to move back a space. This could prove decisive in severing LOCs or obtaining a city, such as during Long Island in 1775.

If a player retreats but losses all cohesion during the rearguard action, the victory is upgraded to a Decisive victory. An instance of this is not found historically in the American Revolution, but it is not for lack of trying. Cornwallis and Howe attempted to pursue and more decisively defeat Washington in the waning hours of the Battle of

Brandywine. General Greene's stout defense allowed the rest of the Continental Army to withdraw in good order.[215]

The last type of battle outcome is the Minor Victory. Minor Victories occur when the number of turns allotted to the battle have elapsed. This models darkness falling on the battlefield. While units may have moved during the dark in 18th century warfare, it was extremely uncommon for combat to take place at night, outside of sieges. With the historical confines of the 1777 campaign, only the Battle at Ticonderoga (a siege) and the Battle of Paoli took place during periods of darkness. However, both were initiated at night. Therefore, the model has combat end at night, excepting the specific Decision Cards that allow for combat to continue another turn.

When the battle ends due to nightfall, the players will calculate the victor by the number of troop and cohesion losses that each side lost. The side that lost fewer is the victor. The represents the narrative a general would craft with his authority or to the press. Burgoyne would attempt this after the Battle of Freeman's farm. As evening fell on the battlefield, the Continentals were in a disadvantageous position as they were battered by the British during the battle. Gates withdrew to the south during the night leaving Burgoyne with the field of battle.[216] Within the model, Gates had lost a significant amount of cohesion and that total would overcome the number lost by the British, despite the heavy casualties. Therefore, the British won a minor victory.

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[215] Harris*, Brandywine,* 354.

[216] Ketchum, *Saratoga*, 402.

With minor victories, each side may withdraw back one area if they want but are not required to do so. Units can not retreat in a direction from which the enemy approached. This type of rearward movement does not count as a retreat for purposes of upgrading the victory to a major victory. The battle can be re-initiated on the next turn by a player if they so desire.

Battles are significant affairs in the 1777 campaign wargame, as they were historically. Victory or defeat in a battle can be equal to the outcome of the campaign if the battle is as important as the Battle of Saratoga. Battles can also mean little if the players do not capitalize on them or fail to tie the tactical victory to a strategic goal, as outlined on their Campaign Authority Cards.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This paper provides the rational for the creation of a wargame model to address the question: How can the 1777 campaign during the American Revolution be effectively modeled into a wargame to educate and train the players on the complexity of Large-Scale Combat Operations? By studying the history surrounding the 1777 campaign at the tactical, operational, and strategic level and showing how these historical events were modelled into the game, this project addresses how the model was created. This chapter describes the outcomes of the research and playtesting, recommendations for future research, and conclusions.

Recommendations for Future Research

Improvements and refinements occurred throughout the development of the game and are indeed always possible with any game. The game in its current form is historically accurate, playable, and meets the proposed research questions. It is also fun and hopefully leaves players with a more firm understanding of the 1777 campaign. Based on research and feedback, further investigation and development would focus on the following topics.

First, early versions of the game included more antagonism between the two players on each side in a four-person game. This was cut to focus on the research questions at hand. Friction existed between the Department Commanders. Some of this is modeled in the game with Decision Cards, but this is somewhat forced upon the players.

Further additions would include rules to have only one player win on each side. If a player scores victory points, the points are awarded to the side but attributed to their Department Commander. This would introduce a level of rivalry that would more organically create the friction found between Howe and Burgoyne, and Gates and Washington.

Secondly, the tactical arrangement of troops on the battlefield is abstracted and could be further refined. Tactical battles exist in a macro view, with all units participating. Players are unable to hold a reserve or determine which unit will face which wing of the enemy. A separate battle map could be designed to abstract this and in early versions of the game, was present. This tactical map was eventually cut due to complexity but would provide a few more tactical options to players.

Thirdly, while the Continentals did not possess a navy comparable to the Royal Navy, they did have some riverine craft that frustrated British efforts to gain control of the Delaware. This is modelled as a series of card and fortifications given to the Continental player at the start of the game. Further research and development could model naval activities along the rivers more specifically.

Finally, the researcher was unable to conduct blind playtesting. This is playtesting in which the researcher provides only the rules and no further instruction. This activity would allow for further refinement of the rules to ensure a more complete player understanding.

Conclusions

Through the research and gameplay, the researcher identified three insights that make the 1777 Campaign relevant to the current operating environment and to military professionals.

The first is the importance of aligning operational actions with strategic goals. Battles in the 1777 Campaign can be costly in troops, cohesion, and supply. Therefore, they should only be conducted to obtain or defend objectives relevant to strategic (Campaign Authority) goals. Washington had a strategy that endured tactical defeat but eventually achieved strategic goals. Howe and the British had disassociated their operational and tactical actions from their strategic purpose. This misalignment cost the British dearly and brought the French into the war.

The second is the finite and fragile nature of armies in the 18th century. The British could not afford to have large losses inflicted upon their regular army. The troops were too hard to reconstitute, in both time and money. The Continental Army had a similar problem with how long it took to turn a recruit into a regular. This, similar to the first point, makes battles extremely costly affairs.

A corresponding point to this is the necessity of secure lines of communication. The two British Armies both suffered from poor lines of communication. While Howe was able to retreat to avoid disaster, Burgoyne was not. While modern lines of communication use vehicles and combustion engines to move supply rather than horse and wagon, these lines remain vulnerable to ambush and disruption. Furthermore, they are directly informed by the terrain, weather, and availability of roads. Modern armies are

still tied to lines of communication for all classes of supplies and if those lines are severed or compromised, the army rapidly begins to lose combat capability.

The final point is the importance of battlefield geometry. Commanders should focus on setting conditions and enabling tactical units to succeed in the tactical fight. Success in the wargame mirrored success in 18th century warfare; those commanders who could expose their enemy's LOCs without creating a vulnerability in their own were able to achieve operational and strategic success.

In this chapter, the lessons learned from the research and development of this game was explained. Additionally, further areas to expand or refine the game were explored to provide a stepping off point for further research. This thesis successfully answers the research question: How can the 1777 campaign during the American Revolution be effectively modeled into a wargame to educate and train the players on the complexity of Large-Scale Combat Operations?

APPENDIX A

GAME PIECES LIST

Game Components

Continental Player Items	
Piece Name	**Quantity**
General Boards	15
Garrison Boards	4
Militia Board	1
Blue ten-sided dice	5
General Blocks	15
Rumor Blocks	6
Garrison Blocks	4
Commissary Depot Blocks	2
Campaign Authority Deck	5 cards
Winter Event Deck	4 cards
Spring Event Deck	20 cards
Summer Event Deck	20 cards
Autumn Event Deck	20 cards
Authority Event Deck	15 cards
Player aid	2

British Player Items	
Piece Name	**Quantity**
General Boards	14
Garrison Boards	4
Red ten-sided dice	5
General Blocks	14
Rumor Blocks	6
Garrison Blocks	4
Commissary Depot Blocks	2
Navy Blocks	2
Navy Rumor Blocks	2
Campaign Authority Deck	5 cards
Winter Event Deck	4 cards
Spring Event Deck	20 cards
Summer Event Deck	20 cards
Autumn Event Deck	20 cards
Authority Event Deck	15 cards
Player Aid	2

Game Items	
Piece Name	**Quantity**
Spring Weather Deck	15 cards
Summer Weather Deck	15 cards
Autumn Weather Deck	15 cards
Terrain Deck	20 cards
Tactics Deck	20 cards
Militia Readiness Track	1
Victory – Turn Track	1
Intelligence Network Track	1
Yellow Cubes	20
Red Cubes	80
Purple Cubes	15
Black Cubes	30
Brown Cubes	15
Blue Cubes	80
Light Green Cubes	80
Dark Green Cubes	60
White Cubes	100
Game Map	1
Game Box	1
Rules	1

APPENDIX B

RULES

Rules for 1777

1. **Concept of the Game**: This game models the 1777 campaign during the American Revolution. In this game, players will take command of two Departments, the Middle and the Northern. Players command their armies at the operational level but make decision related to the strategic and tactical as well, as commanders at the time did. The Continental player is attempting to hold the army together and keep the war going long enough for European Allies to enter the war. The British Player is attempting to end the American Revolution.
   - 1.1. **Components**: The game contains an operational level map of the American Northeast. Units are represented by blue and red blocks representing Continental and British units respectively. The details of the units are tracked on their corresponding general board. The boards keep track of the size of the unit, its supply, supply capacity, and cohesion through a variety of colored cubes. Additionally, there decks of cards that represent weather, terrain, tactics, events, and authority events for the players. Finally, the game contains, 1d10 die that resolve game mechanics.
   - 1.2. **Map and Map Area**: The game contains an operational level map representing the land, ocean, and river areas of the North American North-East region. The game extends from Baltimore in the southwest to Quebec in the northeast.
   - 1.3. **Winning the Game**: The game simulates the 1777 campaign that took place during the American Revolution. The game ends when one player achieves the required number of victory points.
     - 1.3.1. For the Continental Player this means that France has decided to join the war on the side of the American forces. Their entry ensures the war will escalate into a global conflict, stress the already constrained resources of Britain, and ensure American Independence.
     - 1.3.2. For the British Player, this means that the Continental Congress has relieved George Washington as Commander of the Continental Army. France has also declined to join the war. With the Continental Army in disarray and the rebellious colonies isolated, the Continental Congress will soon have to accept terms and the Crown will restore order to its wayward subjects.
2. **Sequence of Play**:
   - 2.1. Set Up:
   - 2.2. Players begin the game by determining who will play which side, British or Continental.
   - 2.3. In a 2-player game, each player controls both Departments. In a 3-player game, the British side has two players, each controlling a Department, while the Continental player controls both Departments. In a four-player game, each player controls a single Department.
   - 2.4. The British player sets up first. Followed by the Continental player.

2.5. **<u>British Set Up</u>**:

2.5.1. The Northern Department: The British player begins the game with the following units and generals in the Northern Department.

Name	Troops	Cohesion	Supply	Supply Capacity	Location	Misc.
Major General John Burgoyne	2 Light 2 British	4	3	6	In any Canadian Space	Lifestyle Comforts, Darling of the Press
Major General Fredrick von Riedesel	6 Hessian	6	3	6	In any Canadian Space	None
Brigadier General James Hamilton	6 British	6	3	6	In any Canadian Space	None
Brigadier General Simon Fraser	4 British 1 Light	5	4	7	In any Canadian Space	None
Garrison 1	2 British	2	4	n/a	Quebec	None
Garrison 2	2 British	2	4	n/a	Montreal	None
Northern Department Commissary Deport	n/a	n/a	n/a	n/a	Montreal or Quebec	None
* The Northern Department also has 1 Light, 6 British, and 4 Hessian Troops that may be placed within any unit. Add cohesion to match troops added.						

2.5.2. The Middle Department: The British player begins the game with the following units and generals in the Middle Department.

Name	Troops	Cohesion	Supply	Supply Capacity	Location	Misc.
General Sir William Howe	2 Light 2 British	4	2	6	New York	Howe's Conscious Holding Area
Lieutenant General Lord Charles Cornwallis	4 British 2 Hessian	6	5	8	Within 1 connection of New York	None
Lieutenant General Wilhelm von Knyphausen	2 British 4 Hessian 1 Light	7	5	7	Within 1 Connection of New York	None
Major General Henry Clinton	3 British 2 Hessian	5	3	7	Within 1 Connection of New York	None
Major General James Grant	2 Hessian 3 British	5	4	6	Within 1 connection of Hartford or Providence	None
Brigadier General Edward Mathew	4 British	8	1	4	New York	Guards Brigade
Garrison 2	2 British	2	4	n/a	Montreal	None
Northern Department Commissary Deport	n/a	n/a	n/a	n/a	Montreal or Quebec	None
* The Northern Department also has 1 Light, 6 British, and 4 Hessian Troops that may be placed within any unit. Add cohesion to match troops added.						

2.5.3. In addition to the troops listed, the British player begins the game with the following:

2.5.3.1. Control of Hartford

2.5.3.2. Control of Providence

2.5.3.3. One Rumor in either Department.

2.5.3.4. Royal Navy 1 and Naval Rumor located in New York.

2.5.3.5. Royal Navy 2 and Naval Rumor located in Quebec.

2.6. **Continental Set Up**:

3.6.1 The Continental Player may not place his units in the same area as a British unit or in such a place that the number of connections counts an area in which a British unit is present.

3.6.2 Northern Department: The Continental Player begins the game with the following generals in the Northern Department.

Name	Troops	Cohesion	Supply	Supply Capacity	Location	Misc.
Major General Hortatio Gates	3 Continental 1 Light	4	2	5	Albany	None
Major General Arthur St. Clair	4 Continental	4	3	6	XXXX	None
Major General Benjamin Lincoln	4 Continental	4	2	4	Within 2 Connections from Albany	None
Brigadier General Benedict Arnold	4 Continental	4	3	5	Within 3 Connections from Albany	None
Garrison 1	2 Continental 1 Light	3	3	n/a	Ticonderoga	None
Northern Department Commissary Depot	N/A	N/A	N/A	N/A	Albany	None

* The Northern Department also has 1 Light and 6 Continental Troops that may be placed within any unit. Add cohesion to match troops added.

Name	Troops	Cohesion	Supply	Supply Capacity	Location	Misc.
General George Washington	3 Continental 1 Light	4	3	6	Morristown	Washington's Presence
Major General Nathaniel Green	4 Continental	4	3	6	Within 3 Connections of Morristown	None
Major General John Sullivan	4 Continental	4	3	6	Within 3 Connections of Morristown	None
Major General William Alexander	4 Continental	4	3	7	Within 4 connections of Morristown	None
Brigadier General Anthony Wayne	4 Continental	4	3	6	Within 4 connections of Morristown	None
Garrison 2	4 Continental	4	4	N/A	Fort Mercer	None
Middle Department Commissary Depot	N/A	N/A	N/A	N/A	Morristown	None

* The Middle Department also has 1 Light and 8 Continental Troops that may be placed within any unit. Add cohesion to match troops added.

3.6.3 Middle Department: The Continental Player begins the game with the following units in the Middle Department.

3.6.4 In addition to the troops listed, the Continental Player begins the game with the following:

3.6.4.1 Control of Philadelphia.

3.6.4.2 Control of Baltimore

3.6.4.3 Control of Boston

3.6.4.4 1 Rumor that can be placed in either Department.

3.7 Player Area Setup:

3.7.1 **Campaign Authority Decks**: Shuffle the Campaign Authority Decks for each side and place them at the top of the map.

3.7.2 **Winter Event Decks**: Shuffle the Winter Event Decks for each side and place them at the top on the map.

3.7.3 **Event Deck**: Shuffle the Spring event deck for each side and place them at the top of the map.

3.7.4 **Weather Deck**: Shuffle the Spring Weather event deck and place it at the bottom of the map.

3.7.5 **Terrain Deck**: Shuffle the terrain deck and place it at the bottom of the map.

3.7.6 **Tactics Deck**: Shuffle the tactics deck and place it at the bottom of the map.

3.7.7 **Intelligence Network**: Place the intelligence network at the top of the map. Place a blue cube 2 on the Continental Track. Place a red cube on the 1 on the British Track.

3.7.8 **Militia Readiness**: Place the Militia Readiness near the Colonial Player. Place a blue cube on the middle one marker.

3.7.9 **Victory and Turn Tracker**: Place a black marker on winter turn 1. Place a blue and red marker on 5 and 25.

3. **Playing the Game**:

3.1. 1777 is played over a series of turns broken down by phases. The Winter Phase begins first. Once the winter phase is complete, there are 30 normal turns. Each set of 10 normal turns is further defined as a Season, with each season is 10 turns. Within each turn, there are several phases that must be resolved in order. The order is:

3.1.1. **Event Phases**: Players draw event and weather cards. These provide the narrative background for this turn. These cards are drawn specifically from the deck associated with the current season the players are in.

3.1.1.1. Turns 1-10 are the Spring Season.

3.1.1.2. Turns 11-20 are the Summer Season.

3.1.1.3. Turns 21-30 are the Winter Season.

3.1.2. **Planning Phase**: During this phase, players decide what orders they would like to execute per Department during the subsequent execution phase.

3.1.3. **Execution Phase**: During this phase, the majority of the game's action occurs. Players take turns executing orders from their pre-planned deck of orders they created during the planning phase. Combat also occurs and is resolved during this phase.

3.1.4. **Assess Phase**: During this phase, players score victory points not scored during the Execution Phase. If a player reaches the required number of victory points, they win the game.

3.1.5. **Reset Phase**: During the phase, players pay upkeep for their units with supply and prepare the board for the following turn.

4. **Winter Phase**:
   4.1. The Winter Phase consists of the first two turns of the game. During this phase, players make various decisions that will affect the course of the game. Combat cannot occur during this phase. Nor can units move unless a card overrides this effect.
   4.2. Each turn of the Winter Phase follows to following steps:
      4.2.1. **Draw Campaign Authority Event**: Each player draws two Campaign Authority Event cards. These cards provide the conditions for the preponderance of the player's victory points. The players read each card and selects one that they would like to keep and one to discard. The card that the player would like to retain is added to the bottom of the deck and the discarded one is discarded. The Campaign Authority Deck is ***NOT SHUFFLED.***
      4.2.2. **Draw Winter Event**: Each player draws one Winter Event and resolves the card as written.
      4.2.3. **Reset**: If it is Winter Phase Turn 1, the players advance the turn counter to Winter Phase Turn 2 and resolved the sets of the Winter Phase again. If it is Winter Phase Turn 2 proceed to the next step.
      4.2.4. **Draw Campaign Authority Event**: Each player shuffles the Campaign Authority Deck and then draws one card. This card is the Campaign Authority card for the rest of the game. Advance the turn marker to turn one and proceed to the main game.
5. **Normal Turn**:
   5.1. After the Winter Phase is over players resolve normal turns until the game is over. The phases of a normal turn are described below.
   5.2. **Event Phase**:
      5.2.1. The player without initiative (lower VP score) draws the weather card and reads it aloud. If the effect lasts throughout the turn, place the card on the map.
      5.2.2. Each player draws the top card from their respective Event Deck and decides to take the event or the decision. If they decide to take the decisions, they add the event card to their hand.
      5.2.3. On turns 3, 6, 13, 16, 23, each player receives additional guidance from their authority. Draw an authority event card and keep it secret.
   5.3. **Planning Phase**:
      5.3.1. For each Department, players select a number of orders equal to the Department commander's operation score.
      5.3.2. For each Department, the player may select an combination of Maneuver, Sustainment, or Intelligence orders.
   5.4. **Execution Phase**:
      5.4.1. At the beginning of the phase, the player with initiative (higher VP score) states which player will go first. They may decide to go first or have the other player go first.
      5.4.2. Players execute orders from either Department. The orders available are covered in section 6.

5.4.3. At the beginning and end of each players turn, they may initiate combat if one of their units is in the same space as a unit from the other side.
5.4.4. If at any point a player has enough victory points to meet or exceed their victory point requirement, they win the game.
5.4.5. At the end of each players turn, if there are units in the same area as an enemy unit, each unit losses one cohesion.
5.4.6. Once all orders and combats have been resolved, move on to the next phase.

5.5. **Assess Phase**:
5.5.1. **Score Victory Points**:
5.5.1.1. The player with initiative may score victory points from their Campaign Authority Card or Authority Card.
5.5.1.2. The player without the initiative may then score victory points from their Campaign Authority Card or Authority Card.
5.5.1.3. If at any point a player has enough victory points to meet or exceed their victory point requirement, they win the game.

5.6. **Reset**:
5.6.1. Each unit that did not march during this turn recovers one cohesion.
5.6.2. Each player performs upkeep on their units. See 10.
5.6.3. The Department commander may move supply equal to his logistics score between units within his LOC.
5.6.4. The Department commander may move supply capacity equal to his logistics score between units within his LOC.
5.6.5. Advance the militia readiness one step if the militia was not called upon during turn.
5.6.6. Advance the turn marker by 1. If the next turn is within the same Season, return to the event phase. If the next turn is within the next season before steps listed in 6.6.6.
5.6.7. **End of a Season**:
5.6.7.1. Take the previous weather deck and place them in the out of play area. Take the event deck for the previous season and place it above the play area.
5.6.7.2. Take the next seasons weather deck, shuffle it, and place it below the map.
5.6.7.3. Take the next seasons event deck, shuffle it, and place it above the map.
5.6.7.4. Starting with the player with initiative, if that either player has authority events that have not been resolved, those players must immediately meet the success conditions, or they are considered to have failed the authority and must suffered the failed penalty on each card.
5.6.7.5. If a player has enough victory points to meet or exceed their victory point requirement, they win the game.

6. Orders:

6.1. Orders constitute the deck built by the player during the Planning Phases of the game. The player may make any combination of orders they desire during the phase and may execute them in any order. Orders in a Department's deck must be given to units or areas within that Department.

6.2. Orders are broken into three categories, Maneuver, Sustainment, and Intelligence Orders

6.3. **Maneuver Orders**:

6.3.1. **March**:

6.3.1.1. March orders allow you to move your units across the map.

6.3.1.2. There are two types of March orders, march to, and march from.

6.3.1.3. March From: Select an area in which you have units. Move units that have no moved this turn out of that area, through connections in any direction. Units may move two connections if both connections are improved connections. Otherwise, the units may move one. See effects of restrictive connections in section 8.

6.3.1.4. March To: Select an area. Move units that have no moved this turn to that area through connections from any direction. Units may move two connections if both connections are improved connections. Otherwise, the units may move one. See effects of restrictive connections in section 8. Once the unit has moved, place it facedown.

6.3.2. **Dig In**:

6.3.2.1. Digging in allows players to add fortification markers to an area. During battle, fortification points may be spent to demote a cohesion loss to a miss or a troops loss to a cohesion loss.

6.3.2.2. If there are no longer any troops in an area that has fortification markers, remove all fortification markers from that area.

6.3.2.3. If a unit is attacked while performing this order, they suffer a loss of 2
cohesion.

6.3.3. **Sail**:

6.3.3.1. This order is only available to the British player.

6.3.3.2. Move ships out through 2 ocean connections. If Naval units are in a landing or port, they move troops from the Sea Holding Area into the land area.

6.4. **Sustainment Orders**:

6.4.1. **Rest**:

6.4.1.1. Resting allows for units to recover cohesion lost in battle or through events.

6.4.1.2. When players execute this order, they select a unit and roll a die. For the unit selected, add the General's logistics score as a positive modifier.

6.4.1.3. On a roll of 1-5, the unit gains two cohesion.

6.4.1.4. On a roll of 6-7, the unit gains three cohesion.

6.4.1.5. On a roll of 8-10, the unit gains five cohesion.

6.4.1.6. If the unit is attacked on the turn it has been ordered to rest, it losses half of its cohesion.

6.4.2. **Reorganization**:

6.4.2.1. During a reorganization, the player may move any number of troops, supply, and supply capacity from one unit to another. Only troops with cohesion may move to another unit.

6.4.2.2. The gaining unit increases cohesion matching the total number of troops gained.

6.4.2.3. During a reorganization the player may also create a garrison. The same steps are followed by a new unit from the garrison pool is created.

6.4.3. **Forage**:

6.4.3.1. Foraging allows for units to collect supply from the local population through a mixture of coercion and payment.

6.4.3.2. Select a unit. The general logistics score allows you to select an area equal to that number of less from the unit's current area to forage at. Calculate distance using LOCs, see Section 8.

6.4.3.3. Declare if you attempting to gather supply or supply capacity. For that area, roll a d10 and apply the general of that unit logistics score to the roll. Resolve the roll depending as follows:

6.4.3.3.1. On a roll of 1-5, add half the units supply attribute to your supply, rounded up. If rolling for supply capacity, add half of the number of supply you would have gained as supply capacity, rounded down.

6.4.3.3.2. On a roll of 6-10, add all the areas supply attribute to your supply. If rolling for supply capacity, add half of the number of supply you would have gained as supply capacity, rounded down.

6.4.3.3.3. Once the roll is complete, place a brown cube on the area to denote that it has been foraged.

6.4.4. **Council of War**:

6.4.4.1. To play council of war, your Department commander must be in the same square as another unit commanded by a general (no garrisons or rumors)

6.4.4.2. You may do one of the following.

6.4.4.2.1. Draw an event card from your deck current season or a previous season that has not been discarded. You may only play this card for the Action.

6.4.4.2.2. Draw tactics card equal to your Department Commander's Tactical score, you may add one to your hand and play it at the beginning of battle rather than draw.

6.5. **Intelligence Orders**:

6.5.1. **Build Intelligence Network**:

6.5.1.1. This order allows you to increase your intelligence network score by one. It additionally adds the unit's general's intelligence score to the number of points you get.

6.5.2. **Conduct Counter-Recon**:

6.5.2.1. This order allows you to decrease your opponent's intelligence network score by 1. For each light troop in the unit you gave the order to decrease their score by 1.

6.5.3. **Conduct Recon**:

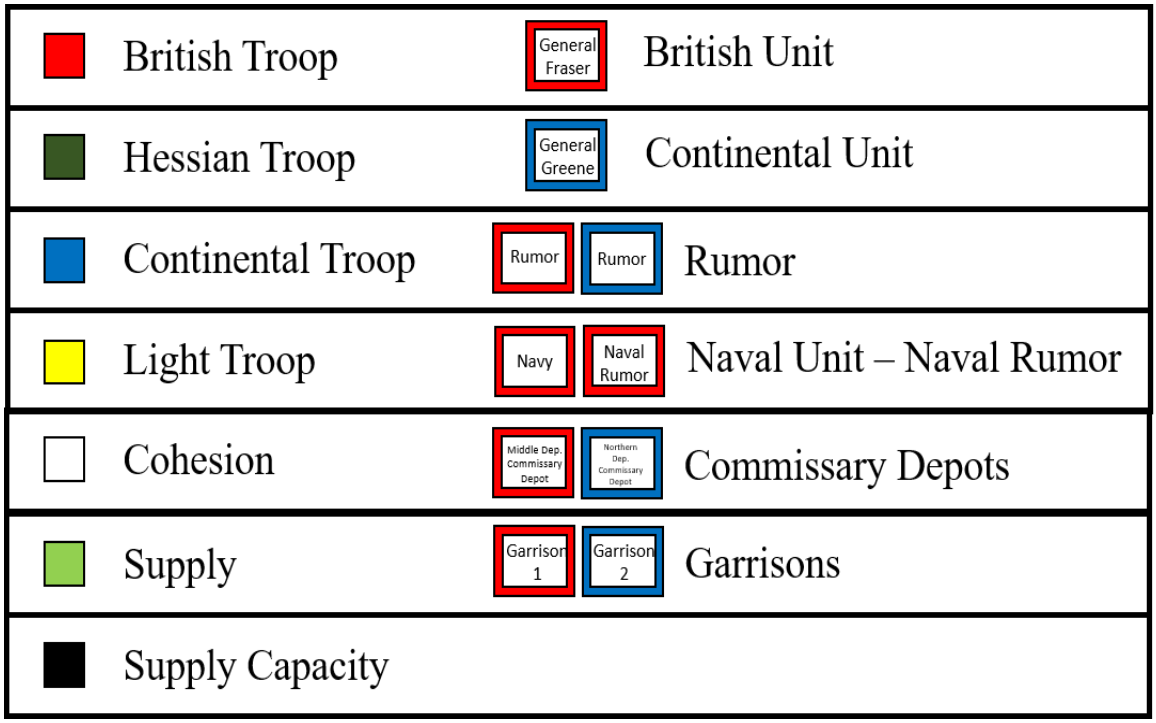
6.5.3.1. Recon gives the player the ability to decrease the fog of war on the battlefield and reveal the enemy's places.

6.5.3.2. To play this order, select one of your units and an area that has an enemy unit. Count the number of connections between that area and your unit. The line cannot go through any areas that contain an enemy unit you are not conducting a recon against. This number is the cost of the recon in intelligence points.

6.5.3.3. For each light troop in the unit conducting a recon the cost is reduced by one. The cost of recon cannot be negative.

7. Generals and Units:

7.1. Section #2 discusses the types of units that are available in the game. Below is a diagram that depicts each type of unit and troop in 1777.



7.2. Troops, Supply, and Supply Capacity all exists on the General Board. The general board corresponds with the unit and the names of the generals on each. Each is explained below.

7.3. Troop and Unit Types:

7.3.1. *Continental Units*: These units are represented by a blue block. One side contains the name of the general commanding the unit, the other side is blue. The side with the name should face the Continental player.

7.3.2. *British Units*: These units are represented by a red block. One side contains the name of the general commanding the unit, the other side is red. The side with the name should face the British player

7.3.3. *Continental Troops*: These troops are represented by blue cubes and go on the general board. Each troop is a representation of approximately 250 soldiers.

7.3.4. *British Troops*: These troops are represented by red cubes and go on the general board. Each troop is a representation of approximately 250 soldiers.

7.3.5. *Light Troops*: Light troops are represented as yellow cubes and serve functionally as a normal troop but have bonus effects for some intelligence orders and other game effects. For the Continental player, these troops are an abstraction of Continental Dragoons, riflemen, and scouts. For the British player, these troops are an abstraction of dragoons, jaegers, light infantry, and native allies.

7.3.6. *Hessian Troops*: These troops are represented by green cubes and go on the general board. Each troop is a representation of approximately 250 soldiers. These units are identical to the British troops in functionality for the British player and a distinction is made for thematic purposes and for certain game effects.

7.3.7. Rumors: Rumors are represented by blocks corresponding to the player who created the rumor and are identical to unit blocks. From the opposing player's view, they are identical to units.

7.3.7.1. Any time a recon is conducted of an area that contains a rumor, that rumor is destroyed.

7.3.7.2. If an enemy unit enters the same area as a rumor, the rumor is destroyed.

7.3.7.3. Rumors are treated as units for the purposes of giving orders or other game effects. It is up to the owning player to keep the ruse up!

7.3.8. Navy:

7.3.8.1. The British Navy ruled the waves. As such, only the British player has naval units.

7.3.8.2. Whenever a Naval Unit embarks troops, move the units to the Sea Holding Area. The sea holding area corresponds with the number on the Naval Units square.

7.3.9. **Garrisons**:

7.3.9.1. Garrisons represent forces that have been left to hold an area.

7.3.9.2. For the most part, garrisons are treated the same as other units with the following exceptions.

7.3.9.2.1. They cannot be given march to/march from orders.

7.3.9.2.2. They have no supply capacity.

7.3.9.2.3. If a garrison is defeated, the garrison cannot withdraw. If a general unit is within one area of them, they are added to that general unit without cohesion. Each troop moved in this way allows one supply to move to the new general as well.

7.3.9.2.4. Supply left in the garrison is added to the attacking unit, if they have the supply capacity to accept it.

7.4. **Cohesion**:

7.4.1. Cohesion represents the fighting spirit, espirt d'corps, and combat capabilities of a unit.

7.4.2. Units cannot have more cohesion than troops in the unit. Certain game effects will override this rule.

7.4.3. Cohesion determines the number of Cohesive Brigades that a unit has within it. This effects the number of die rolled for that unit in combat. See Brigades. 7.5

7.5. **Brigades**:

7.5.1. Brigades represent the sub-units to which troops belong within the unit.

7.5.2. A brigade is defined as 1-4 troops not associated with a brigade. This means that four troops are one brigade, but 5 troops are two brigades.

7.5.3. For a brigade to be considered cohesive, it must have at least one cohesion associated with that brigade.

7.5.4. A cohesive brigade adds 1 die to the roll of the unit during combat.

7.6. **Supply**:

7.6.1. Supply represents the material needed to conduct war in the 1777. It is consumed by units as upkeep.

7.7. **Supply Capacity**:

7.7.1. Supply capacity represents the equipment used to move supply such as wagons and animals.

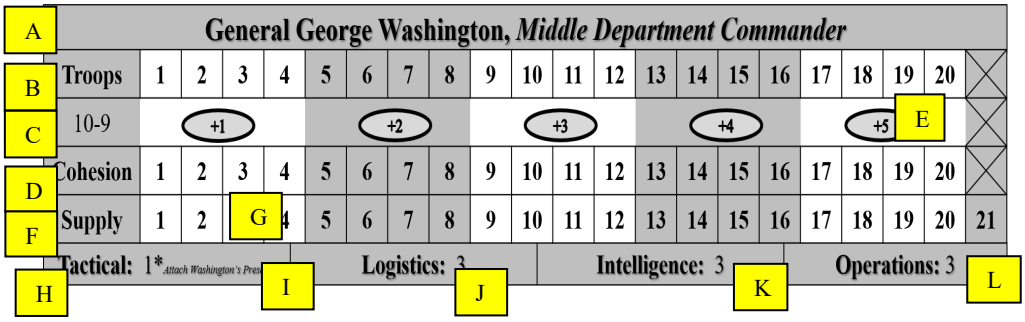
7.7.2. Supply capacity represents the maximum number of supply a unit can have at any time.

7.7.3. The supply capacity is expressed as a black cube that caps the number of supply cubes that a unit can have. Thus, a supply capacity of four will have the black cube on the five, showing that there are four empty spaces for supply.

7.8. **General Boards**

7.8.1. General board show what general commands the unit associated with his name, how many troops, brigades, supply, and supply capacity exists within the unit.

7.8.2. Below is an example of a Department Commander General Board.



7.8.3. A – This shows the name of the commander. This area will also highlight any special elements of the general's name, such as which Department he commands, or if he is Hessian.
7.8.4. A: This shows the name of the commander. This area will also highlight any special elements of the general's name, such as which Department he commands, or if he is Hessian.
7.8.5. B: Troops are placed here. The order does not matter for game purposes.
7.8.6. C: These numbers depict the combat capability of the unit. The left most number shows the number that must be rolled to inflict a Troop Loss during battle. The number on the right is the number that must be rolled to inflict a Cohesion Loss during battle.
7.8.7. D: Cohesion is placed here. Each cohesion is associated with the troop block above it. This denotes that that troop is combat capable.
7.8.8. E: This is a Brigade. To have a cohesive brigade two conditions must be met. There must be at least one troop in the Brigade and there must be at least one cohesion. If that is true, then the +X number is the number of dice that unit rolls in combat.
7.8.9. F: Supply and supply capacity is placed along this track.
7.8.10. G: Supply capacity is represented as a black cube on this track. Supply capacity is placed one space to the right of the number of capacity you have. If a supply capacity cube where placed where the letter G is, it would depict a capacity of 4, which allows for four supply cubes.
7.8.11. H: A general's tactical score is depicted here. The higher number denotes a general with a higher level of tactical ability.
7.8.12. I: Special abilities. Text here denotes that the general starts the game with an attached event card matching the name written. It give the general the ability written on the text.
7.8.13. J: This is the general's logistics score. A high score denotes a logistically sound and administratively capable general officer.
7.8.14. K: This is the general's intelligence score. This shows the general's aptitude with security and reconnaissance. It also denotes their ability to gain local contacts to add to the spy network and communicate effectively with informants.
7.8.15. L: Operations score denotes the ability of the general to arrange operations within his Department. The number is the number of orders that can be assigned to that Department during the Planning Phase. Operations score is only for the Department commander. Other generals have prestige.
7.8.16. M: Prestige denotes the ranking of the general with his fellow generals. A higher number does not denote tactical ability but rather the opinion of Congress or Parliament. A general with a higher prestige is assumed to be in command of generals with a lower prestige. This factors into who is the commander during battles when the Department Commander is not present.

Brigadier General Simon Fraser																					
Troops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
10-8		+1				+2				+3				+4				+5			
Cohesion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Supply	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tactical: 3					Logistics: 2				Intelligence: 2				Prestige: 1								

M

8. **Movement**:
   8.1. Movement occurs when units are given march orders during the execution phase. There are two kinds of movement, land and naval.
   8.2. If a unit enters an area that contains a unit that belongs to the enemy, the unit must stop movement. The player may initiate a battle once the movement order is complete. If battle is not initiated, then each unit in the area losses one cohesion. See Rule #9 for more on battles.
   8.3. **Land Movement**:
      8.3.1. Land movement is the method of moving units from area to area through connections. Different connections have different effects on movement.
      8.3.2. **Improved Connections**:
         8.3.2.1. Improved connections represent two areas that have an established and maintained route between the two that is generally free of obstructions and can be moved quickly along.
         8.3.2.2. Units can execute a rapid through two improved connections per turn with the march.
         8.3.2.3. Improved connections are denoted by a black line between areas.
         8.3.2.4. When calculating Lines of Communication (LOC) this counts as 1 connection.
      8.3.3. **Unimproved Connections**:
         8.3.3.1. Unimproved connections represent two areas that have an established and maintained route between the two but has obstructions or is through terrain that degrades the movement in some way.
         8.3.3.2. Units cannot execute a rapid march.
         8.3.3.3. Improved connections are denoted by a brown line between connections.
         8.3.3.4. When calculating Lines of Communication (LOC) this counts as 1.5 connections.
      8.3.4. **Restrictive Connections**:
         8.3.4.1. Restrictive connections represent areas that do not have an established or maintained route between the two, have significant obstructions, or the terrain such that it degrades movement.
         8.3.4.2. For each unit moving on that connection, roll a d10 and add the logistics score of the general to that roll. On a roll of 1-6, you lose one supply capacity. On a roll of 7-10 nothing occurs.
         8.3.4.3. When calculating Lines of Communication this counts as 2.

8.3.6. **River Connections**:

8.3.6.1. River connections denote the major riverways through which large ships can pass.

8.3.6.2. When calculating Lines of Communication, these count as .5 connections.

8.4. **Naval Movement**:

8.4.1. Naval Units move between ocean areas. Only British Players may give orders to Naval Units. Only Sail Orders may be given to Naval Units.

8.4.2. When Naval Units enter an ocean area, add a Naval Rumor to the area.

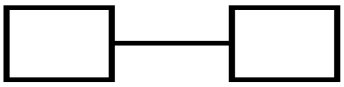
8.4.3. When the Sail order is given all Naval Units and Naval Rumors move 2 connections away from their current area.

8.4.4. **Embarking**:

8.4.4.1. To embark units into Naval Units, units must be given a march order to enter the ships. Units on ships are held in the Naval Holding area that corresponds with their Naval Unit Number.

8.4.4.2. Units may embark without a march order if they are in an area that is within an ocean area. These represent deep water ports that are capable of accepting large fleets.

8.4.5. Units in the Sea Holding Area still pay upkeep during the Reset Phase.

Improved Connection 	- Able to move through 2 improved connections - When calculating lines of communication, counts as 1.
Unimproved Connection	- May only move through on connection per turn. - Counts as 1.5 when calculating lines of communication.
Restricted Connection	- May only move through on connection per turn. - For each unit moving on that connection, roll a d10 and add the logistics score of the general to that roll. On a roll of 1-6, you lose one supply capacity. On a roll of 7-10 nothing occurs. - Counts as 2 when calculating lines of communication
River Connection	- Counts a .5 when calculating lines of communications
Ocean Connection	- Only Naval units may move along ocean connections. - Land units may only disembark at ports or at landings.

9. **Battle**:
   9.1. Battles is the term used in 1777 for any action that involved units. The size of the battle is not important.
   9.2. Players can initiate battle at the end of an orders round during the Execution Phase. If multiple battles could occur the initiating player may decide which battle to execute first. A player may initiate battle in any area that contains one of more of their units and one or more of the enemy's units. T
   9.3. The player who initiated the battle becomes the attacking player and the other player becomes the defending player.
   9.4. **Battle Set Up**:
      9.4.1. If the Department Commander is not present, each player determines the Commanding General for the battle by identifying the general with the highest Prestige on their side.
      9.4.2. The defending player draws terrain cards equal to the terrain number or the tactical score of the Commanding General, whichever is higher. The player selects one and returns the rest to the terrain deck. Then shuffle the deck.
      9.4.3. The attacking player draws tactics cards equal to the CG's tactical ability. The player selects one and returns the rest to the tactics deck. Then shuffle the deck.
      9.4.4. **Determine Tactic**:
         9.4.4.1. Once the attacking player has selected a tactical card, they roll a d10 and add the Commanding General's Tactical Score as a modifier. If the number meets or exceeds the Tactical Difficulty of the score then the cards effect occurs as written. If the card fails, your general attacks the enemy head on with no effect.
      9.4.5. Each player then reveals their cards.
      9.4.6. Roll for Militia turnout
         9.4.6.1. The Continental Player rolls a d10 and adds the current Militia Readiness modifier to the score. The player then takes action based on the result of the roll.
      9.4.7. The defending player then has the ability to withdraw. If the defender withdraws, the battle ends and there is no winner or loser. All defending units must leave the area that the combat took place in. Units can only to go areas that do not have an enemy unit in it or are not cities controlled by the enemy.
      9.4.8. If the defending player does not withdraw then the battle begins.
   9.5. **Battles**:
      9.5.1. Battles take place in the following steps.
      9.5.2. **General Officer Disposition**:
         9.5.2.1. For every general officer, the player decides to have the general on the battleline or in the rear. Generals on the battleline are marked with a red marker on their block.

9.5.3. **Roll for Combat**:

9.5.3.1. Players determine the number of cohesive brigades they have and roll a number of die equal to that number.

9.5.3.2. Each general officer may be activated to add +1 to a roll. If a roll is modified in this way, it may count for a cohesion loss but may not count toward a troop loss. The general is turned sideways to show he is activated.

9.5.3.3. Players resolve the rolls based on the combat capability of the unit. Generally, the Continentals score a cohesion hit on a 9 while the British score on an 8. Both sides score a troop loss on a 10.

9.5.3.4. On a roll of 1, a general officer is targeted. See General Officer Targeted.

9.5.4. **Assign Results**:

9.5.4.1. Troop Loss is defined as losing one troop and one cohesion in the unit.

9.5.4.2. Cohesion loss is defined as losing one cohesion in the unit.

9.5.4.3. Players calculate the number of cohesion and troop losses that have been inflicted on their side during that roll. Players may then assign those hits to their units.

9.5.4.4. Players must assign hits evenly among their units. This means that all units must be assigned a troop loss before one unit can be assigned a second one.

9.5.4.5. Cohesion and Troop losses are placed on the map until the battle is over.

9.5.4.6. Once all hits have been assigned to units, proceed to the next step.

9.5.5. **Retreat**:

9.5.5.1. Either player may declare a retreat during this step. The defending player may announce retreat first, then the attacking player. If a player declare a retreat, they are now the retreating player. The other play is now the pursuing player. The pursuing player may initiate a rearguard turn or allow the retreating player to retreat instantly.

9.5.5.2. If the pursing player decides to initiate a rearguard turn, go to Rearguard turn. Otherwise continue to End of Battle.

9.5.6. **Rally**:

9.5.6.1. General Officers on the battleline who have not been activated may roll a die to rally their troops. This roll is modified by that general's tactical score.

9.5.6.2. On a roll of 1-6, there is no effect.

9.5.6.3. On a roll of 7-9, your general's presence rallies some retreating troops, and one cohesion is regained. Cohesion is pulled from the map first.

9.5.6.4. On a roll of 10, your general's presence is inspirational, and you regain 2 cohesion, pulled first from the map.

9.5.6.5. Regardless of modifiers, a roll of zero always results in no effect.

9.5.6.6. Once rallies are complete, procced to reset.

9.5.7. **Reset**:

9.5.7.1. If the either side no longer has any unit with cohesion the player is the loser. Proceed to End of Battle.

9.5.7.2. Advance the battle turn marker by 1. If the number of turns on the marker exceed the number of turns on the tactics cards, the battle ends, proceed to End of Battle.

9.5.7.3. Deactivate all General Officers.

9.5.7.4. Return to Roll for Combat and repeat.

9.5.8. **End of Battle**:

9.5.8.1. Battles have three outcomes: Decisive, Major, Minor.

9.5.8.2. Decisive battles occur when one side has no unit with cohesion remaining. The side with no cohesion is the loser and the side with cohesion is the victor.

9.5.8.2.1. Decisive victories require the loser to move back one area from the area the battle took place in.

9.5.8.3. Major Victories occur when one side retreats from the battlefield, ceding the field to the other side. The retreating player is the loser and the other player is the victor.

9.5.8.3.1. Major victories require the loser to move back one area from the area the battle took place in.

9.5.8.4. Minor victories occur when the day ends before one of the other conditions are meet.

9.5.8.4.1. To determine the winner and loser, count the total number of troops and cohesion lost by both sides.

9.5.8.4.2. When calculating the battle score, troop losses count for 2 points and cohesion losses count for one. The player with the most points is the loser.

9.5.8.4.3. Minor Victories do not require the loser to withdraw from the area. The loser may withdraw if they decide to.

9.5.8.5. Once a victor has been determined, immediately assigned victory point to both players based on the outcome and their Campaign Authority Cards.

9.5.9. **Rearguard Turn**:

9.5.9.1. Before the retreating player can retreat, one more round of combat must occur that is called the Rearguard Turn.

9.5.9.2. During rearguard turns, the number of die that that retreating force can roll is reduced by half, rounded up.

9.5.9.3. During rearguard turns, for each cohesive light troop on the retreating force, the number of die the pursuing force rolls is reduced by 1.

9.5.9.4. During rearguard turns, for every 2 light troops on the pursuing side, roll an additional die.

9.5.9.5. For each remaining fortification on the retreating side, the number of die rolled by the pursuer is reduced by 1.

9.5.9.6. During rearguard turns, cohesion losses are doubled.

9.5.10. **General Officer Targeted**:

9.5.10.1. When your opponent rolls a one in combat, his fire has targeted one of your general officers on the battleline. He selects a general on the battleline at random and rerolls the die.

9.5.10.2. On a score of 7-9, the general is wounded about will return to play in five turns. The unit suffers 3 cohesion losses immediately. See wounded general.

9.5.10.3. On a score of 10, the general is killed. The unit suffers 5 cohesion loss immediately. See killed general.

10. Upkeep and Lines of Communication:

10.1. During the reset phase, each player must pay upkeep on their units with supply.

10.2. Upkeep is 1 supply for every 2 Brigades, rounded up.

10.3. If a unit is in an area that has not been foraged and has not been used for a supply bonus this turn, that unit receives a supply bonus.

10.4. **Supply Bonus**:

10.4.1. Supply bonus is half of the supply attribute in the area, rounded up.

10.4.2. The unit may spend this supply as if it were supply within the unit. Unspent bonus supply is lost at the end of the Rest Phase.

10.5. **Lines of Communication**:

10.5.1. Lines of communication represent the supply and logistics network that existed in both armies during the 1777 campaign.

10.5.2. Lines of Communication allow the Department Commander to access a greater number of supply bonus and access their commissary depot.

10.5.3. If a unit is within the LOC of their Department Commander and the Department Commander is within the LOCs of the Commissary Depot, the unit may use the Commissary Depot's Supply Bonus in addition to any bonus already received.

10.5.4. With units are within the LOC of the Department Commander, the DC may move supply and supply capacity from one unit to another equal to the Department Commander's logistics score.

10.5.5. The Department Commander's LOC extends a number of spaces away from him that are uninterrupted by enemy units. Different connections shorten or lengthen this line as described below.

10.5.5.1. Improved Connections count as 1 connection.

10.5.5.2. Unimproved Connections count as 1.5 connections, rounded down.

10.5.5.3. Restricted Connections count as 2 connections.

10.5.5.4. River Connections count as .5 connections, rounded down.

10.6. **Commissary Depot**:

10.6.1. Commissary Depots are the logistics hubs of 18th century warfare. They are the place where the Commissary Departments bring all nature of supplies for distribution to soldiers.

10.6.2. Commissary Deports increases the supply attribute of the area they are in by 2.

10.6.3. There are restrictions to where Commissary Depots can be set up.

10.6.3.1. The British player may only place the Commissary Depots on Cities and Landings.

10.6.3.2. The Continental Player may only place the Commissary Depots on Cities and Towns.

10.7. **Out of Supply**:

10.7.1. If a unit is unable to pay for their any part of its upkeep, the unit is forced to surrender and is destroyed. Immediately assigned victory point to both players based on the outcome and their Campaign Authority Cards.

10.7.2. If a unit is able to pay for part of its upkeep, but not all, the unit still surrenders.

11. Killed or Wounded Officers:

11.1. General Officers are not safe from the hazards of combat. Below are the rules for injured or killed officers.

11.2. **Wounded**:

11.2.1. Wounded officers are convalescing and are unable to command their units.

11.2.2. It is assumed that a subordinate will command the unit until the general returns. However, as he is not as capable as the previous leader all scores are reduced by 2.

11.2.3. Scores reduced in this way cannot be negative.

11.2.4. Regardless of the Prestige of the former general, the Prestige for the interim commander is 0.

11.2.5. Once the general is wounded, he will return to action at the beginning of the fifth turn from the turn he was injured. It may be helpful to place a marker on the victory track to remind you.

11.3. **Killed**:

11.3.1. Generals who are killed are unable to continue commanding their units.

11.3.2. It is assumed that a subordinate will take command of the unit. However, as he is not as capable as the previous leader all scores are reduced by 2.

11.3.3. Scores reduced in this way cannot be negative.

11.3.4. Regardless of the Prestige of the former general, the Prestige for the interim commander is 0.

12. Control:

12.1. Players can exert control over two types of areas in which they do not currently have units: Rivers and Cities.

12.2. Control of an area is depicted by placed a blue or red cube for the Continental Player or British player, respectively.

12.3. If a player was the last player to be in one of these areas

13. Canada:

13.1. The large box at the top of the map denotes which areas are considered to be in the province of Canada.

13.2. Canadian cities do not count toward victory points for cities; they do count specifically toward Victory Points concerning Montreal and Quebec.

13.3. British Northern Department Troops do not pay upkeep while all unit remain in Canada during the Spring Season. If a single unit departs, all units must now pay upkeep.

13.3.1. If a Continental Unit enters Canada during the Spring Season, this effect is removed.

APPENDIX C

GAME COMPONENTS

Crush the Rebels

Each City : *+1 BVP*

Control of Hudson: *+1 BVP*

Control of Delaware : *+1BVP*

Control of Philadelphia: *+1 BVP*

Loss of Quebec or Montreal: *-5 BVP*

Decisive Battle Victory : *+4 BVP*
Major Victory: *+3 BVP*
Minor Victory: *+2 BVP*

Any Battle Lost - *2 BVP*

Continental Troop Loss: *+1 BVP*

Continental Division Destroyed/Surrender: *+5BVP*

Continental General Killed: +2 BVP
If Washington is a casualty: +5 BVP

Control the Population

Each City: *+3 BVP*

Control of Hudson: *+1 BVP*

Control of Delaware : *+1BVP*

Control of Philadelphia: *+1 BVP*

Loss of Quebec or Montreal: *-5 BVP*

Decisive Battle Victory: *+3BVP*
Major Battle Victory: *+2BVP*
Battle Lost:- *2 BVP*
Continental Troop Loss: *+.5 BVP*

Continental Division Destroyed/Surrender: *+2VP*

Each turn the Continental Intelligence Network is below 2: *+1 BVP*
If Below 0: *+1 BVP*
If British Intelligence Network below 0: *+2*

The Rebel Capital

Each City other than Philadelphia: *+1 BVP*

Philadelphia: *+5 BVP*
Per turn: *+1 BVP*

Control of Hudson: *+1 BVP*

Control of Delaware: *+1 BVP*

Loss of Quebec or Montreal: *-5 BVP*

Battle Victory : *+1 BVP*
Battle Lost:- *2 BVP*
Continental Troop Loss: *0*

Continental Division Destroyed/Surrender: *+2BVP*

Each turn the Continental Intelligence Network is below 2: *+1 BVP*
If Below 0: *+1 BVP*
If British Intelligence Network below 0: *+2 BVP*

Divide the Colonies

Control of a City : *+1 BVP*
Control Albany: *+2 BVP*
Control Philadelphia: *+3 BVP*

Control of Hudson: *+2 BVP*
Per Turn: *+1*

Control of Delaware : *+2BVP*
Per Turn: *+1*

Loss of Quebec or Montreal: *-5 BVP*

Decisive Battle Victory : *+3 BVP*
Major Battle Victory : *+2 BVP*
Minor Battle Victory : *+1 BVP*
Battle Lost *- 2 BVP*

Continental Troop Loss: *0 BVP*

Continental Division Destroyed/Surrender: *+1BVP*

Schrecklichkeit

Each City Pillaged: *+3 BVP*
If Philadelphia: *+2 BVP*

Each area pillaged:
+.5 per 1 supply in area.

Any Battle Victory : *+2 BVP*

Any Battle Lost: *- 2 BVP*

New Tactical Order:
Pillage –
-Add supply equal to 3x times the supply of the area.
-Add the pillage marker to area. Areas that have been pillaged cannot be foraged or provide supply to forces there. Ports that have been pillaged cannot have naval forces within them or serve as a base of supply.
- The Continental player increases militia readiness by 1.

Fabian Strategy

Each City : +1 *BVP*

Control of Hudson: *+1 CVP*

Control of Delaware : +1 *CVP*

Control of Quebec or Montreal: *+3 CVP*

Per turn
No battle occurred between players: *+1 CVP*

British Player Unable to Gain VPs from Battle victories

British Player Victory points doubled for loss of Continental Division

Battle Victory : +2 *CVP*

British Division Destroyed/Surrender: *+2CVP*
British Troops Lost: *+1 CVP*

Keep the ports open

Each City: *+2 CVP*

Per turn
If 3 ports are controlled: *+1 CVP*
If 5 ports are controlled: *+2 CVP*

Loss of a City: *-2 CVP*
Control of Hudson: *+2 CVP*
Control of Delaware : +2 *CVP*
Control of Quebec or Montreal: *+ 3 CVP*

Decisive Battle Victory : +2 *CVP*
Other Battle Victory: *+1CVP*
If the Battle was won within one connection of a city: *+2 CVP*

Battle Lost:- *2 CVP*

British Division Destroyed/Surrender: *+2 CVP*

Second Canadian Expedition

Each City: *+1 CVP*

Control of Quebec: *+5 CVP*

Control of Montreal: *+5 CVP*

Control of both Quebec and Montreal : +10 *CVP*

Battle Victory : +2 *CVP*

Battle Lost: *-2 CVP*

British Division Destroyed/Surrender: *+3 CVP*

Army in Being

Each City : +2 *BVP*

Control of Hudson: *+1 CVP*

Control of Delaware : *+1 CVP*

Control of Quebec or Montreal: *+3 CVP*

Count the total number of troops in a department per turn:
If over 20: *+1 CVP*
If over 28: *+2 CVP*

British Player Unable to Gain VPs from Battle victories

British Player Victory points doubled for loss of Continental Division or troops loss

Battle Victory : *+ 2 CVP*

British Division Destroyed/Surrender: *+2CVP*

Defeat the British

Each City other than Philadelphia: *+1 CVP*

Philadelphia: +2 *BVP*

Control of Hudson: *+1 CVP*

Control of Delaware: *+1 CVP*

Control of Quebec or Montreal:*+5 CVP*

Decisive Battle Victory : *+5 CVP*
Major Battle Victory : *+3CVP*
Minor Battle Victory : *+2CVP*

Battle Lost:*-2 CVP*

British Troop Lost:*-.5 CVP*

British Division Destroyed/Surrender:*+3 CVP*

Winter Respite

Increase cohesion in all generals by 3 *(Allowed to exceed total number of troops)*

You may adjust the intelligence network score a total of five times, divided as you choose between the players.

Improved Supply

1) Increase supply capacity in the Middle Department by five wagons. Increase may be spread across multiple divisions.

2) Increase supply capacity in the Upper Department by three wagons. Increase may be spread across multiple divisions.

3) Gain five supply in the Middle Department divided as you choose across divisions.

4) Gain three supply in the Upper Department divided as you choose across divisions.

Send Clinton to England

1) Remove Clinton from play. Redistribute troops, supply, and supply capacity to other generals.
2) At the end of the Winter Phase, draw two winter authority cards and select one for play.
3) Draw two authority cards and place them facedown with Clinton.
4) On turn 8, return to Clinton to play.
   - Add the two attached authority cards to your hand.
   - Clinton arrives in New York. Reorganize forces in New York if desired.

Request more Troops

Action – *Select one*

1) The British Player may discard this card to increase the CVR by 5 points

2) Select an option from below

Minimal Request	**Medium Request**	**Large Request**
- Add four British Troops to any department - +1 BVP	- Add four British Troops to any department - Add six Hessian Troops to any department - Add MG Charles Grey - -2 CVR	- Add six British Troops to any department - Add eight Hessian Troops to any department - Add MG Charles Grey - -3 CVR

Rumors of a Great Army

Increase the Continental Intelligence Network by 2 points

Decrease the British Intelligence Network by 2 points

Attach this card to George Washington,
As an intelligence order, create two rumors anywhere in the Middle Department

Support from Governors

1) In both the Middle Department and Upper Department
   - Add six Continental Troops with Cohesion
   - Increase supply capacity by two
   - Increase supply by four

2) Increase militia readiness 3 steps.

Smallpox Outbreak

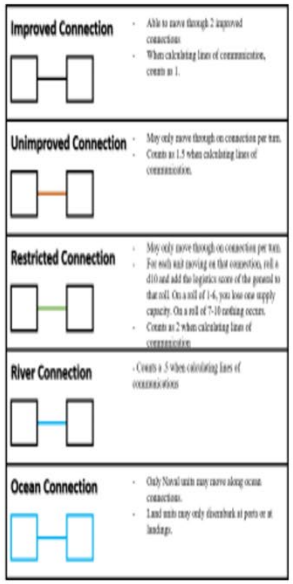
Prior to the roll, the Continental Player decides how many *CVPs* you wish to bet. Lose that many *CVPs* and apply that number to the result of the roll.
Roll a d10. Apply the result.

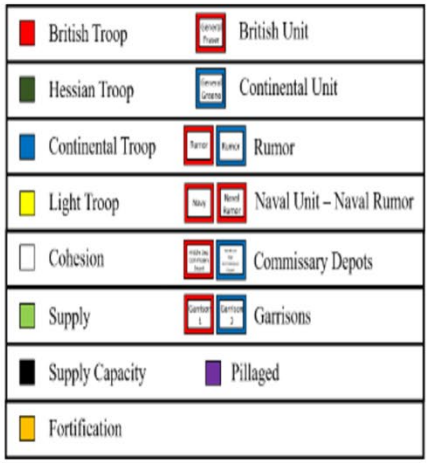
1-3: Severe outbreak	4-6: Mild Outbreak	7-10: Minimal Outbreak	Natural 10
A natural 1 always triggers this result Lose four troops in Middle Department *-2 CVP* *-2 BVR*	Lose 2 troops in Middle Department	Lose 1 troop in Middle Department +2 CVP	*Apply this result only if a at least one CVP was bet* - Gain 1 troop in Middle Department - Refund all CVPs bet. - +3 CVP

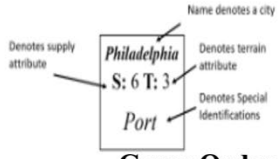
Supplies from France

1) Increase supply capacity by 5, divided as you choose between theaters, and generals.

2) Increase supply by 5 divided as you choose between departments and generals.







Game Order

Set-Up / Winter Phase

Event Phase
Draw and Resolve Decision and Weather

Planning Phase
Build orders decks for your Departments

Execution Phase
Execute Orders from your orders decks

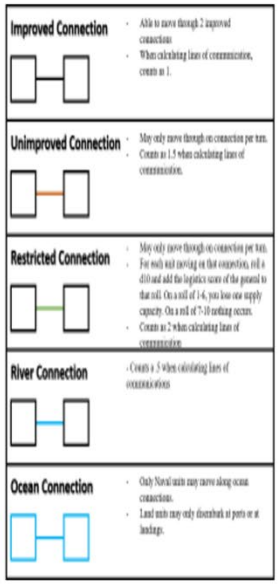
Assess Phase
Check to see if anyone has won the game

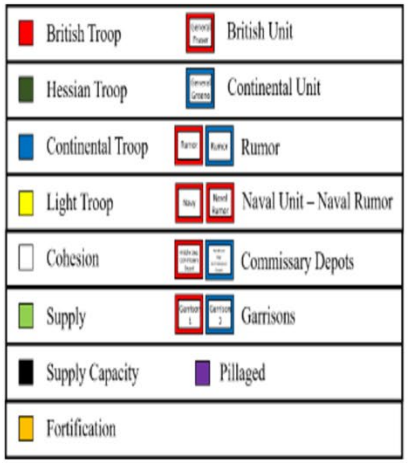
Reset Phase
Pay Upkeep and Update Trackers

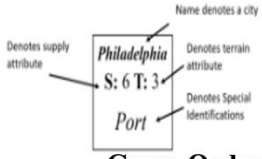
Battle Order

Battle Set Up
Determine Commanding General
Attacker– Draw Tactic Cards – Roll
Defender – Draw Terrain Cards
Call for Militia

Battle
General Officer Disposition
Roll for Combat
Assign Results
Retreat
Rally
Reset







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General Officer Disposition
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Assign Results
Retreat
Rally
Reset

Decisive Victory– Defeated player has no unit with cohesion

Major Victory – Defeated Player retreats

Minor – Defeated Player took more troop or cohesion loss. Defender wins ties.

Orders

Maneuver Orders

March From (*Area*)
Select an area. Move units from one area into any adjacent area. Units do not have to arrive at the same area.
Units may move two connections if both connections are improved.

March To (*Area*)
Select an area. Move units to that area from adjacent areas. Units may move two connections if both connections are improved.

Dig in (*Unit*)
Add one field fortification to this area. If attacked this unit fights with 1 dice.

Sail (*Area – British Only*)
Move all Naval units two spaces. Can only move on ocean or river areas.

Sustainment Orders

Rest (*Unit*)
Roll a d10. On a 1-5, add two cohesion. On 6-7, add three cohesion. On 8-10, add five cohesion. Apply the generals, logistics score to the result. If the unit is attacked while foraging it losses half of its cohesion.

Reorganize (*Area*)
Conduct a reorganization within an area.

Forage (*Unit*)
Roll a d10. On a 1-5, add half the areas supply to your supply. On 6-10, add all of the areas supply to your supply. Apply the general's logistics score to the result. If the unit is attacked while foraging it losses half of its cohesion.

Council of War (*Area*)
Draw one event card and add it to your hand. You cannot use it as an event.
To play this order, the senior commander must be in the area, and have at least one other general there.

Relocate the Commissary (Unit)
Move the Department Commissary from its current location to the current location of that Department's Commander. Play only if the Department Commander's location is an appropriate location for that player. LOC based supply bonus cannot be utilized in that department this turn,

Intelligence Orders

Build Intelligence Network (Unit)
Add 1 point plus the general's Intelligence score to your intelligence network score.

Conduct Counter-Recon (Unit)
Subtract 1 point from your opponent's intelligence network per intelligence point of the general commanding the unit.

Conduct Recon (Unit)
Select the area. Spend 1 intelligence network point for every one space between you and your target area. Reveal the generals in the area, destroying all rumors. The targeted player must reveal the commander of the unit and the total number of brigades in the unit. Destroy any revealed rumors.

Orders

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Sudden Chill

For each unit that moves this turn
Roll 1d10
On a roll of 1-6 that unit losses 2 cohesion.

7-10, No effect

Lovely Spring

No effect

Warm Breeze

For each area that contains units , roll a d10.

On a roll of 8-10, increase cohesion by 2. Otherwise increase cohesion by 1.

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Excess Winter Stores

All supplies gained this turn from forage, or from area capacity are doubled.

Lovely Spring

No effect

Muddy Roads

For each space a unit moves, reduce its supply capacity by 2. Supply cannot be moved between units before reconciliation.

Forage and senior command logistics is reduced by 1 area.

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Lovely Spring

No effect

Winter Mold Discovered

The general with the lowest logistical score in the department losses 5 supply.

All other generals lose, 1 supply.

Spring Training

For every two supply spent this turn for upkeep, spend one more.

For every three supply spent this turn on upkeep, increase cohesion by one.

Springtime Obligations

-1 to the operations score of all department commanders
-2 if they are currently in a city

Increase cohesion by 1 in every unit. Cohesion can exceed unit maximum.

Stormy Seas

Sea movement is restricted to one space.

British supply from cities is reduced by half.

Torrential Downpour

All movement is restricted to one space.

Each space moved reduces supply capacity by 3 per general.

Foliage Overgrowth

The cost of all recon is increased by 1.

The effect of counter-recon is decreased by 1.

Strong Winds

Sail orders move 3 connections.

Rain into Mud

All movement is treated as moving through Restrictive Connections.

Losses to supply capacity as a result of Restrictive Connections is doubled.

Summer Storm

Sail order cannot be played this turn.

Cool Summer

No effect

Summer Crops

All supplies gained this turn from forage, or from area capacity are doubled.

Weak Winds

Sail orders move 1 connections.

Sticky Heat

Each unit losses cohesion immediately.

Each unit losses one cohesion per connection is moves through this turn.

Dense Foliage

During battle, reduce the number of terrain cards drawn by the defender.

This minimum number drawn remains 1.

Cool Summer

No effect

Blown Off course

The Continental player may move all Naval Units in ocean tiles one connection in any direction.

Sail orders may not be played this turn.

Swarms of Bugs

Cohesion gained from rest orders is reduced by half, rounded down

Cool Summer

No effect

Cool Summer Days

Each unit gains 1 cohesion.

Summer Duty

Increase Militia Readiness by 1 step.

Increase British Intelligence Network score by 1 point.

Sudden Rain

Each unit discards 1 supply.

Each unit gains one cohesion

Fine Sailing Weather

Sail orders move 3 connections.

Heavy Rains

All movement is treated as moving through Restrictive Connections.

Hurricane Gales

Sail order cannot be played this turn.

Warm Autumn

No effect

Poor Harvest

All supplies gained this turn from forage, or from area capacity are halved.

Dense Morning Fog

When conducting a march order, roll a d10. On a 1-5, the unit losses 1 cohesion.

Warm Autumn

No effect

Longer Nights

The number of turns available for battle is reduced by 1.

Flooded Rivers

River Connections count as Improved Connections when calculating LOCs this turn.

Bountiful Harvest

Each unit gains 2 supply once this card is revealed.

Farmers support the harvest

Decrease the militia readiness 2 steps.

Warm Autumn

No effect

Muddy Hillsides

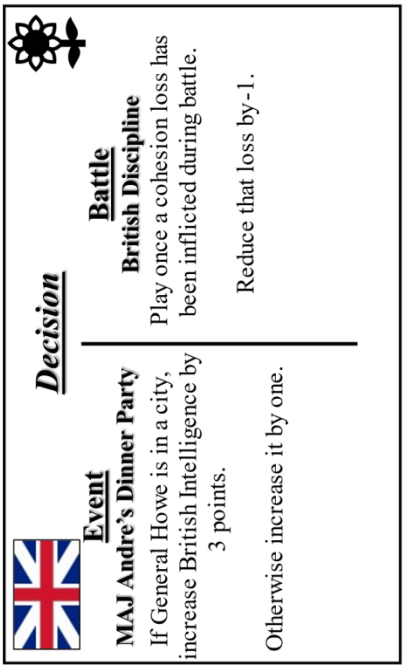
At the beginning of a battle, the attacker rolls a d10 for each of his units participating in the battle. On a result of 1-5, that unit losses 1 cohesion.

Low Foliage

Recon orders produce 1 more intelligence.

Farmers support the harvest

Decrease the militia readiness 2 steps.



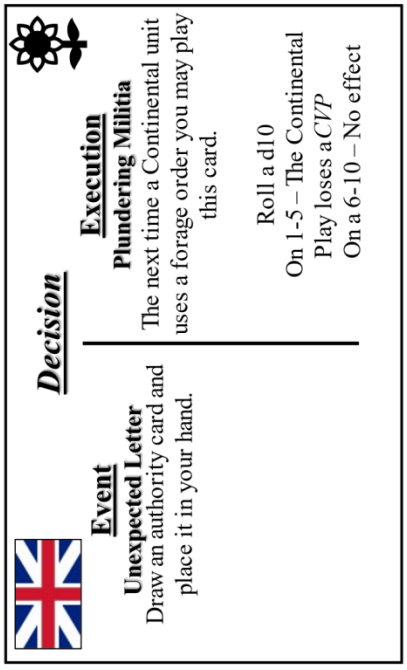
Decision

Event
MAJ Andre's Dinner Party
If General Howe is in a city, increase British Intelligence by 3 points.

Otherwise increase it by one.

Battle
British Discipline
Play once a cohesion loss has been inflicted during battle.

Reduce that loss by-1.

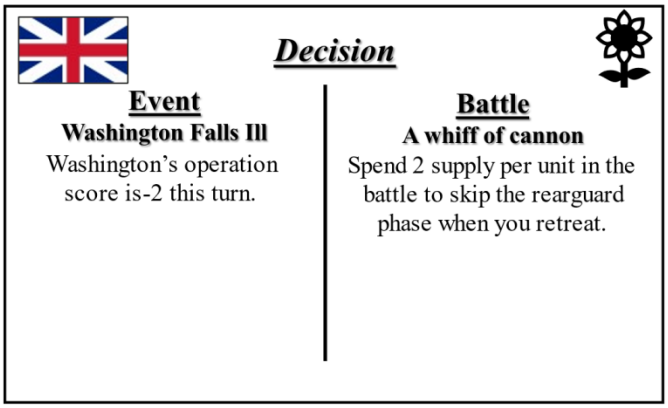


Decision

Event
Unexpected Letter
Draw an authority card and place it in your hand.

Execution
Plundering Militia
The next time a Continental unit uses a forage order you may play this card.

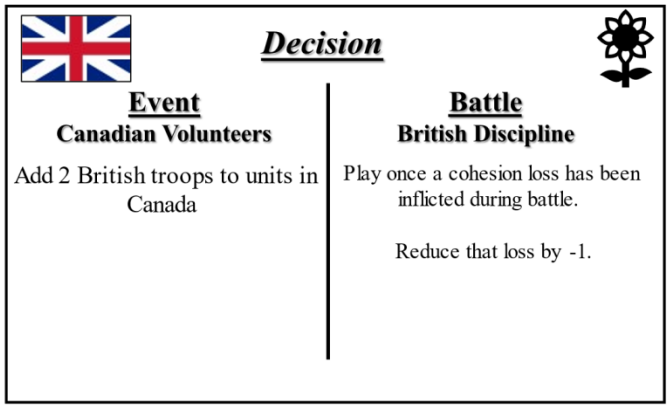
Roll a d10
On 1-5 – The Continental Play loses a *CVP*
On a 6-10 – No effect



Decision

Event
Washington Falls Ill
Washington's operation score is-2 this turn.

Battle
A whiff of cannon
Spend 2 supply per unit in the battle to skip the rearguard phase when you retreat.

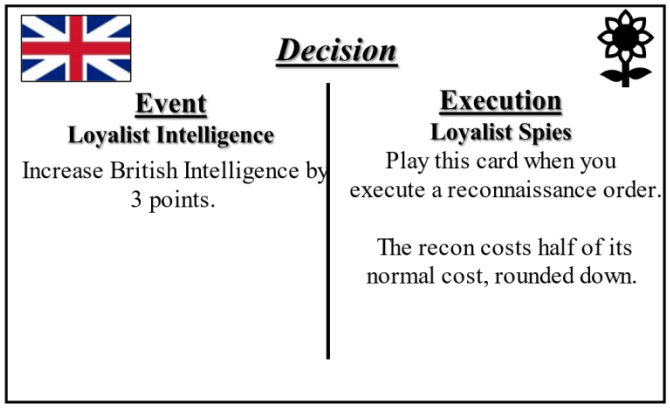


Decision

Event
Canadian Volunteers
Add 2 British troops to units in Canada

Battle
British Discipline
Play once a cohesion loss has been inflicted during battle.

Reduce that loss by -1.

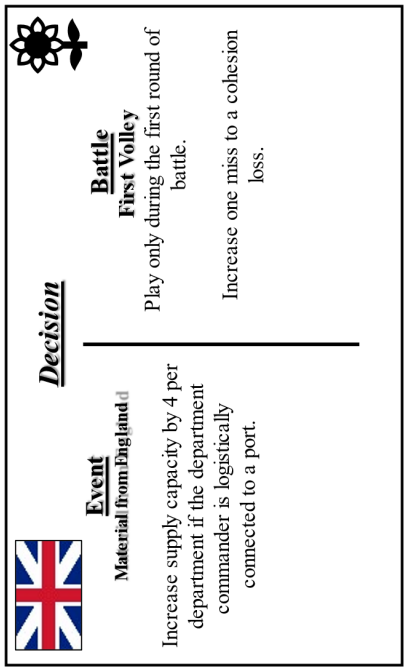


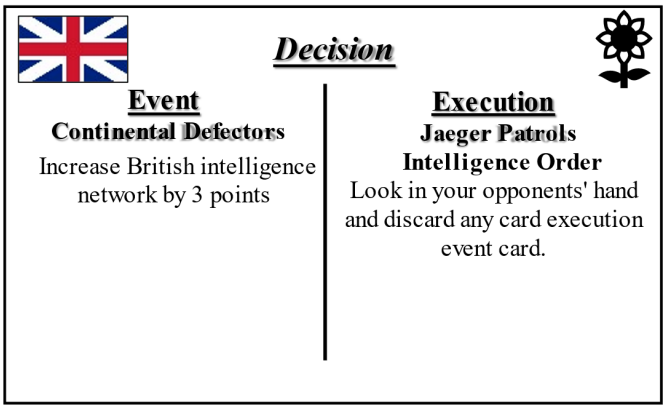
Decision

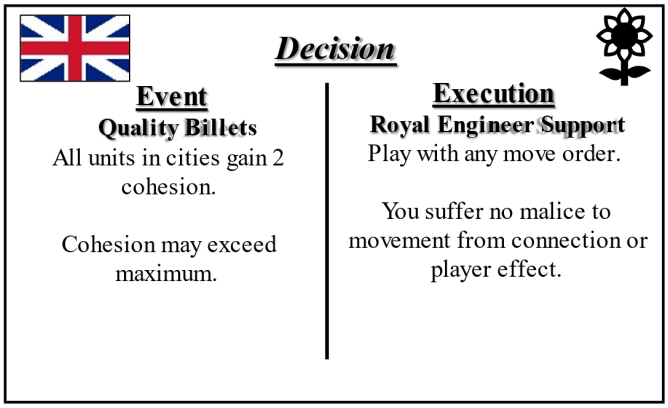
Event
Loyalist Intelligence
Increase British Intelligence by 3 points.

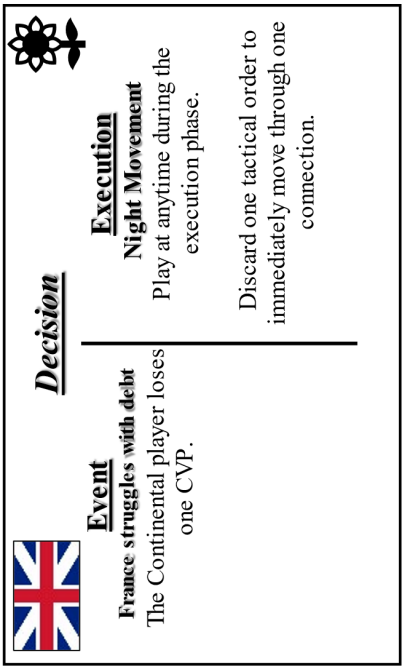
Execution
Loyalist Spies
Play this card when you execute a reconnaissance order.

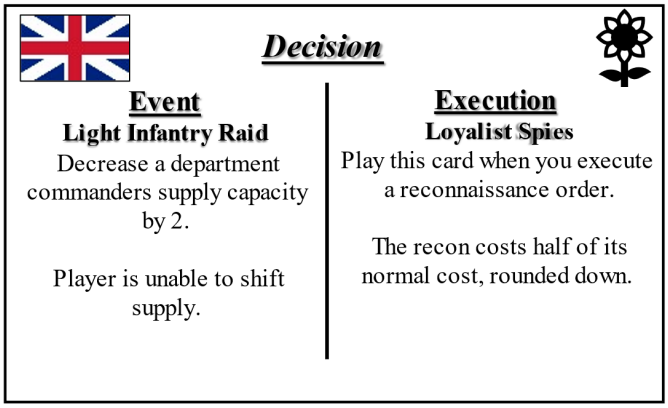
The recon costs half of its normal cost, rounded down.

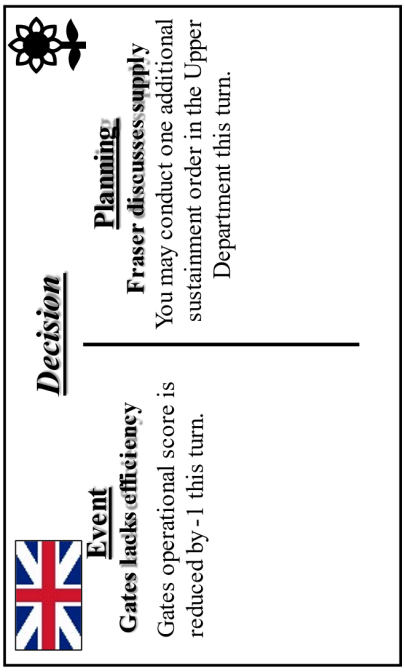

Decision
Event
Material from England
Increase supply capacity by 4 per department if the department commander is logistically connected to a port.
Battle
First Volley
Play only during the first round of battle.
Increase one miss to a cohesion loss.

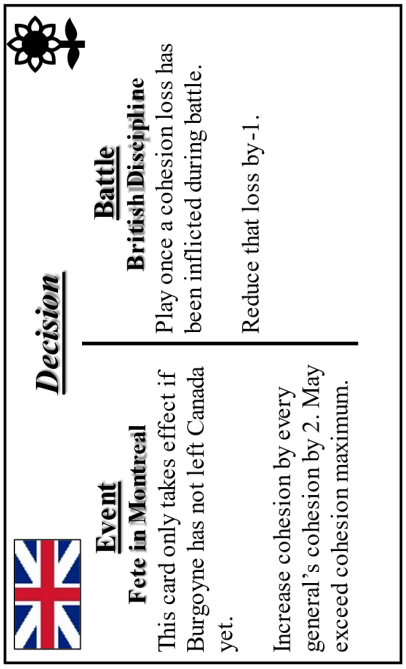

Decision
Event
Continental Defectors
Increase British intelligence network by 3 points
Execution
Jaeger Patrols
Intelligence Order
Look in your opponents' hand and discard any card execution event card.

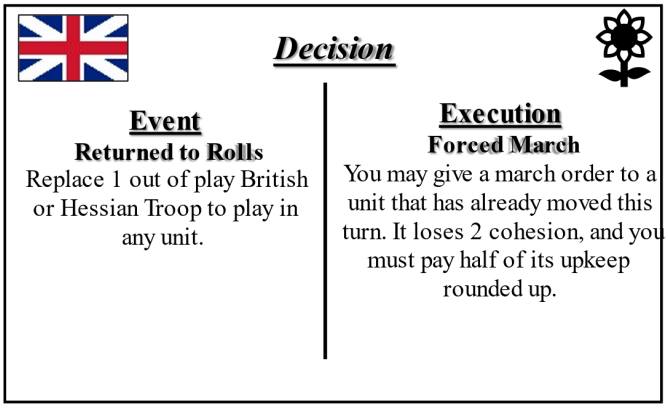

Decision
Event
Quality Billets
All units in cities gain 2 cohesion.
Cohesion may exceed maximum.
Execution
Royal Engineer Support
Play with any move order.
You suffer no malice to movement from connection or player effect.

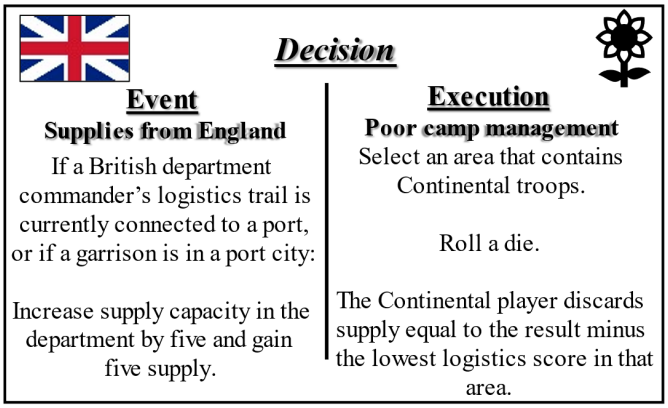

Decision
Event
France struggles with debt
The Continental player loses one CVP.
Execution
Night Movement
Play at anytime during the execution phase.
Discard one tactical order to immediately move through one connection.

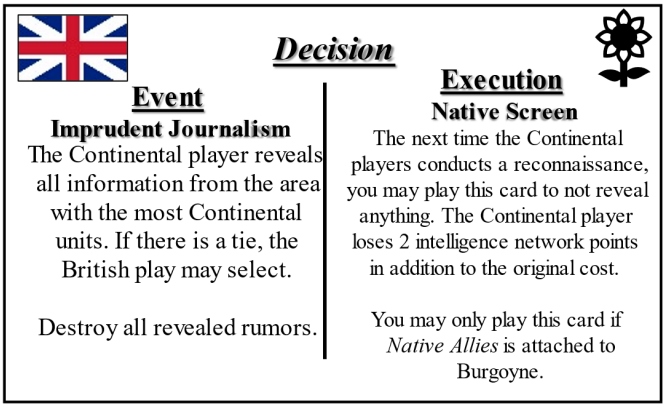

Decision
Event
Light Infantry Raid
Decrease a department commanders supply capacity by 2.
Player is unable to shift supply.
Execution
Loyalist Spies
Play this card when you execute a reconnaissance order.
The recon costs half of its normal cost, rounded down.

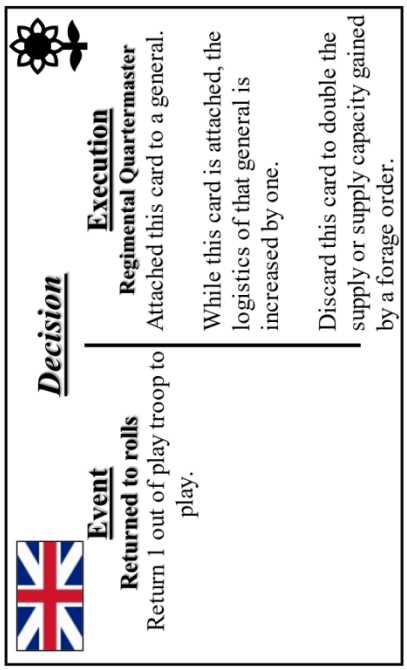

Decision
Planning
Fraser discusses supply
You may conduct one additional sustainment order in the Upper Department this turn.
Event
Gates lacks efficiency
Gates operational score is reduced by -1 this turn.

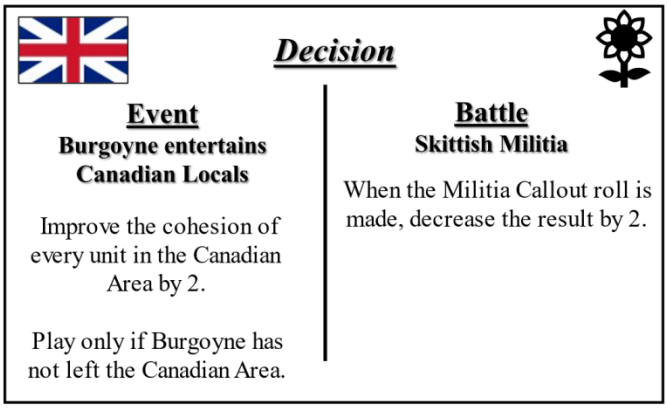

Decision
Battle
British Discipline
Play once a cohesion loss has been inflicted during battle.
Reduce that loss by -1.
Event
Fete in Montreal
This card only takes effect if Burgoyne has not left Canada yet.
Increase cohesion by every general's cohesion by 2. May exceed cohesion maximum.

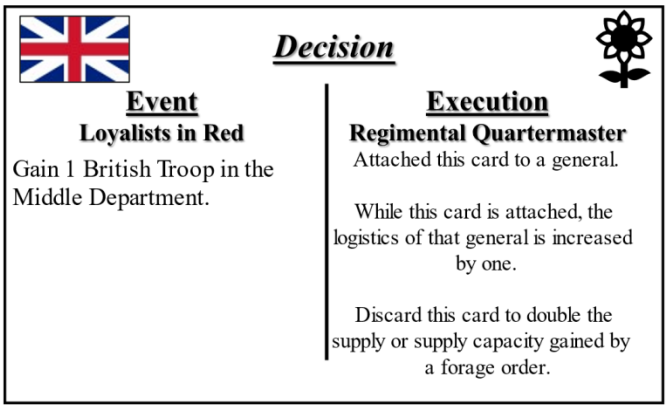

Decision
Event
Returned to Rolls
Replace 1 out of play British or Hessian Troop to play in any unit.
Execution
Forced March
You may give a march order to a unit that has already moved this turn. It loses 2 cohesion, and you must pay half of its upkeep rounded up.

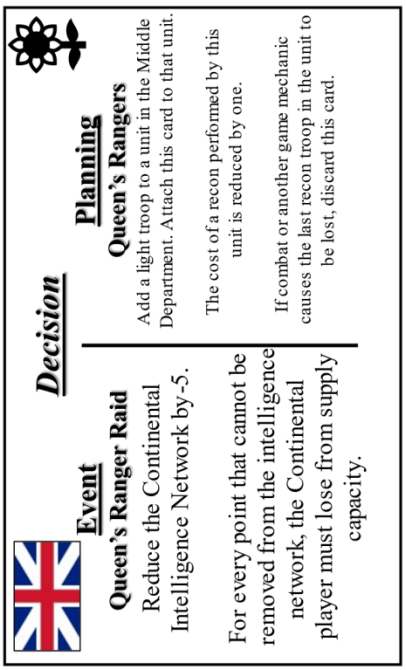

Decision
Event
Supplies from England
If a British department commander's logistics trail is currently connected to a port, or if a garrison is in a port city:
Increase supply capacity in the department by five and gain five supply.
Execution
Poor camp management
Select an area that contains Continental troops.
Roll a die.
The Continental player discards supply equal to the result minus the lowest logistics score in that area.

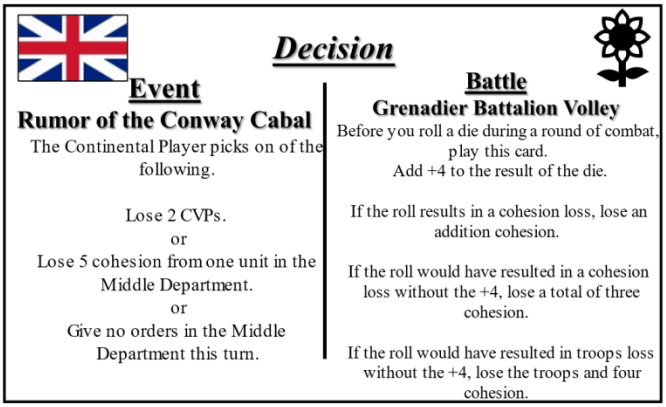

Decision
Event
Imprudent Journalism
The Continental player reveals all information from the area with the most Continental units. If there is a tie, the British play may select.
Destroy all revealed rumors.
Execution
Native Screen
The next time the Continental players conducts a reconnaissance, you may play this card to not reveal anything. The Continental player loses 2 intelligence network points in addition to the original cost.
You may only play this card if Native Allies is attached to Burgoyne.

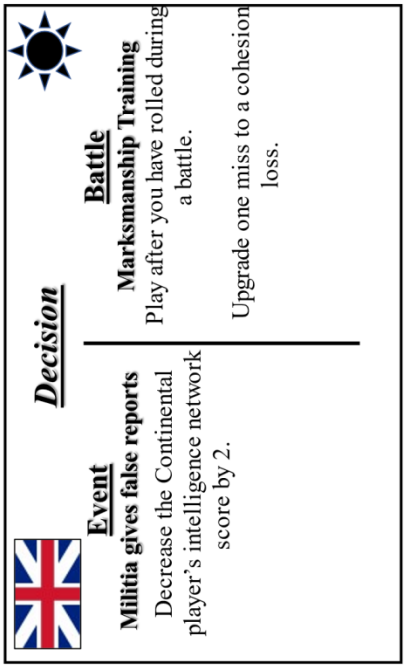

Decision
Event
Returned to rolls
Return 1 out of play troop to play.
Decision
Execution
Regimental Quartermaster
Attached this card to a general.
While this card is attached, the logistics of that general is increased by one.
Discard this card to double the supply or supply capacity gained by a forage order.


Decision
Event
Burgoyne entertains Canadian Locals
Improve the cohesion of every unit in the Canadian Area by 2.
Play only if Burgoyne has not left the Canadian Area.
Battle
Skittish Militia
When the Militia Callout roll is made, decrease the result by 2.


Decision
Event
Loyalists in Red
Gain 1 British Troop in the Middle Department.
Execution
Regimental Quartermaster
Attached this card to a general.
While this card is attached, the logistics of that general is increased by one.
Discard this card to double the supply or supply capacity gained by a forage order.


Decision
Event
Queen's Ranger Raid
Reduce the Continental Intelligence Network by -5.
For every point that cannot be removed from the intelligence network, the Continental player must lose from supply capacity.
Planning
Queen's Rangers
Add a light troop to a unit in the Middle Department. Attach this card to that unit.
The cost of a recon performed by this unit is reduced by one.
If combat or another game mechanic causes the last recon troop in the unit to be lost, discard this card.


Decision
Event
Rumor of the Conway Cabal
The Continental Player picks on of the following.
Lose 2 CVPs.
or
Lose 5 cohesion from one unit in the Middle Department.
or
Give no orders in the Middle Department this turn.
Battle
Grenadier Battalion Volley
Before you roll a die during a round of combat, play this card.
Add +4 to the result of the die.
If the roll results in a cohesion loss, lose an addition cohesion.
If the roll would have resulted in a cohesion loss without the +4, lose a total of three cohesion.
If the roll would have resulted in troops loss without the +4, lose the troops and four cohesion.



Decision

Event

Militia gives false reports

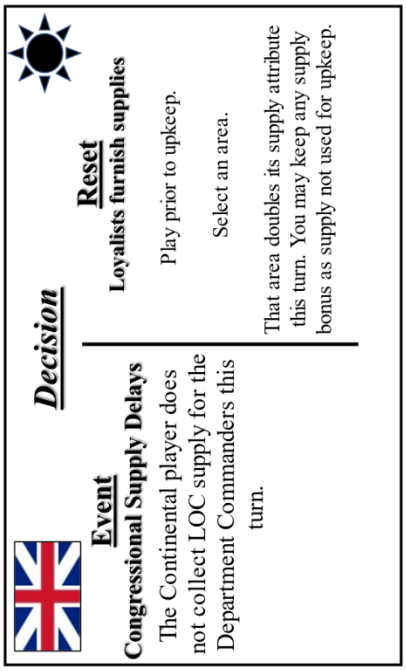
Decrease the Continental player's intelligence network score by 2.

Battle

Marksmanship Training

Play after you have rolled during a battle.

Upgrade one miss to a cohesion loss.



Decision

Event

Congressional Supply Delays

The Continental player does not collect LOC supply for the Department Commanders this turn.

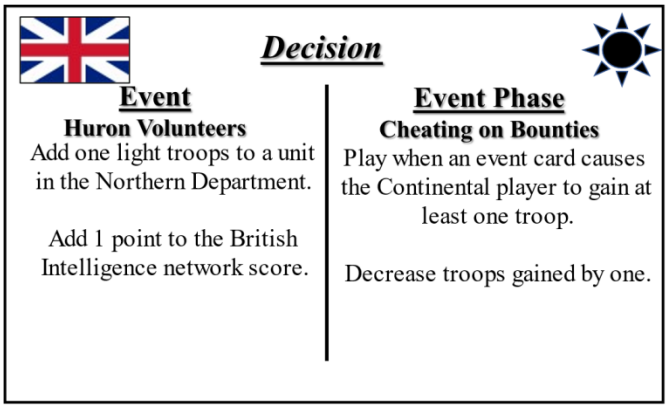
Reset

Loyalists furnish supplies

Play prior to upkeep.

Select an area.

That area doubles its supply attribute this turn. You may keep any supply bonus as supply not used for upkeep.



Decision

Event

Huron Volunteers

Add one light troops to a unit in the Northern Department.

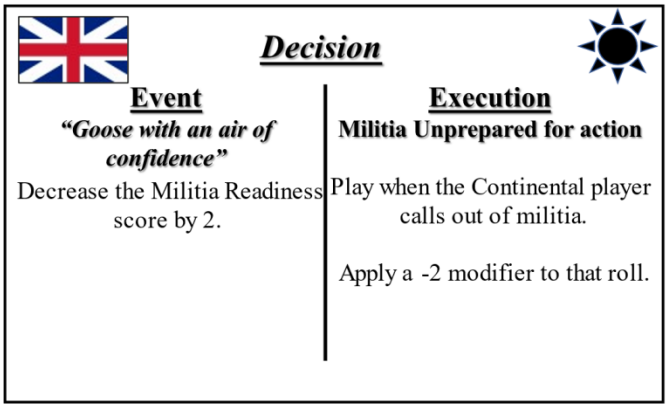
Add 1 point to the British Intelligence network score.

Event Phase

Cheating on Bounties

Play when an event card causes the Continental player to gain at least one troop.

Decrease troops gained by one.



Decision

Event

"Goose with an air of confidence"

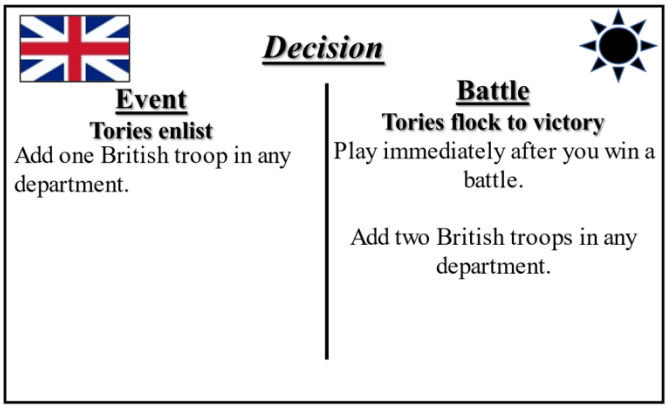
Decrease the Militia Readiness score by 2.

Execution

Militia Unprepared for action

Play when the Continental player calls out of militia.

Apply a -2 modifier to that roll.



Decision

Event

Tories enlist

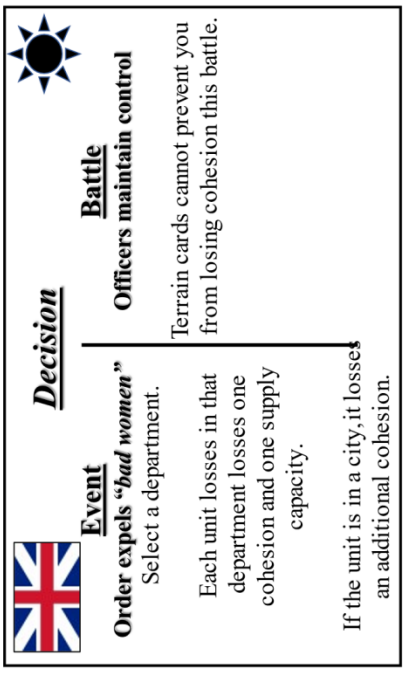
Add one British troop in any department.

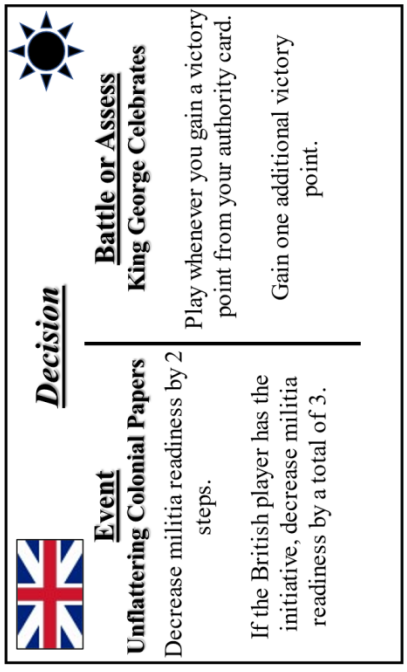
Battle

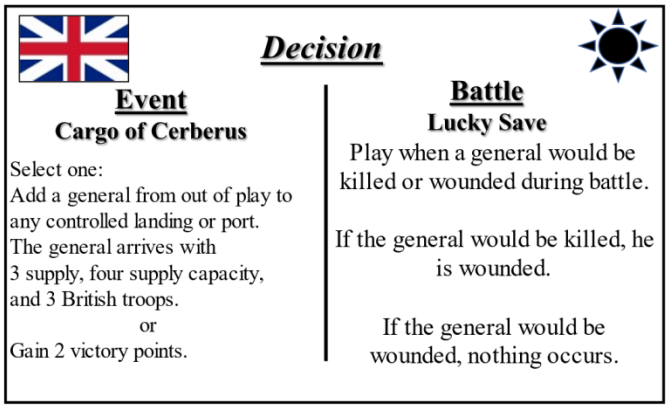
Tories flock to victory

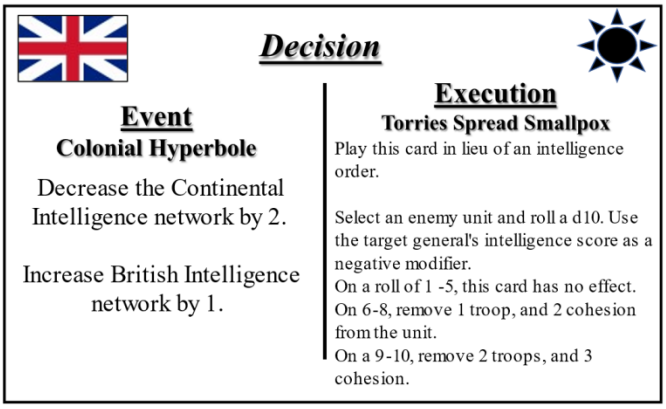
Play immediately after you win a battle.

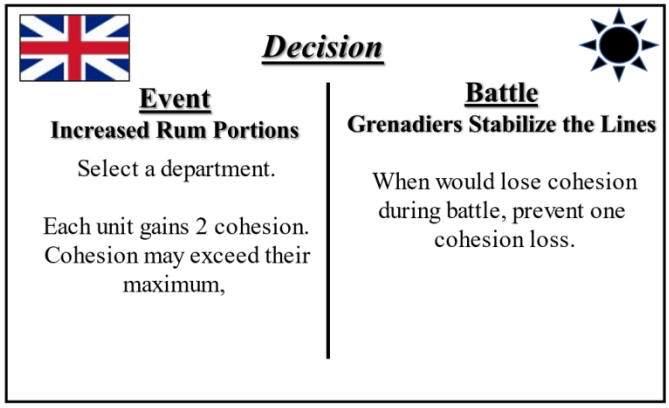
Add two British troops in any department.

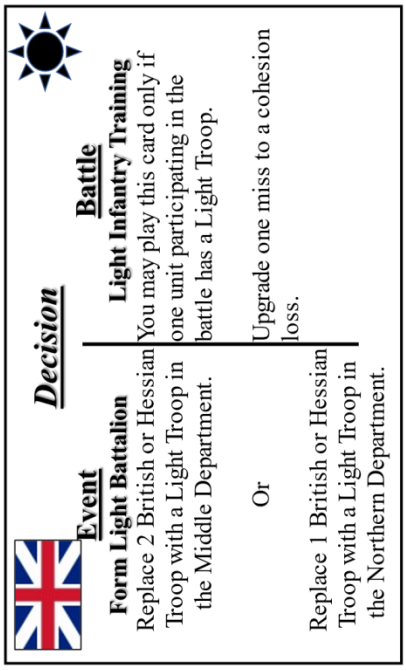

Decision
Event
Order expels "bad women"
Select a department.
Each unit losses in that department losses one cohesion and one supply capacity.
If the unit is in a city, it losses an additional cohesion.
Battle
Officers maintain control
Terrain cards cannot prevent you from losing cohesion this battle.

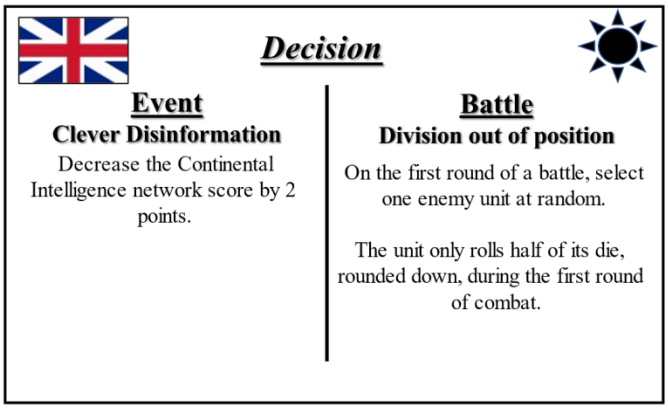

Decision
Event
Unflattering Colonial Papers
Decrease militia readiness by 2 steps.
If the British player has the initiative, decrease militia readiness by a total of 3.
Battle or Assess
King George Celebrates
Play whenever you gain a victory point from your authority card.
Gain one additional victory point.

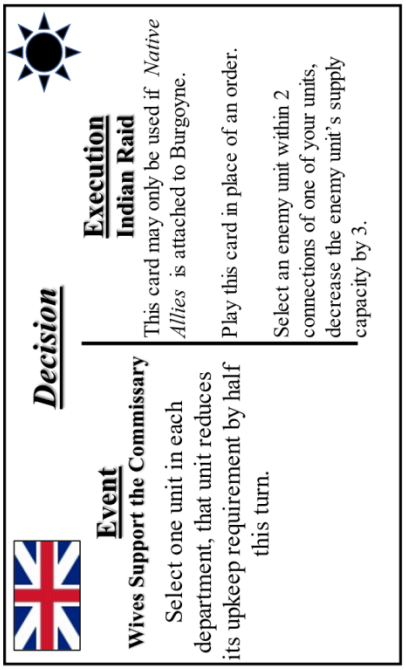

Decision
Event
Cargo of Cerberus
Select one:
Add a general from out of play to any controlled landing or port. The general arrives with 3 supply, four supply capacity, and 3 British troops.
or
Gain 2 victory points.
Battle
Lucky Save
Play when a general would be killed or wounded during battle.
If the general would be killed, he is wounded.
If the general would be wounded, nothing occurs.

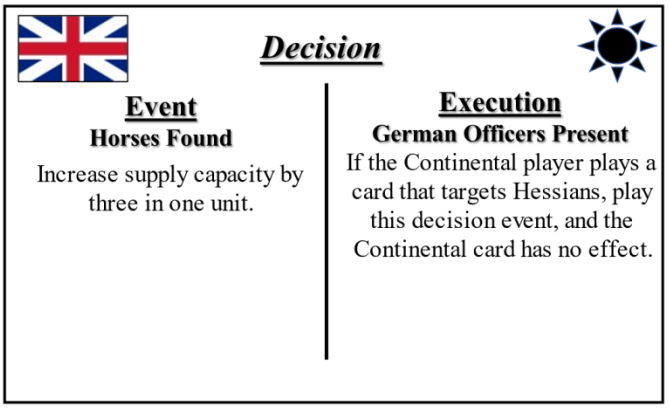

Decision
Event
Colonial Hyperbole
Decrease the Continental Intelligence network by 2.
Increase British Intelligence network by 1.
Execution
Torries Spread Smallpox
Play this card in lieu of an intelligence order.
Select an enemy unit and roll a d10. Use the target general's intelligence score as a negative modifier.
On a roll of 1 -5, this card has no effect.
On 6-8, remove 1 troop, and 2 cohesion from the unit.
On a 9-10, remove 2 troops, and 3 cohesion.

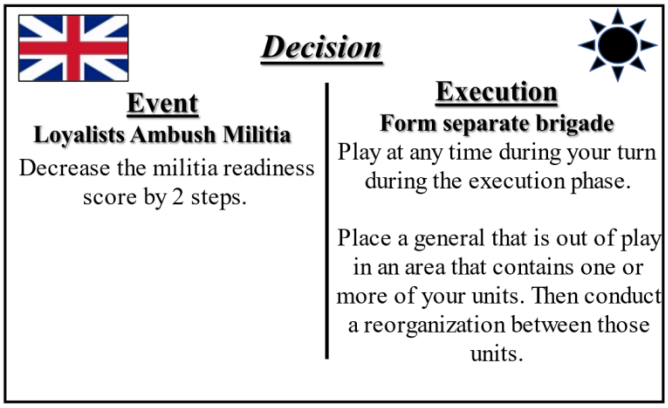

Decision
Event
Increased Rum Portions
Select a department.
Each unit gains 2 cohesion. Cohesion may exceed their maximum,
Battle
Grenadiers Stabilize the Lines
When would lose cohesion during battle, prevent one cohesion loss.

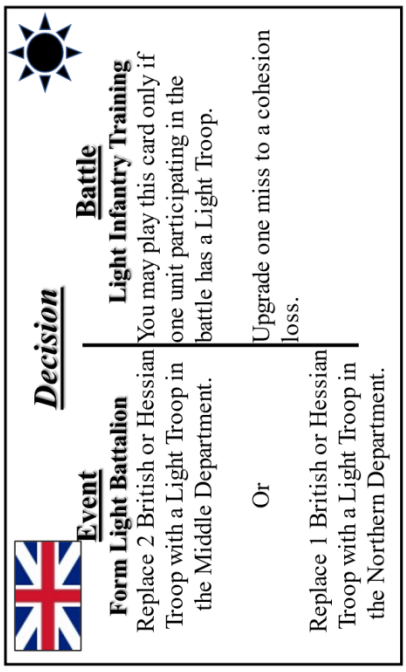

Decision
Event
Form Light Battalion
Replace 2 British or Hessian Troop with a Light Troop in the Middle Department.
Or
Replace 1 British or Hessian Troop with a Light Troop in the Northern Department.
Battle
Light Infantry Training
You may play this card only if one unit participating in the battle has a Light Troop.
Upgrade one miss to a cohesion loss.


Decision
Event
Clever Disinformation
Decrease the Continental Intelligence network score by 2 points.
Battle
Division out of position
On the first round of a battle, select one enemy unit at random.
The unit only rolls half of its die, rounded down, during the first round of combat.


Decision
Event
Wives Support the Commissary
Select one unit in each department, that unit reduces its upkeep requirement by half this turn.
Execution
Indian Raid
This card may only be used if Native Allies is attached to Burgoyne.
Play this card in place of an order.
Select an enemy unit within 2 connections of one of your units, decrease the enemy unit's supply capacity by 3.


Decision
Event
Horses Found
Increase supply capacity by three in one unit.
Execution
German Officers Present
If the Continental player plays a card that targets Hessians, play this decision event, and the Continental card has no effect.


Decision
Event
Loyalists Ambush Militia
Decrease the militia readiness score by 2 steps.
Execution
Form separate brigade
Play at any time during your turn during the execution phase.
Place a general that is out of play in an area that contains one or more of your units. Then conduct a reorganization between those units.



Decision

Event

Form Light Battalion

Replace 2 British or Hessian Troop with a Light Troop in the Middle Department.

Or

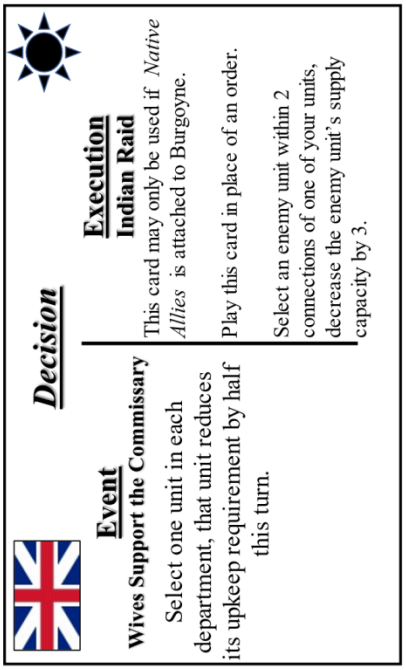
Replace 1 British or Hessian Troop with a Light Troop in the Northern Department.

Battle

Light Infantry Training

You may play this card only if one unit participating in the battle has a Light Troop.

Upgrade one miss to a cohesion loss.



Decision

Event

Wives Support the Commissary

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Execution

Indian Raid

This card may only be used if *Native Allies* is attached to Burgoyne.

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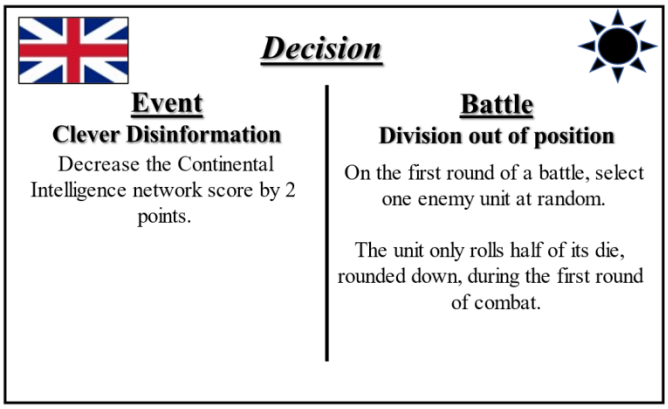
Select an enemy unit within 2 connections of one of your units, decrease the enemy unit's supply capacity by 3.



Decision

Event

Clever Disinformation

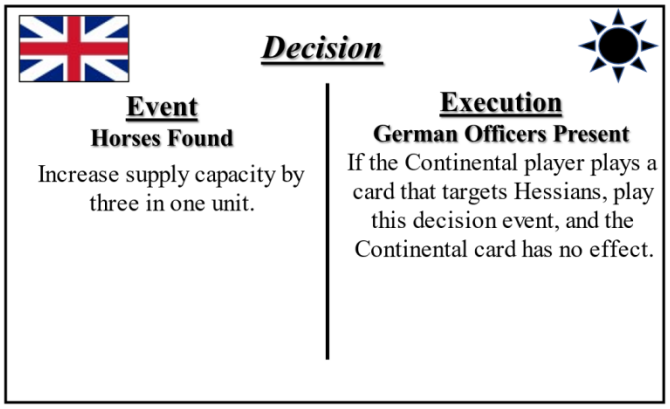
Decrease the Continental Intelligence network score by 2 points.

Battle

Division out of position

On the first round of a battle, select one enemy unit at random.

The unit only rolls half of its die, rounded down, during the first round of combat.



Decision

Event

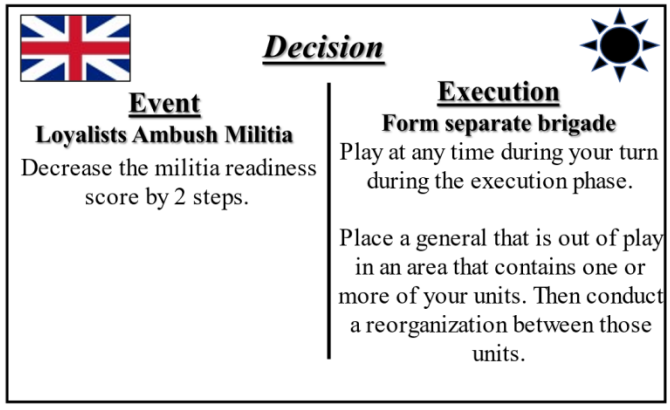
Horses Found

Increase supply capacity by three in one unit.

Execution

German Officers Present

If the Continental player plays a card that targets Hessians, play this decision event, and the Continental card has no effect.



Decision

Event

Loyalists Ambush Militia

Decrease the militia readiness score by 2 steps.

Execution

Form separate brigade

Play at any time during your turn during the execution phase.

Place a general that is out of play in an area that contains one or more of your units. Then conduct a reorganization between those units.

Decision

Execution
Uneasy Truce
Neither unit suffers cohesion loss this turn for being in the same space.

Event
Burgoyne Promotion
MG Burgoyne is now LTG Burgoyne.

Each of your units in the Northern Department gain two cohesion.

Decision

Battle
Hessian Precision
Play only if one of your units in the Battle contains Hessian Troops.

Play after you roll die in combat.

One miss becomes a cohesion loss.

Event
Promised Reinforcements
Add 2 British and 2 Hessian Troops to either the Northern or Middle Departments, divided as you choose.

Troops arrive with cohesion.

Decision

Event
Unprepared Militia
Reduce the militia readiness score by 3 steps.

Battle
Supplies captured
Play after you've won a battle.

Select one enemy unit that participated in the battle. That unit loses half of its supply and supply capacity.
One of your units that participated in the battle gains that supply and supply capacity.

Decision

Event
"This hour is decisive"
Both Department Commander's operation score is increased by one this turn.

Assess
Disciplined Rations
Each unit's upkeep is reduced by half rounded up.

Each unit losses one cohesion.

Decision

Event
Greedy Gates
The Continental Player must move 4 troops with cohesion from the Middle Department to the Northern Department.

Battle
Militia Flee
Play after the Continental Player rolls for Militia Callout, reduce the roll by -3.

Decision

Event
Information Centralization
Decrease the Continental Intelligence Network score by 4 points.

Execution
Loyalists Furnish Supplies
Play in conjunction with a forage order that is targeted an area that has a city.

Double the number of supplies or supply capacity gained.

Decision

Event
Poor supply management
Select a Continental Unit.

That unit discards 3 supply.

Battle
Wet Power
Play at the beginning of a battle. You may activate this card 3 times during the battle.

Select 1 die your opponent is about to roll during combat. For that die, roll 2 die instead and use the lower number at the result.

The unit cannot lose 3 supply it losses as much supply as it can and losses supply capacity equal to the difference.

Decision

Event
Concerns of Pay
Select a Continental Department.

That Department losses 5 cohesion across the Department.

Battle
"Is this Army beaten?"
Play during battle after you suffer a cohesion loss.

Gain four cohesion.

Decision

Event
Grand Council of War
Look through all Decision cards that have not been played this game.

Take two and add them to your hand.

Execution
Scouts lose track of the Army
Play in conjunction with a march order.

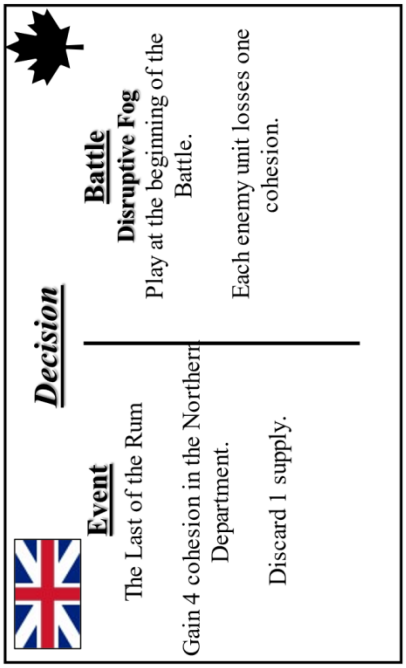
Pay 3 intelligence points to create a rumor before the march occurs.

Decision

Event
Locals predict weather
Look at the top three cards of the weather deck. Then shuffle them and place them on the top of the deck.

Execution
Weather Advice
Play in conjunction with an order during the execution phase.

You suffer no negative effects of weather for that order.



Decision

Event

The Last of the Rum

Gain 4 cohesion in the Northern Department.

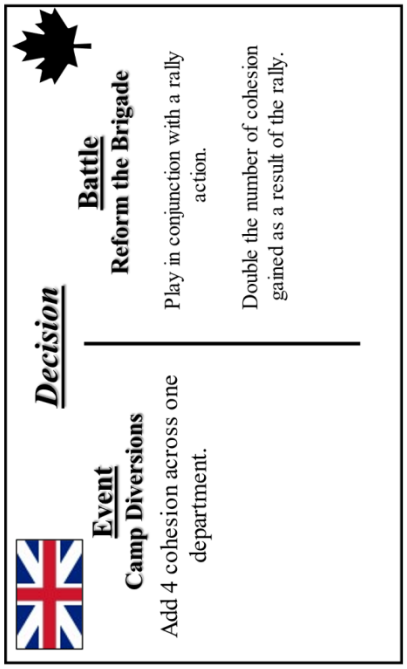
Discard 1 supply.

Battle

Disruptive Fog

Play at the beginning of the Battle.

Each enemy unit losses one cohesion.



Decision

Event

Camp Diversions

Add 4 cohesion across one department.

Battle

Reform the Brigade

Play in conjunction with a rally action.

Double the number of cohesion gained as a result of the rally.

Decision

Event

Militia Defections

Reduce the militia readiness by 2 steps.

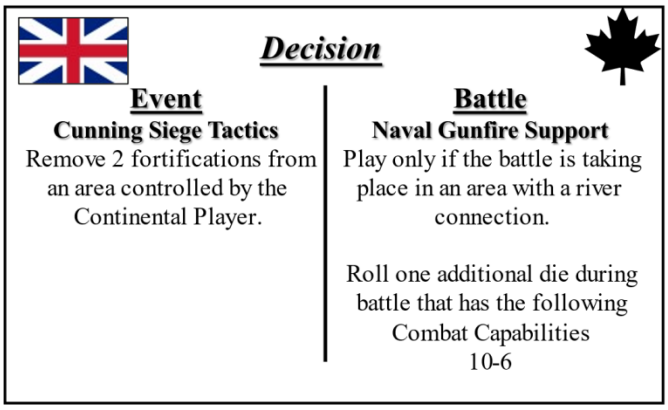
Add 1 point to the British Intelligence Network score.

Battle

Fortified Manor

Play at the beginning of a turn of combat in which you are the defender.

Add 3 fortifications to the area the battle is taking place in.



Decision

Event

Cunning Siege Tactics

Remove 2 fortifications from an area controlled by the Continental Player.

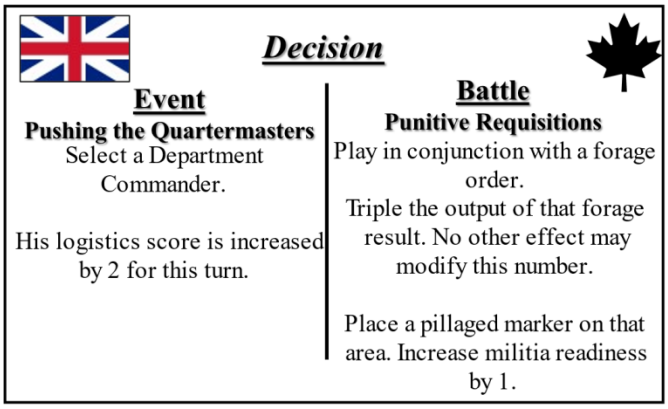
Battle

Naval Gunfire Support

Play only if the battle is taking place in an area with a river connection.

Roll one additional die during battle that has the following Combat Capabilities

10-6



Decision

Event

Pushing the Quartermasters

Select a Department Commander.

His logistics score is increased by 2 for this turn.

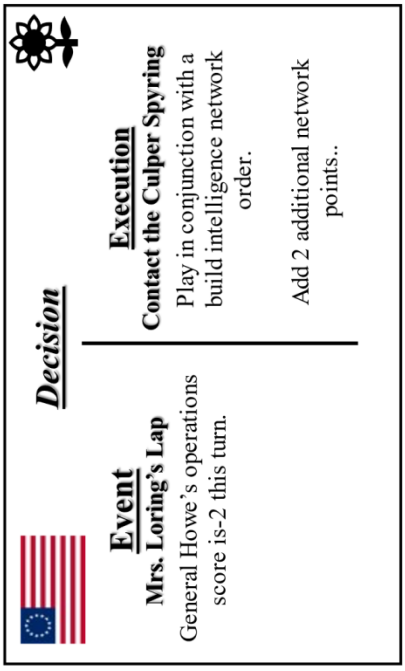
Battle

Punitive Requisitions

Play in conjunction with a forage order.

Triple the output of that forage result. No other effect may modify this number.

Place a pillaged marker on that area. Increase militia readiness by 1.

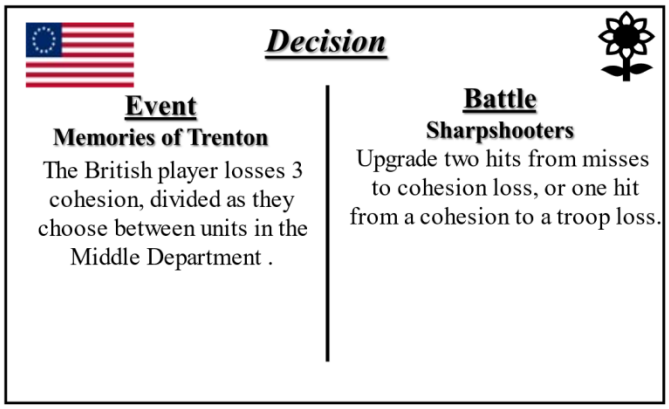


Decision

Event
Mrs. Loring's Lap
General Howe's operations score is-2 this turn.

Execution
Contact the Culper Spyring
Play in conjunction with a build intelligence network order.

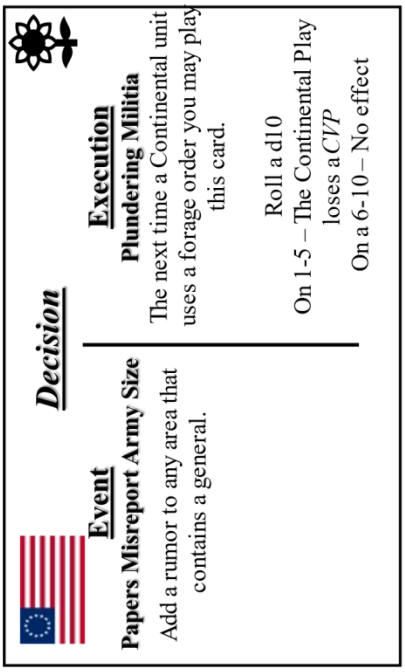
Add 2 additional network points..



Decision

Event
Memories of Trenton
The British player losses 3 cohesion, divided as they choose between units in the Middle Department .

Battle
Sharpshooters
Upgrade two hits from misses to cohesion loss, or one hit from a cohesion to a troop loss.

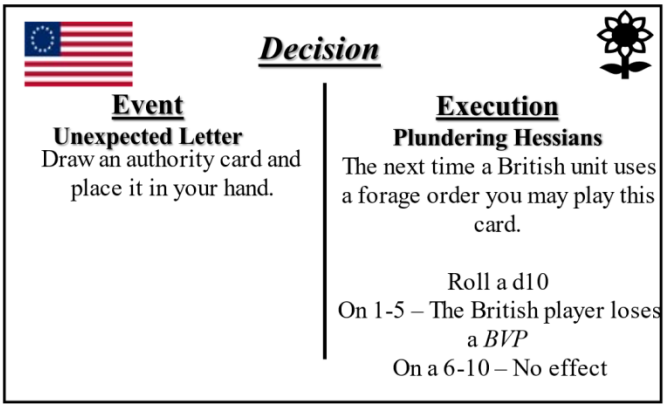


Decision

Event
Papers Misreport Army Size
Add a rumor to any area that contains a general.

Execution
Plundering Militia
The next time a Continental unit uses a forage order you may play this card.

Roll a d10
On 1-5 – The Continental Play loses a *CVP*
On a 6-10 – No effect

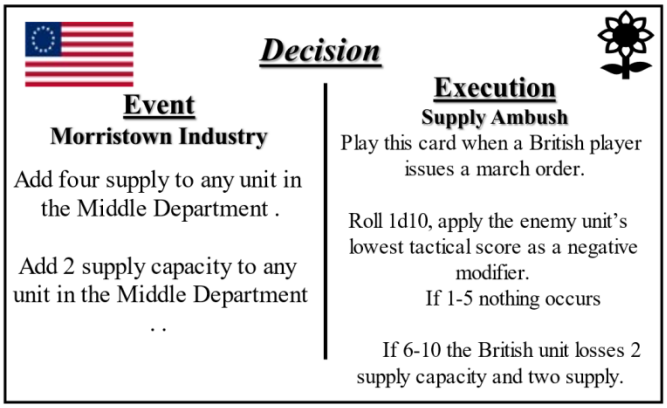


Decision

Event
Unexpected Letter
Draw an authority card and place it in your hand.

Execution
Plundering Hessians
The next time a British unit uses a forage order you may play this card.

Roll a d10
On 1-5 – The British player loses a *BVP*
On a 6-10 – No effect



Decision

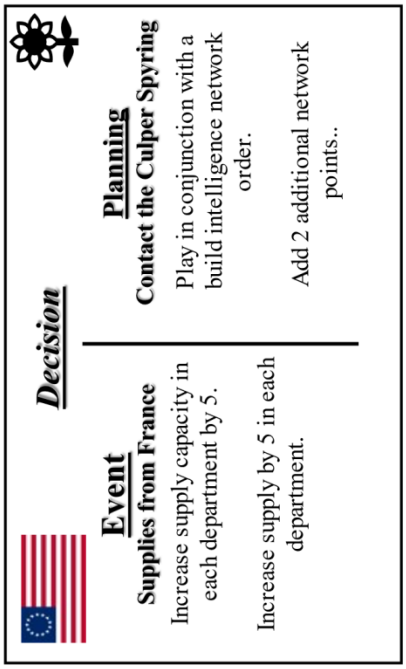
Event
Morristown Industry
Add four supply to any unit in the Middle Department .

Add 2 supply capacity to any unit in the Middle Department . .

Execution
Supply Ambush
Play this card when a British player issues a march order.

Roll 1d10, apply the enemy unit's lowest tactical score as a negative modifier.
If 1-5 nothing occurs

If 6-10 the British unit losses 2 supply capacity and two supply.



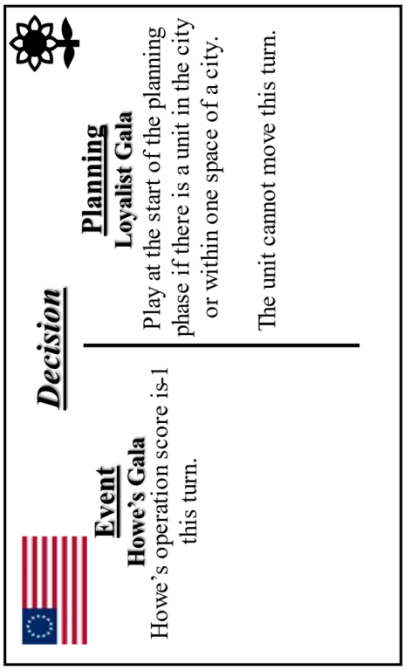
Decision

Event
Supplies from France
Increase supply capacity in each department by 5.

Increase supply by 5 in each department.

Planning
Contact the Culper Spyring
Play in conjunction with a build intelligence network order.

Add 2 additional network points..

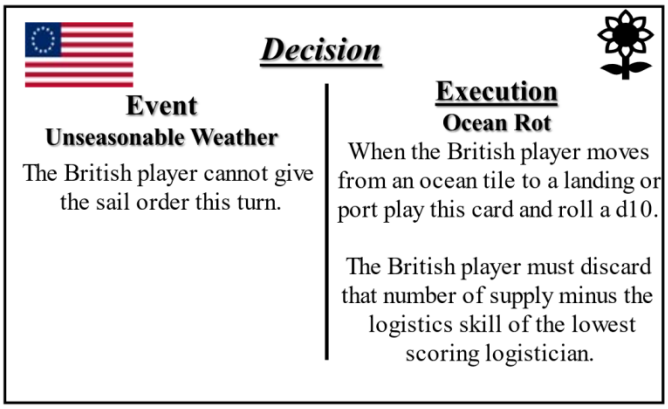


Decision

Event
Howe's Gala
Howe's operation score is-1 this turn.

Planning
Loyalist Gala
Play at the start of the planning phase if there is a unit in the city or within one space of a city.

The unit cannot move this turn.

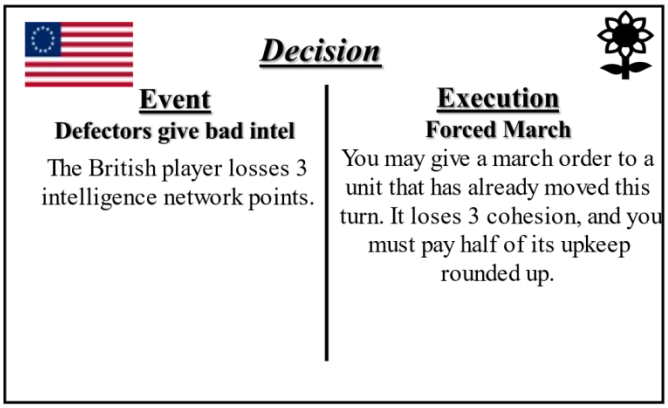


Decision

Event
Unseasonable Weather
The British player cannot give the sail order this turn.

Execution
Ocean Rot
When the British player moves from an ocean tile to a landing or port play this card and roll a d10.

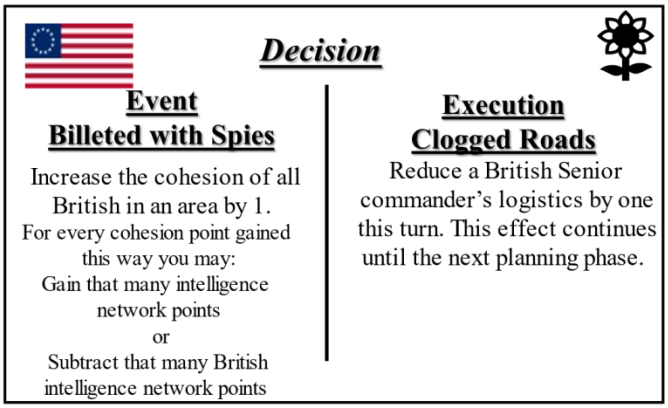
The British player must discard that number of supply minus the logistics skill of the lowest scoring logistician.



Decision

Event
Defectors give bad intel
The British player losses 3 intelligence network points.

Execution
Forced March
You may give a march order to a unit that has already moved this turn. It loses 3 cohesion, and you must pay half of its upkeep rounded up.



Decision

Event
Billeted with Spies
Increase the cohesion of all British in an area by 1.
For every cohesion point gained this way you may:
Gain that many intelligence network points
or
Subtract that many British intelligence network points

Execution
Clogged Roads
Reduce a British Senior commander's logistics by one this turn. This effect continues until the next planning phase.

Decision

Event

Connecticut Militia Arrive

Add 2 troops in the Northern Department. Those units gain one cohesion per troop added.

Increase militia readiness by 1

Execution

Quartermaster Department

Attached this card to any general.

That general's logistics in increased by 1.

Discard this card to double the supply or supply capacity gained from a forage order.

Decision

Event

Freemen Militia

Increase the militia readiness by 2 steps.

Execution

Hamilton as Chief of Staff

Attachment : While this card is attached to Washington, Washington's Operations Score is increased by 1.

Decision

Event

Dragoons ambush Scouts

Remove 1 light troop from your one of your opponent's units.

Battle

Concentrated Battery

Spend 2 supply to increase one miss to a cohesion loss, or 3 supply to increase a cohesion loss to a troops loss.

Cannot do both. Cannot spend five to upgrade from a miss to a troops loss.

Decision

Planning

Frontier Scouts

Add 2 light troops to any unit.

Event

Robert Rogers Relieved

Reduce the British Intelligence Network by 2.

If the card Queen's Ranger is attached to an unit, roll a d10.
On a result of 1-6 No effect
On a result of 7-8 that unit losses 3 cohesion.
On a result of 9-10, discard Queen's Rangers card.

Decision

Event

French training

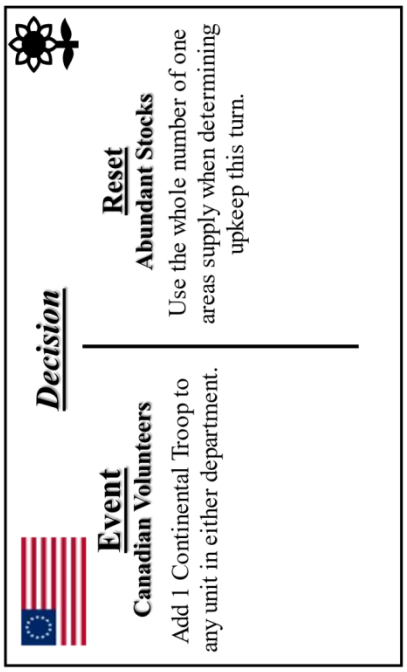
Decrease militia readiness by 2 steps.

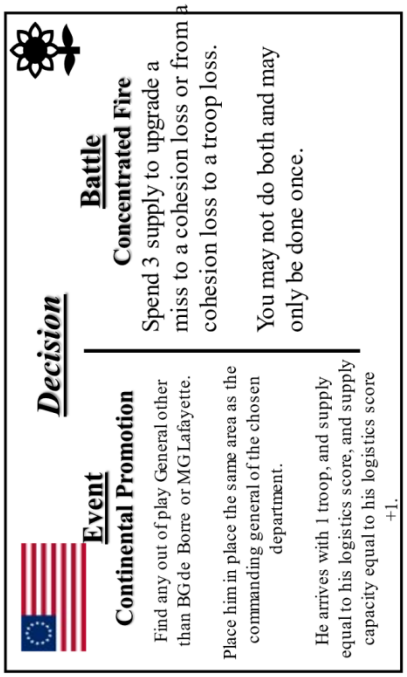
Add 2 Continental Troops to any department and increase cohesion in those units by 1.

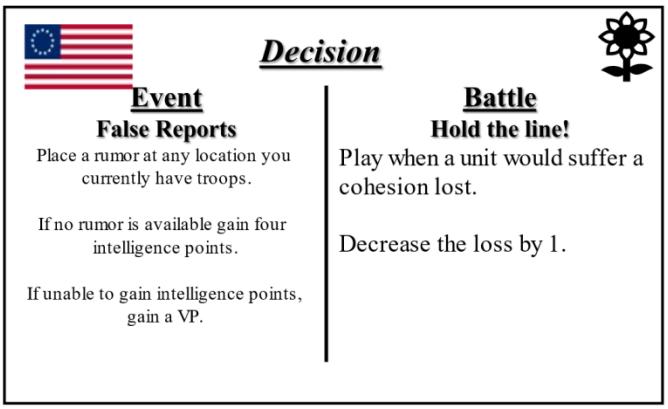
Battle

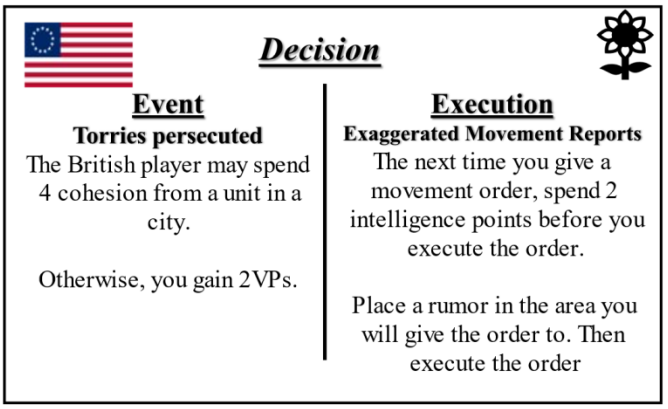
Marksmanship Training

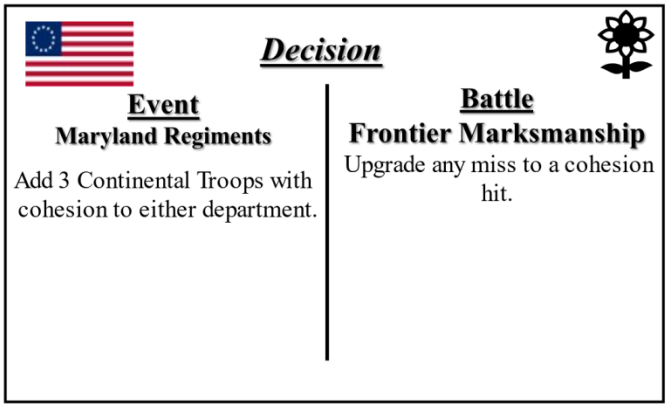
Reroll a die for a continental unit during battle.

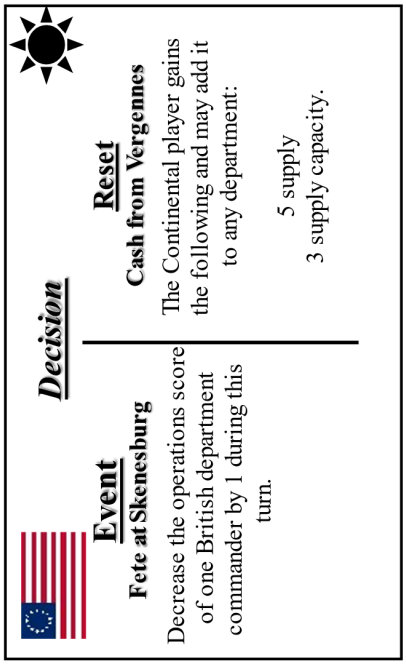

Decision
Event
Canadian Volunteers
Add 1 Continental Troop to any unit in either department.
Reset
Abundant Stocks
Use the whole number of one areas supply when determining upkeep this turn.

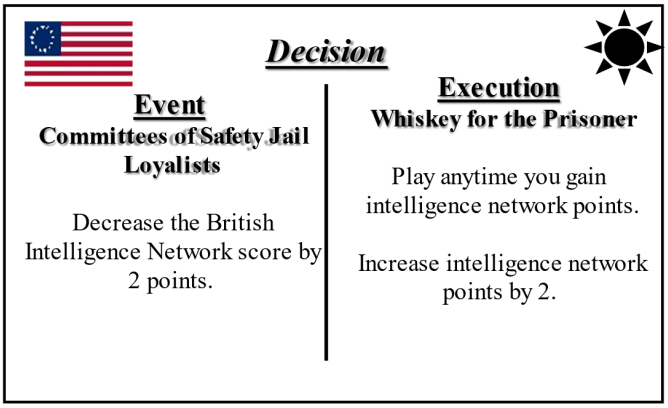

Decision
Event
Continental Promotion
Find any out of play General other than BG de Borre or MG Lafayette.
Place him in place the same area as the commanding general of the chosen department.
He arrives with 1 troop, and supply equal to his logistics score, and supply capacity equal to his logistics score +1.
Battle
Concentrated Fire
Spend 3 supply to upgrade a miss to a cohesion loss or from a cohesion loss to a troop loss.
You may not do both and may only be done once.

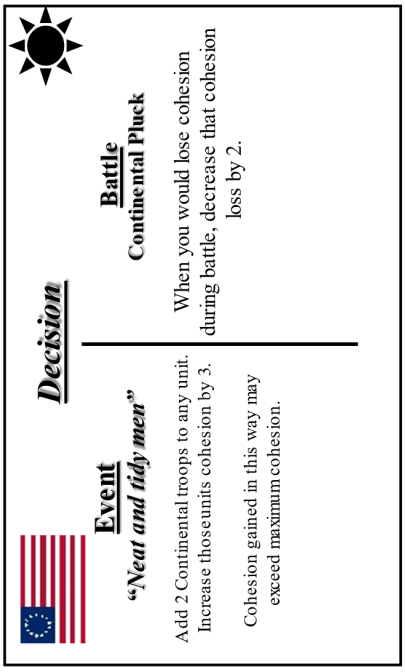

Decision
Event
False Reports
Place a rumor at any location you currently have troops.
If no rumor is available gain four intelligence points.
If unable to gain intelligence points, gain a VP.
Battle
Hold the line!
Play when a unit would suffer a cohesion lost.
Decrease the loss by 1.

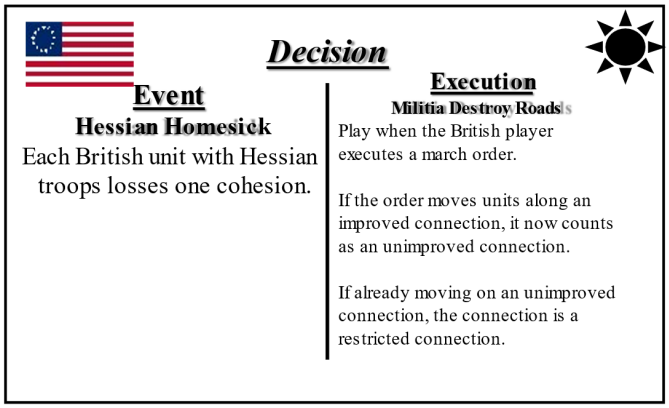

Decision
Event
Torries persecuted
The British player may spend 4 cohesion from a unit in a city.
Otherwise, you gain 2VPs.
Execution
Exaggerated Movement Reports
The next time you give a movement order, spend 2 intelligence points before you execute the order.
Place a rumor in the area you will give the order to. Then execute the order

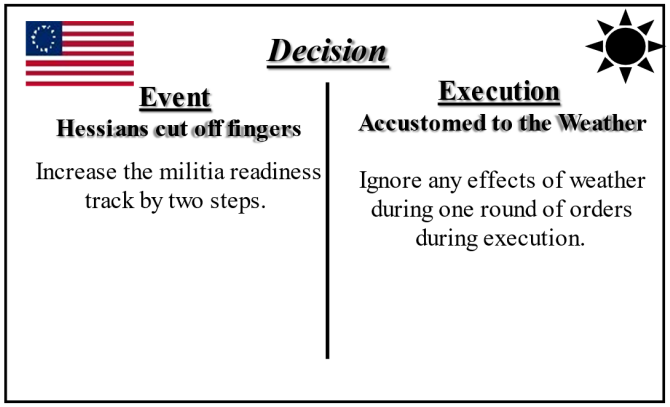

Decision
Event
Maryland Regiments
Add 3 Continental Troops with cohesion to either department.
Battle
Frontier Marksmanship
Upgrade any miss to a cohesion hit.


Decision
Reset
Cash from Vergennes
The Continental player gains the following and may add it to any department:
5 supply
3 supply capacity.
Event
Fete at Skenesburg
Decrease the operations score of one British department commander by 1 during this turn.


Decision
Event
Committees of Safety Jail Loyalists
Decrease the British Intelligence Network score by 2 points.
Execution
Whiskey for the Prisoner
Play anytime you gain intelligence network points.
Increase intelligence network points by 2.


Decision
Battle
Continental Pluck
When you would lose cohesion during battle, decrease that cohesion loss by 2.
Event
"Neat and tidy men"
Add 2 Continental troops to any unit. Increase those units cohesion by 3.
Cohesion gained in this way may exceed maximum cohesion.


Decision
Event
Hessian Homesick
Each British unit with Hessian troops losses one cohesion.
Execution
Militia Destroy Roads
Play when the British player executes a march order.
If the order moves units along an improved connection, it now counts as an unimproved connection.
If already moving on an unimproved connection, the connection is a restricted connection.

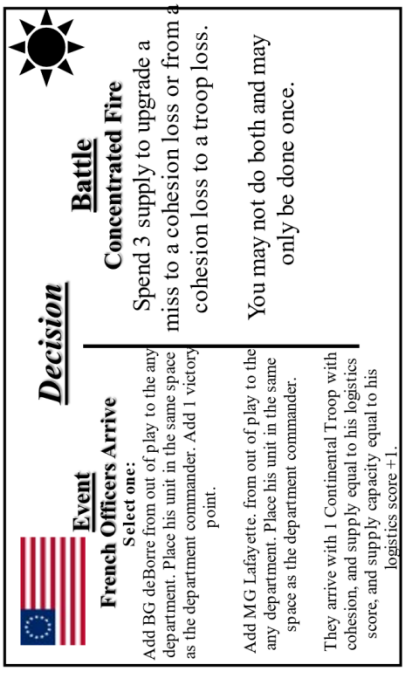

Decision
Event
Hessians cut off fingers
Increase the militia readiness track by two steps.
Execution
Accustomed to the Weather
Ignore any effects of weather during one round of orders during execution.

Decision

Event
Southern Troops Arrive
Add 3 Continental Troops to units in the Middle Department. Increase the cohesion of each unit that receives a troop by 1.

Battle
Ungentlemanly thing
Play this card when one of your generals on the battle line is threatened.

Prevent the enemy from rolling for the result.



Decision

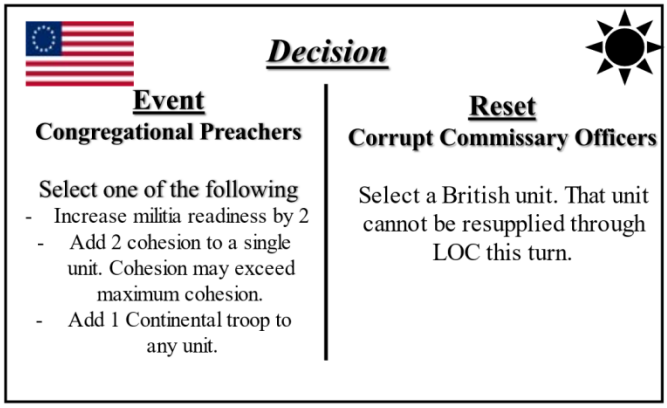
Event
French Officers Arrive
Select one:
Add BG deBorre from out of play to the any department. Place his unit in the same space as the department commander. Add 1 victory point.

Add MG Lafayette. from out of play to the any department. Place his unit in the same space as the department commander.

They arrive with 1 Continental Troop with cohesion, and supply equal to his logistics score, and supply capacity equal to his logistics score +1.

Battle
Concentrated Fire
Spend 3 supply to upgrade a miss to a cohesion loss or from a cohesion loss to a troop loss.

You may not do both and may only be done once.



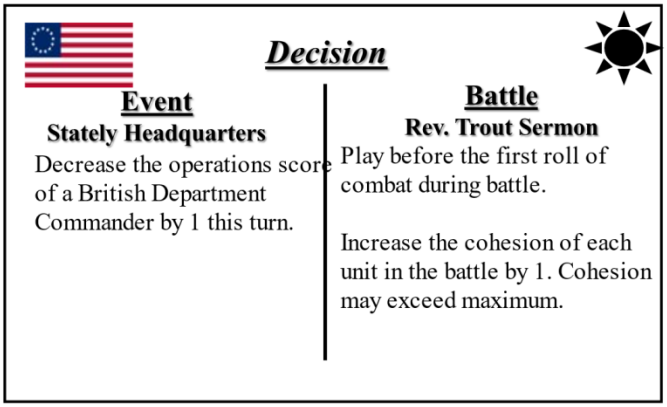
Decision

Event
Congregational Preachers

Select one of the following
- Increase militia readiness by 2
- Add 2 cohesion to a single unit. Cohesion may exceed maximum cohesion.
- Add 1 Continental troop to any unit.

Reset
Corrupt Commissary Officers

Select a British unit. That unit cannot be resupplied through LOC this turn.

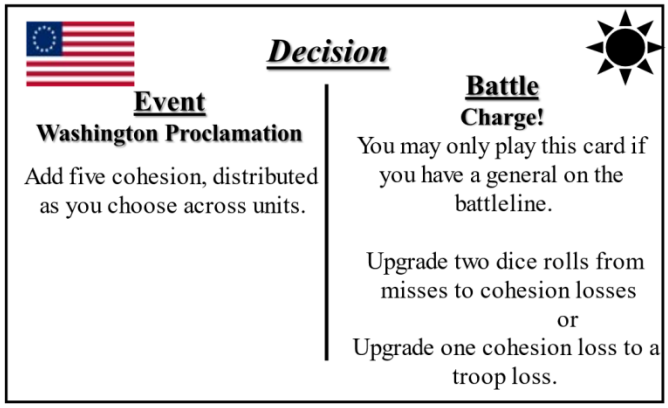


Decision

Event
Stately Headquarters
Decrease the operations score of a British Department Commander by 1 this turn.

Battle
Rev. Trout Sermon
Play before the first roll of combat during battle.

Increase the cohesion of each unit in the battle by 1. Cohesion may exceed maximum.

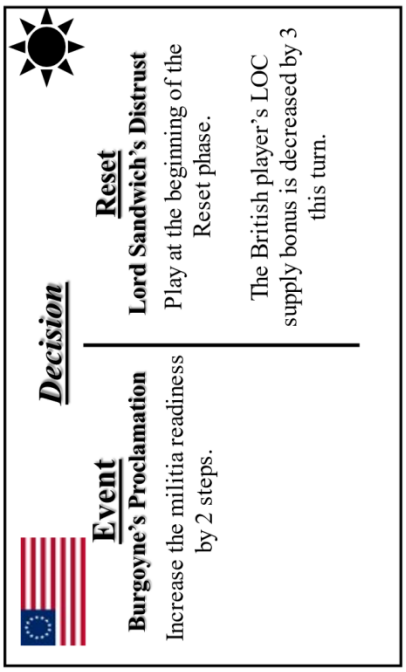


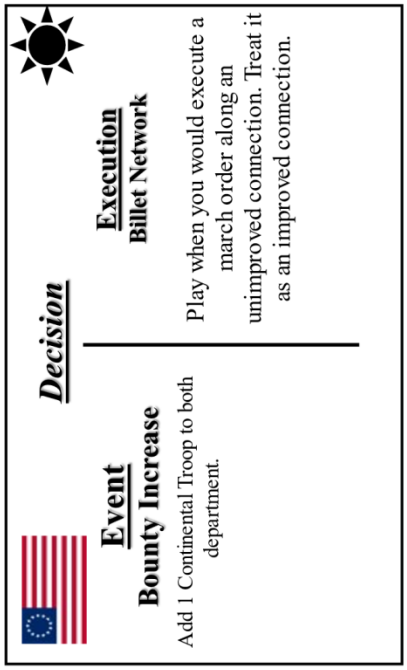
Decision

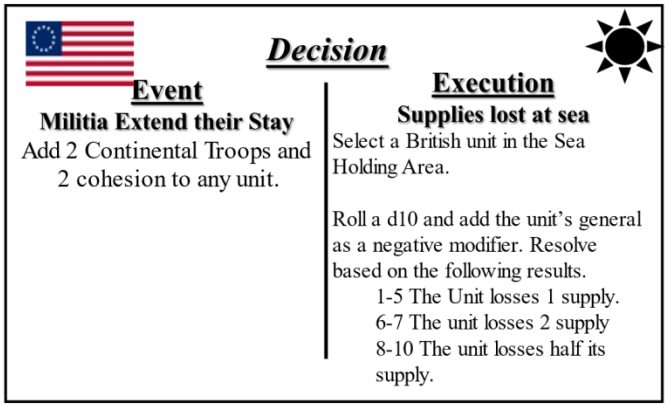
Event
Washington Proclamation
Add five cohesion, distributed as you choose across units.

Battle
Charge!
You may only play this card if you have a general on the battleline.

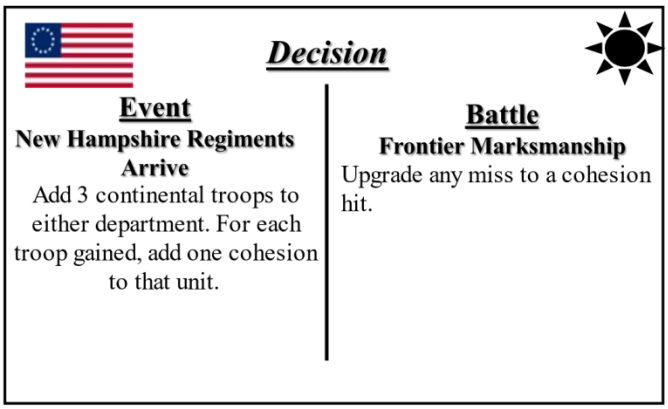
Upgrade two dice rolls from misses to cohesion losses
or
Upgrade one cohesion loss to a troop loss.

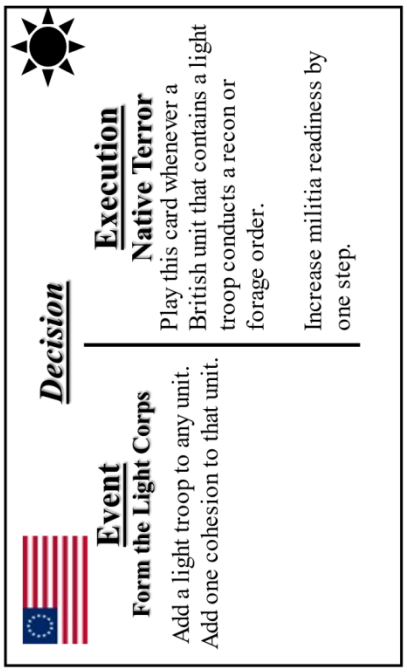

Decision
Reset
Lord Sandwich's Distrust
Play at the beginning of the Reset phase.
The British player's LOC supply bonus is decreased by 3 this turn.
Event
Burgoyne's Proclamation
Increase the militia readiness by 2 steps.


Decision
Execution
Billet Network
Play when you would execute a march order along an unimproved connection. Treat it as an improved connection.
Event
Bounty Increase
Add 1 Continental Troop to both department.


Decision
Event
Militia Extend their Stay
Add 2 Continental Troops and 2 cohesion to any unit.
Execution
Supplies lost at sea
Select a British unit in the Sea Holding Area.
Roll a d10 and add the unit's general as a negative modifier. Resolve based on the following results.
1-5 The Unit losses 1 supply.
6-7 The unit losses 2 supply
8-10 The unit losses half its supply.

Decision
Event
Protection to Loyalists
The British player must lose 4 cohesion in the middle department or the Continental Player gains a VP.
Execution
Emergency Militia Call
Play this card before roll for the militia turnout. Add +2 to the result.


Decision
Event
New Hampshire Regiments Arrive
Add 3 continental troops to either department. For each troop gained, add one cohesion to that unit.
Battle
Frontier Marksmanship
Upgrade any miss to a cohesion hit.

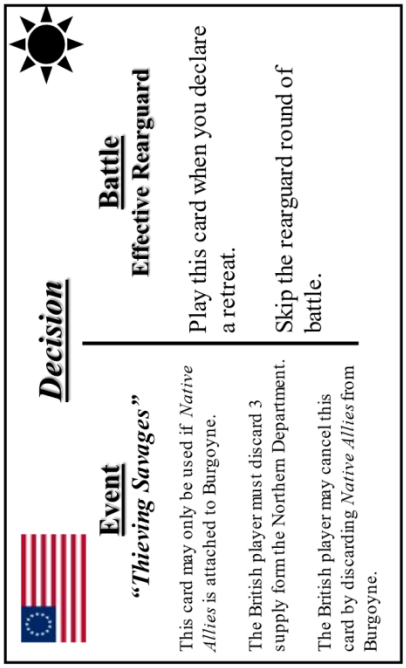


Decision

Event
Form the Light Corps
Add a light troop to any unit.
Add one cohesion to that unit.

Execution
Native Terror
Play this card whenever a British unit that contains a light troop conducts a recon or forage order.

Increase militia readiness by one step.



Decision

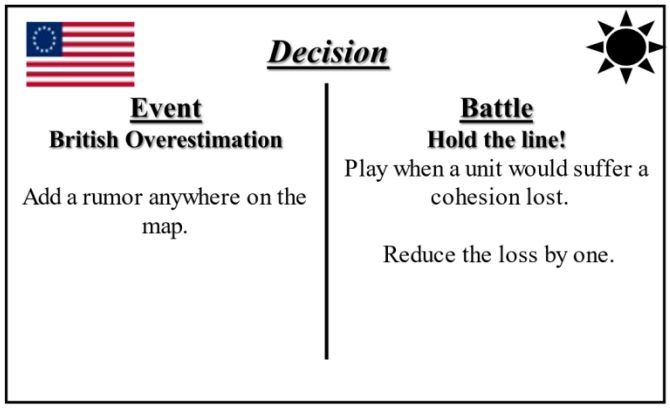
Event
"Thieving Savages"
This card may only be used if *Native Allies* is attached to Burgoyne.

The British player must discard 3 supply from the Northern Department.

The British player may cancel this card by discarding *Native Allies* from Burgoyne.

Battle
Effective Rearguard
Play this card when you declare a retreat.

Skip the rearguard round of battle.

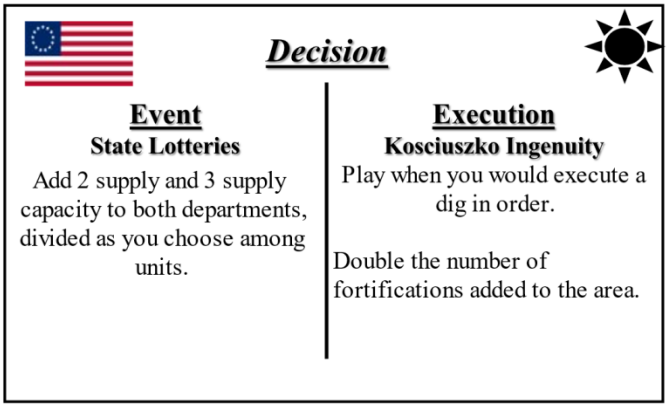


Decision

Event
British Overestimation
Add a rumor anywhere on the map.

Battle
Hold the line!
Play when a unit would suffer a cohesion lost.

Reduce the loss by one.

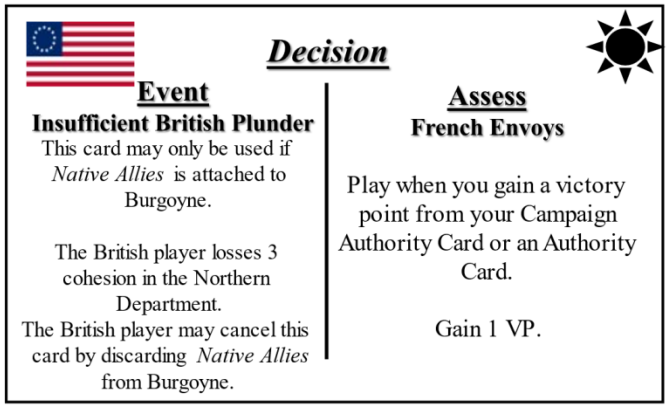


Decision

Event
State Lotteries
Add 2 supply and 3 supply capacity to both departments, divided as you choose among units.

Execution
Kosciuszko Ingenuity
Play when you would execute a dig in order.

Double the number of fortifications added to the area.



Decision

Event
Insufficient British Plunder
This card may only be used if *Native Allies* is attached to Burgoyne.

The British player losses 3 cohesion in the Northern Department.
The British player may cancel this card by discarding *Native Allies* from Burgoyne.

Assess
French Envoys
Play when you gain a victory point from your Campaign Authority Card or an Authority Card.

Gain 1 VP.

Decision

Event
Prisoner Raid
Decrease the Continental Intelligence Network by 2.

Gain one Continental Troop with cohesion in either department.

Execution
Militia Disrupt Movement
Play after the British Player executes a move order.

Decrease militia readiness by 1 step.

The move order is treated as though the British player moved through a Restrictive Connection

Decision

Event
Congressional Appointment
Select a General from out of play and add him to either department. Place his unit in the same area as the Department Commander and you may conduct a reorganization.

Assess
Boundless Supply
Select one area that contains one of your units.

You gain the whole supply bonus during upkeep.

Decision

Event
Northern Call-Ups
Increase militia readiness by 1.

Add one Continental Troop with Cohesion to the Northern Department.

Battle
"Turkey Calls"
Play before the first roll for combat is made.
Roll combat one die plus one die for every Light Troop in your units in the battle.

Rolls of 1 count as a cohesion loss.

Decision

Event
"More than Six Pence a Day"
Select a department.

Each unit gains two cohesion. Cohesion may exceed maximum.

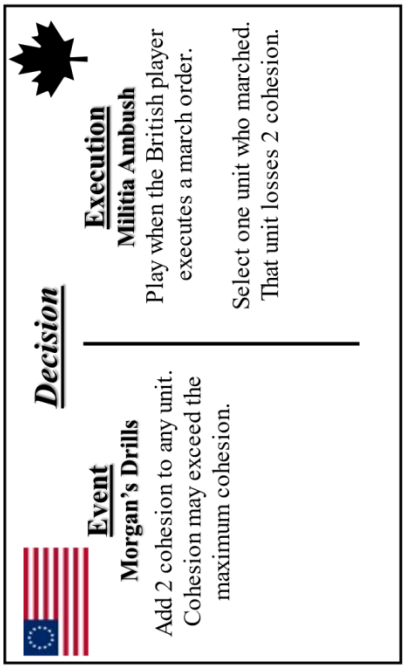
Battle
Unexpected Militia
Play when you would roll for Militia Callout.

Roll 2 die and select the better of the 2.

Decision

Event
Locals provide timber
Add two fortifications to any one area.

Execution
Uneasy Truce
Neither unit suffers cohesion loss this turn for being in the same space.

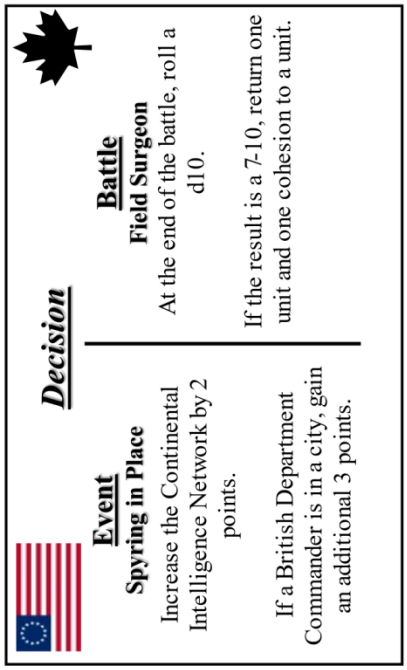


Decision

Event
Morgan's Drills
Add 2 cohesion to any unit. Cohesion may exceed the maximum cohesion.

Execution
Militia Ambush
Play when the British player executes a march order.

Select one unit who marched. That unit losses 2 cohesion.



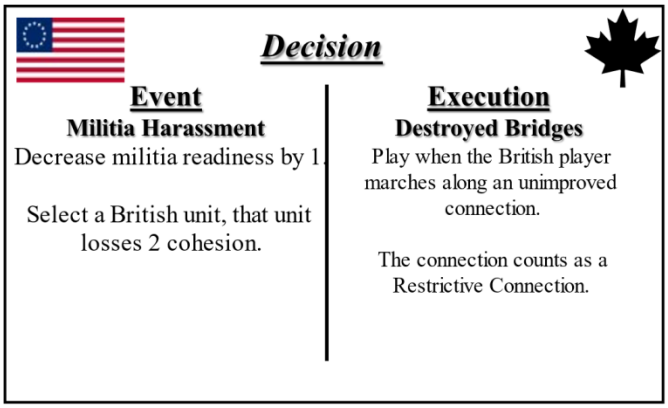
Decision

Event
Spying in Place
Increase the Continental Intelligence Network by 2 points.

If a British Department Commander is in a city, gain an additional 3 points.

Battle
Field Surgeon
At the end of the battle, roll a d10.

If the result is a 7-10, return one unit and one cohesion to a unit.



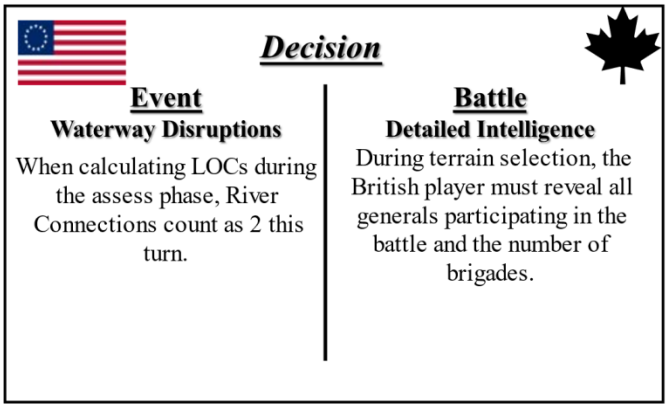
Decision

Event
Militia Harassment
Decrease militia readiness by 1.

Select a British unit, that unit losses 2 cohesion.

Execution
Destroyed Bridges
Play when the British player marches along an unimproved connection.

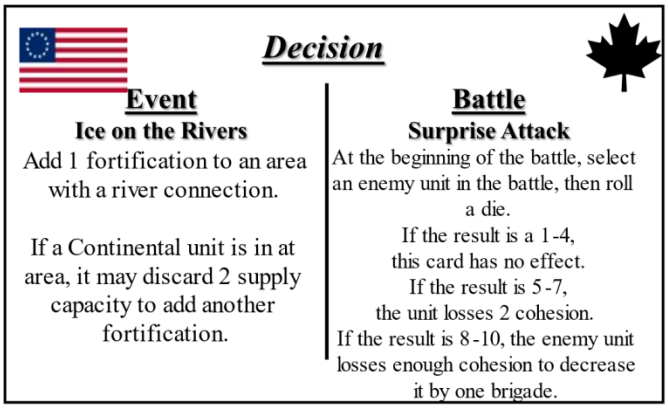
The connection counts as a Restrictive Connection.



Decision

Event
Waterway Disruptions
When calculating LOCs during the assess phase, River Connections count as 2 this turn.

Battle
Detailed Intelligence
During terrain selection, the British player must reveal all generals participating in the battle and the number of brigades.

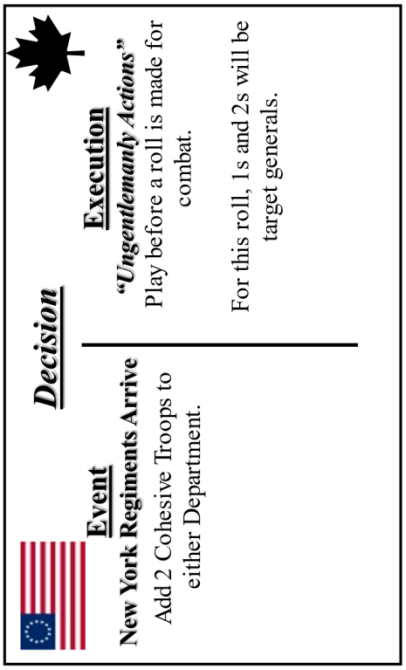


Decision

Event
Ice on the Rivers
Add 1 fortification to an area with a river connection.

If a Continental unit is in at area, it may discard 2 supply capacity to add another fortification.

Battle
Surprise Attack
At the beginning of the battle, select an enemy unit in the battle, then roll a die.
If the result is a 1-4, this card has no effect.
If the result is 5-7, the unit losses 2 cohesion.
If the result is 8-10, the enemy unit losses enough cohesion to decrease it by one brigade.

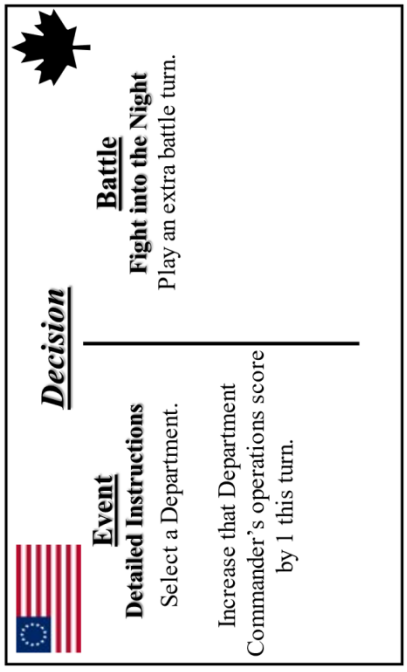


Decision

Event
New York Regiments Arrive
Add 2 Cohesive Troops to either Department.

Execution
"Ungentlemanly Actions"
Play before a roll is made for combat.

For this roll, 1s and 2s will be target generals.

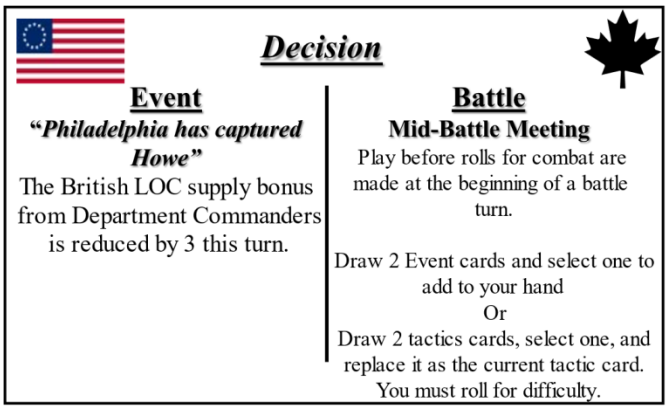


Decision

Event
Detailed Instructions
Select a Department.

Increase that Department Commander's operations score by 1 this turn.

Battle
Fight into the Night
Play an extra battle turn.

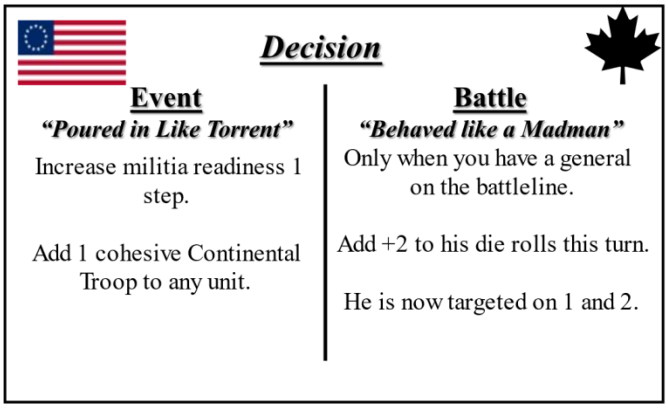


Decision

Event
"Philadelphia has captured Howe"
The British LOC supply bonus from Department Commanders is reduced by 3 this turn.

Battle
Mid-Battle Meeting
Play before rolls for combat are made at the beginning of a battle turn.

Draw 2 Event cards and select one to add to your hand
Or
Draw 2 tactics cards, select one, and replace it as the current tactic card. You must roll for difficulty.



Decision

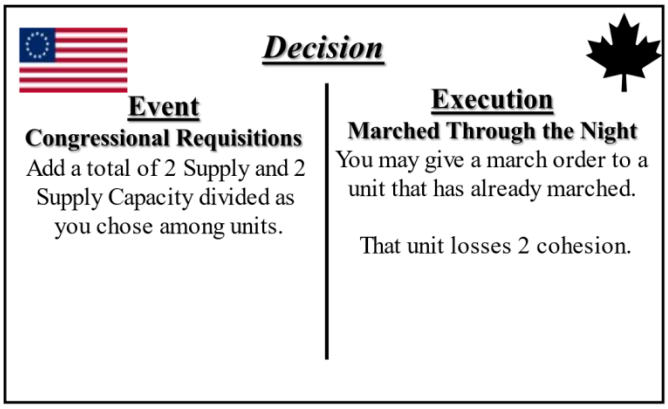
Event
"Poured in Like Torrent"
Increase militia readiness 1 step.

Add 1 cohesive Continental Troop to any unit.

Battle
"Behaved like a Madman"
Only when you have a general on the battleline.

Add +2 to his die rolls this turn.

He is now targeted on 1 and 2.



Decision

Event
Congressional Requisitions
Add a total of 2 Supply and 2 Supply Capacity divided as you chose among units.

Execution
Marched Through the Night
You may give a march order to a unit that has already marched.

That unit losses 2 cohesion.

Decision

Event

Promises from France

Pick one:

The British player losses a victory point

Or

The Continental player gains a victory point.

Execution

Screened withdraw

Play only if there is a least one light troop participating in the battle.

Skip the Rearguard round.

Decision

Event

Congressional Appointment

Select a General from out of play and add him to either department. Place his unit in the same area as the Department Commander and you may conduct a reorganization.

Assess

Boundless Supply

Select one area that contains one of your units.

You gain the whole supply bonus during upkeep.

Decision

Event

Citizen Naval Actions

The British may not use rivers for Lines of Communications this turn.

Execution

"This country is barren"

Play when the British play is executing a forage order.

Cancel the order.

Decision

Event

"Chevaux-de-fries"

Select a Continental Unit that is in an Area with a river connection. Add 2 fortifications to that unit.

Battle

Officers maintain order

Double the amount of cohesion gained from rallies this turn.

Decision

Event

British discount rumors

Decrease the British Intelligence Network score by 2.

Battle

Farmhouse Fortification

Play when you are assigning losses to your units.

Decrease the cohesion lost by one.

Open fields

No effect

Guns on that hill

Twice during the battle, you may add +1 a roll during the combat.

This effect cannot be used to improve a roll twice.

Canalizing Terrain

The attacking force is unable to play the Flank or Turn tactics

Open Hilltop

Prior to the battle beginning, you can conduct a recon of the enemy force without spending

Shallow Creek

The attacking force losses two cohesion per unit participating in the battle.

Open fields

No effect

Guns on that hill

Twice during the battle, you may add +1 a roll during the combat.

This effect cannot be used to improve a roll twice.

Open Hilltop

Prior to the battle beginning, you can conduct a recon of the enemy force without spending

Shallow Creek

The attacking force losses two cohesion per unit participating in the battle.

Canalizing Terrain

The attacking force is unable to play the Flank or Turn tactics

Open fields

No effect

Egress Routes

If you declare a retreat, there is no rearguardcombat and you suffer no cohesion loss.

Natural Redouts

Twice during the battle, you may subtract 1 from a combat during the combat.

This effect cannot be used to on the same roll twice.

Poor terrain

Every defending unit losses 1 cohesion at the beginning of the battle.

Deep Ravines

The attacking force losses 3 cohesion per unit participating in the battle.

No line of natural line of retreat

You cannot declare a retreat on your first turn of combat

Captain's Hill

Once during the battle, you may activate a general that has already been activated.

Good Interior Lines

Every defending unit gains 1 cohesion at the beginning of the battle.

Open fields

No effect

Deep Ravines

The attacking force losses 3 cohesion per unit participating in the battle.

Morning Frontal Assault

Tactical Difficulty: 3

Time: 8 turns

No effect. Finesse is for cooking.

Afternoon Frontal Assault

Tactical Difficulty: 2

Time: 4 turns

No effect.

Morning Flanking Maneuver

Tactical Difficulty: 7

Time: 8 turns

To perform this tactic, there must be at least two generals participating in the battle.

Select a general. That general cannot participate in the first turn of the battle.

The general joins the battle, on turn 2. On the two remaining turns, add +1 to all die results of that general.

Mid-Day Flanking Maneuver

Tactical Difficulty: 6

Time: 4 turns

To perform this tactic, there must be at least two generals participating in the battle.

Select a general. That general cannot participate in the first turn of the battle.

The general joins the battle, on turn 2. On the two remaining turns, add +1 to all die results of that general.

Mid-Day Turning Maneuver

Tactical Difficulty: 5

Time: 4 turns

Select one division of your opponents at random, that unit suffers four cohesion losses at the beginning of the battle.

Morning Out of Position

Tactical Difficulty:8

On the first turn of combat, reduce the number of die your opponent rolls by half, rounded up.

Time: 5 turns

Afternoon Out of Position

Tactical Difficulty:5

On the first turn of combat, reduce the number of die your opponent rolls by half, rounded up.

Time: 4 turns

Morning Probing Attack

If you announce retreat, there will be no rearguard round.

Tactical Difficulty:5

Time: 6 turns

Afternoon Probing Attack

If you announce retreat, there will be no rearguard round.

Tactical Difficulty:4

Time: 3 turns

Morning Disjointed Attack

All your units suffer 2 cohesion losses before the battle begins.

Tactical Difficulty:3

Time: 10 turns

Positioned for Pursuit

During the rearguard combat, roll 2 additional die.

Tactical Difficulty: 5

Time: 6 turns

Morning Reconnaissance

You may conduct a free recon of the enemy before the battle begins.

Tactical Difficulty: 4

Time: 6 turns

Rapid Advance

During the first round of combat, your opponent losses 3 cohesion across the unis in combat.

Tactical Difficulty: 6

Time: 4 turns

Midday Artillery Preparation

Before the first round of combat begins, you may spend 4 supply to remove one field fortification from play.

You may do this up to 3 before combat begins.

Tactical Difficulty: 3

Time: 4 turns

Sound dispositions

At the beginning of battle, after your opponent's terrain card has come into effect, every unit gains 2 cohesion.

Cohesion may exceed maximum.

Tactical Difficulty: 5

Time: 4 turns

Positioned for Pursuit

During the rearguard combat, roll 2 additional die.

Tactical Difficulty: 5

Time: 6 turns

Morning Reconnaissance

You may conduct a free recon of the enemy before the battle begins.

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Time: 4 turns

Sound dispositions

At the beginning of battle, after your opponent's terrain card has come into effect, every unit gains 2 cohesion.

Cohesion may exceed maximum.

Tactical Difficulty: 5

Time: 4 turns

Protect the Cities

Have at least 2 garrisons in 2 different cities at the end of the season.

Success: 1 VPs

Failure:-1 VPs.

Submit war plan to Congress

Have a total of five decision events in your hand at the end of the season.

Success: 3 VPs

Failure:-2 VPs.

Congress wants Action

Fight a battle by the end of the season.

Success: 2 VPs

Failure:-3 VPs.

Increase Militia Readiness

Have the Militia Readiness at Step 3 or higher at the end of the season.

Success: 3 VPs

Failure:-3 VPs.

Clear Intelligence

At the end of the season, have an Intelligence Network Score of 10 or more.

Success: 2 VPs

Failure:-2 VPs.

Pay fair prices

Gain no supply bonus during a turn.

Success: 0 VPs

Failure:-1 VPs.

Pay fair prices

Gain no supply bonus during a turn.

Success: 0 VPs

Failure:-1 VPs.

Keep the Enemy Blind

At the end of the season, the British Intelligence Network score must be below 2.

Success: 2 VPs

Failure:-2 VPs.

Win a Battle

Before the end of the season, win a battle.

Success: 2 VPs,

Failure:-2 VPs.

Prepare for French Supplies

Have 15 unused supply capacity in a single department.

Success: 2 CVPs

Failure:-2 CVPs.

Full Commissary Wagons
At the end of the season, have a total of 20 supplies in each department.

Success: 3 VPs

Failure:-3 VPs.

Rebuild the Army
At the end of the season, 15 troops each department. All units must have cohesion.

Success: 3 VPs

Failure:-3 VPs.

Congress wants Action
Fight a battle by the end of the season.

Success: 2 VPs

Failure:-3 VPs.

Continental Review
Have a total of 8 troops in a city at the end of a turn with full cohesion.

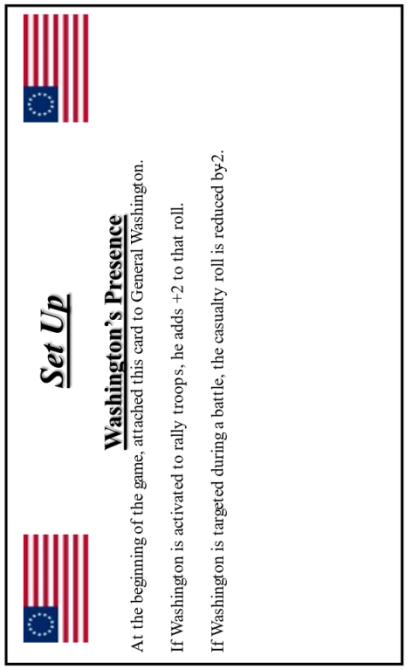
Success: 2 VPs, 4 bonus cohesion points (may exceed maximum cohesion).

Failure:-3 VPs.

Garrison for Congress
At the end of the season, have at least four troops within one connection of Philadelphia.

Success: 2 CVPs

Failure:-2 CVPs.



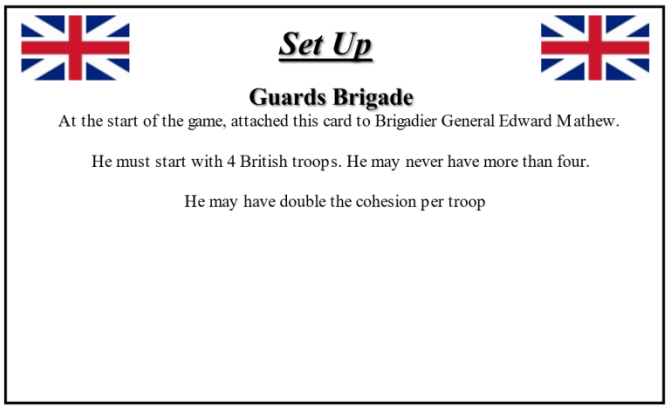
Set Up

Washington's Presence

At the beginning of the game, attached this card to General Washington.

If Washington is activated to rally troops, he adds +2 to that roll.

If Washington is targeted during a battle, the casualty roll is reduced by2.



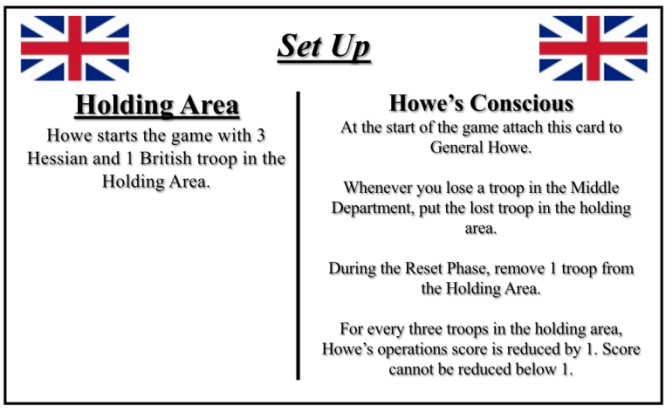
Set Up

Guards Brigade

At the start of the game, attached this card to Brigadier General Edward Mathew.

He must start with 4 British troops. He may never have more than four.

He may have double the cohesion per troop



Set Up

Holding Area

Howe starts the game with 3 Hessian and 1 British troop in the Holding Area.

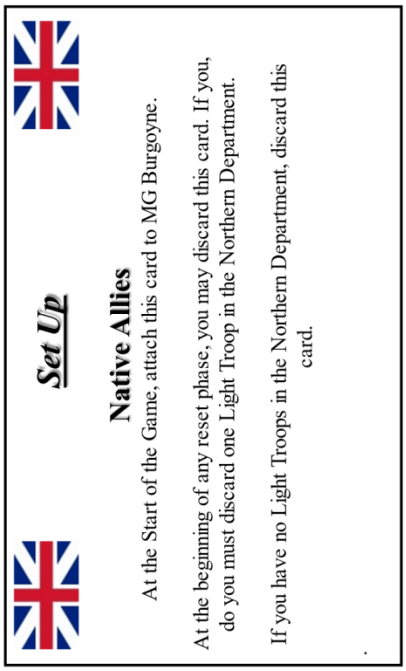
Howe's Conscious

At the start of the game attach this card to General Howe.

Whenever you lose a troop in the Middle Department, put the lost troop in the holding area.

During the Reset Phase, remove 1 troop from the Holding Area.

For every three troops in the holding area, Howe's operations score is reduced by 1. Score cannot be reduced below 1.



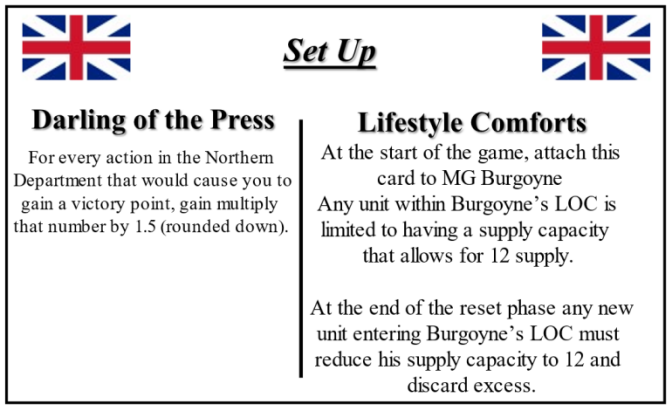
Set Up

Native Allies

At the Start of the Game, attach this card to MG Burgoyne.

At the beginning of any reset phase, you may discard this card. If you, do you must discard one Light Troop in the Northern Department.

If you have no Light Troops in the Northern Department, discard this card.



Set Up

Darling of the Press

For every action in the Northern Department that would cause you to gain a victory point, gain multiply that number by 1.5 (rounded down).

Lifestyle Comforts

At the start of the game, attach this card to MG Burgoyne

Any unit within Burgoyne's LOC is limited to having a supply capacity that allows for 12 supply.

At the end of the reset phase any new unit entering Burgoyne's LOC must reduce his supply capacity to 12 and discard excess.

Troops Recalled

Remove two troops of any kind in a port or landing.

Success: -3 CVPs

Failure: +1 CVPs

Open Ports for Trade

If you control three ports not in Canada, you succeed.

If at the end of the season, you have not succeeded, you fail.

Success: 3 BVPs

Failure: -3 BVPs

His Majesty Desires Boston

Before the end of the season, you must control Boston.

Success: 3 BVPs

Failure: -2 BVPs

Bring the Rebels to Battle

Before the end of the season, fight a battle with the Continental Player

Success: 1 BVP

Failure: -1 BVP

Traitors rooted out

At the end of the season, the Continental player must have a negative intelligence network score.

Success: 3 BVP

Failure: -3 BVP

Suppress the Militia

At the end of the season, the militia readiness score must be at 1 step or below

Success: 2 VPs

Failure:-1 VPs

Write to Parliament

Have a total of five decision events in your hand at the end of the season

Success: 2 VPs

Failure:-2 VPs

Keep the Enemy Blind

At the end of the season, the Continental Intelligence Network score must be below 2.

Success: 2 VPs

Failure:-2 VPs.

Bring the Rebels to Battle

Before the end of the season, fight a battle with the Continental Player

Success: 1 BVP

Failure:-1 BVP

Clear Intelligence

At the end of the season, have an Intelligence Network Score of 10 or more.

Success: 2 VPs

Failure:-2 VPs.

Full Commissary Wagons

At the end of the season, have a total of 20 supplies in each department.

Success: 2 VPs

Failure:-2 VPs.

Leave them Bloodied

In a single battle, inflict 4 troop losses on the enemy.

Success: 2 VPs

Failure:-2 VPs

"Be not overly harsh"

Before the end of the season, do not collect supply bonus or forage during a turn.

Success: 0 VPs

Failure:-1 VPs

His Majesty's Justice

Capture a city that is currently held by the Continental player.

Success: 1 BVP

Failure:-1 BVP

His Majesty's Justice

Capture a city that is currently held by the Continental player.

Success: 1 BVP

Failure:-1 BVP

Victory – Turn Track

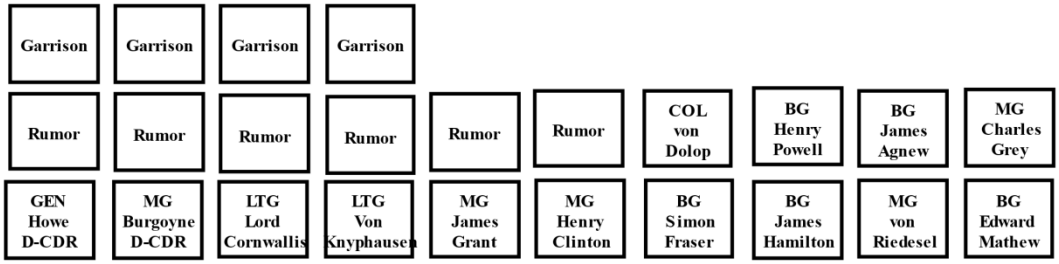
Winter 1	**Spring Season**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Winter 2	**Summer Season**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**19**	**19**	**20**
	Autumn Season	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**

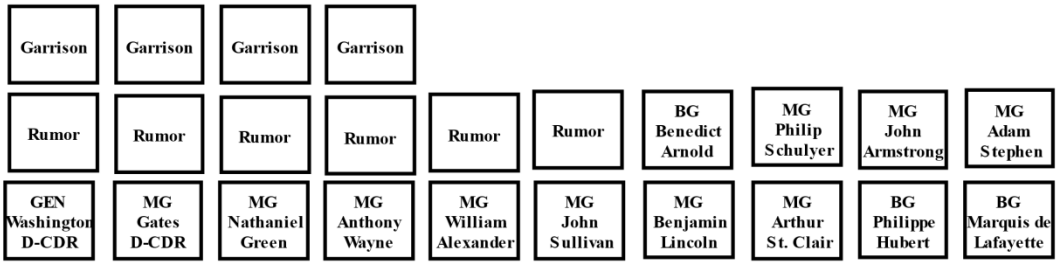
Intelligence Network

British	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Continental	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Militia Readiness

-2	-2	-1	-1	1	1	1	2	2	2	3	3	4	4
	Regardless of the Modifier, on a 1, no militia arrive.	**1 No Militia Arrive**	Decrease militia readiness by 1 step	Add 1 Continental Troop and Cohesion to the Militia Unit. **3-2 Cowardly Militia**	Decrease militia readiness by 2 steps	Add 4 Continental Troops and Cohesion to the Militia Unit **6-4 Satisfactory Militia Turnout**	Decrease militia readiness by 3 steps	Add 6 Continental Troops and Cohesion to the Militia Unit **9-7 Impressive Militia Turnout**	Decrease militia readiness by 4 steps	Add 8 Continental Troops and Cohesion to the Militia Unit. **10- Extraordinary Militia Turnout**		During Battle Set Up, Roll a d10 and apply the Militia Readiness as a modifier.	**Militia Callout**





Continental Militia																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-9		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: -					**Logistics: -**						**Intelligence: -**						**Prestige: -**			

Brigadier General John Stark																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-9		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 3					**Logistics:** 1						**Intelligence:** 3						**Prestige:** 1			

Major General Nathaniel Green																				
Troops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-9		+1				+2				+3				+4				+5		
Cohesion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Supply	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tactical: 2					**Logistics:** 1					**Intelligence:** 2							**Prestige:** 4			

Brigadier General Anthony Wayne																				
Troops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-9		+1				+2				+3				+4				+5		
Cohesion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Supply	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tactical: 1					**Logistics:** 1					**Intelligence:** 1							**Prestige:** 1			

Major General William Alexander, *Lord Sterling*																				
Troops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-9		+1				+2				+3				+4				+5		
Cohesion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Supply	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tactical: 1					**Logistics:** 2					**Intelligence:** 2							**Prestige:** 2			

Major General John Sullivan																				
Troops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-9		+1				+2				+3				+4				+5		
Cohesion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Supply	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tactical: 2					**Logistics:** 1					**Intelligence:** 1							**Prestige:** 2			

Brigadier General Philippe Hubert, *Chevalier de Borre*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 0					**Logistics:** 1					**Intelligence:** 1					**Prestige:** 1						

Major General Gilbert du Motier, *Marquis de Lafayette*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 3					**Intelligence:** 1					**Prestige:** 1						

Major General Adam Stephen																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 2					**Intelligence:** 1					**Prestige:** 2						

Major General John Armstrong																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 3					**Intelligence:** 2					**Prestige:** 2						

Major General Philip Schulyer																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 2						**Intelligence:** 1						**Prestige:** 2				

Brigadier General Benedict Arnold																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 3					**Logistics:** 1						**Intelligence:** 0						**Prestige:** 1				

General George Washington, *Middle Department Commander*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1* *Attach Washington's Presence*					**Logistics:** 3						**Intelligence:** 3						**Operations:** 3				

Major General Horatio Gates, *Northern Department Commander*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 5						**Intelligence:** 2						**Operations:** 2				

Major General Benjamin Lincoln																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 2						**Prestige:** 3					

Major General Arthur St. Clair																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-9		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 1					**Intelligence:** 1						**Prestige:** 2					

Garrison 1																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 1						**Prestige:** 0					

Garrison 2																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 1						**Prestige:** 0					

Garrison 3																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1						**Intelligence:** 1						**Prestige:** 0				

Garrison 4																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1						**Intelligence:** 1						**Prestige:** 0				

Garrison 1																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1						**Intelligence:** 1						**Prestige:** 0				

Garrison 2																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1						**Intelligence:** 1						**Prestige:** 0				

Garrison 3																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 1				**Prestige:** 0							

Garrison 4																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 1				**Prestige:** 0							

Major General James Grant																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence: 2**				**Prestige:** 1							

Major General Henry Clinton																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 3					**Logistics:** 2					**Intelligence:** 2				**Prestige:** 2							

Brigadier General Simon Fraser																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 3					**Logistics:** 2					**Intelligence:** 2						**Prestige:** 1					

Brigadier General James Hamilton																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 1					**Intelligence:** 1						**Prestige:** 2					

Major General Fredrick von Riedesel (Hessian)																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 2					**Intelligence:** 2						**Prestige:** 2					

Brigadier General Edward Mathew																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-7*		+1				+2				+3				+4				+5			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2* *Starts with Guards*					**Logistics:** 1					**Intelligence:** 1						**Prestige:** 1					

Major General Charles Grey																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-8		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 2					**Intelligence:** 1							**Prestige:** 2			

Brigadier General James Agnew																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-8		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 2							**Prestige:** 2			

Brigadier General Henry Powell																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-8		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 1					**Logistics:** 1					**Intelligence:** 1							**Prestige:** 1			

Colonel Carl von Dolop																				
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
10-8		+1				+2				+3				+4				+5		
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 2					**Intelligence:** 1							**Prestige:** 1			

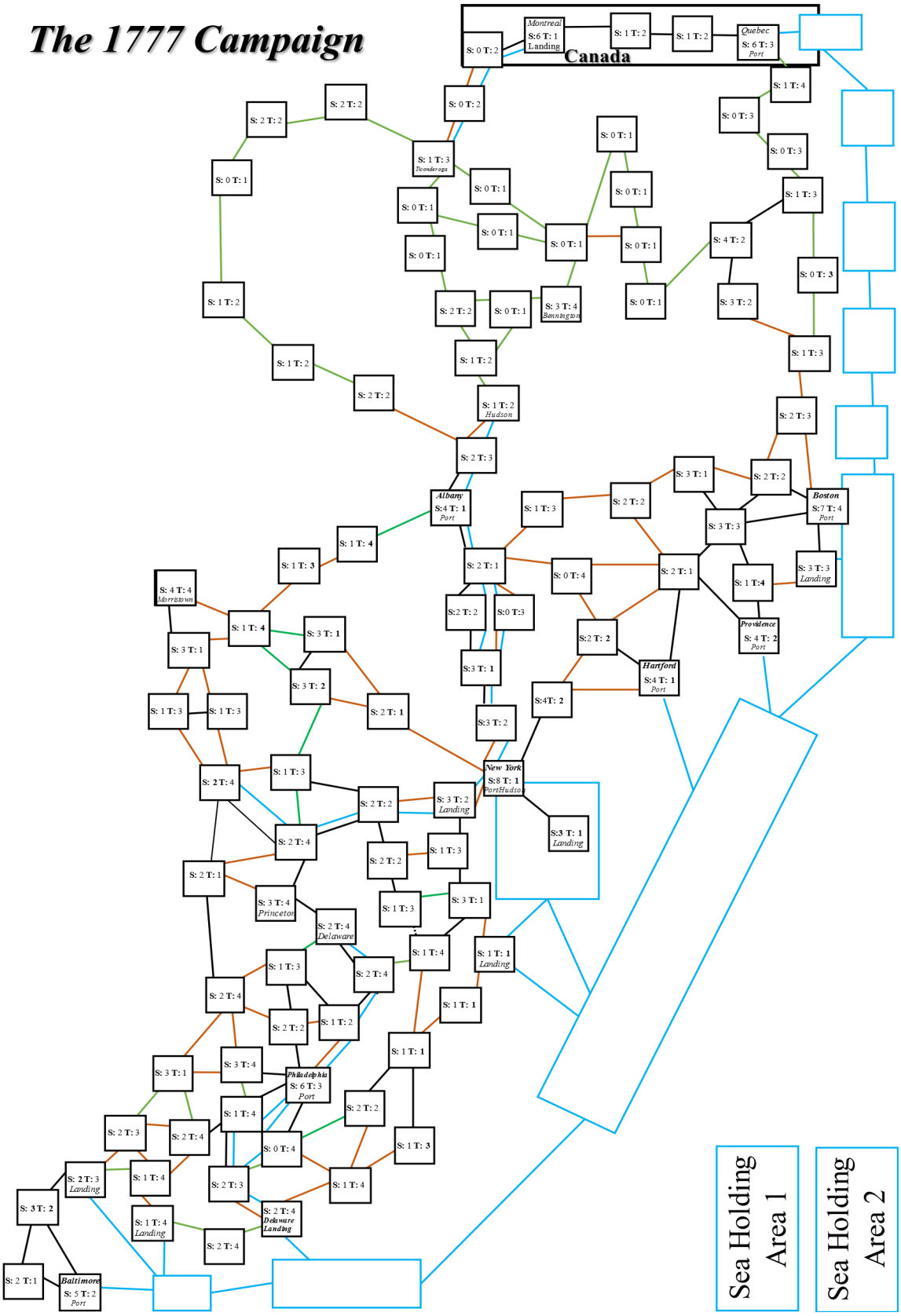
General Sir William Howe, *Middle Department Commander*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		**+1**				**+2**				**+3**				**+4**				**+5**			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2**Howe's Conscious*					**Logistics:** 3						**Intelligence:** 3						**Operations:** 4				

Major General John Burgoyne, *Northern Department Commander*																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		**+1**				**+2**				**+3**				**+4**				**+5**			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 2**Lifestyle Comforts*						**Intelligence:** 1						**Operations:** 3				

Lieutenant General Lord Charles Cornwallis																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		**+1**				**+2**				**+3**				**+4**				**+5**			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 2						**Intelligence:** 1						**Prestige:** 4				

Lieutenant Wilhelm von Knyphausen (Hessian)																					
Troops	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
10-8		**+1**				**+2**				**+3**				**+4**				**+5**			
Cohesion	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	
Supply	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tactical: 2					**Logistics:** 1						**Intelligence:** 2						**Prestige:** 2				

The 1777 Campaign



BIBLIOGRAPHY

Historical Works

Anderson, Fred. *Crucible of War, The Seven Years' War and the Fate of Empire in British North America, 1754-1766*. New York, NY: Random House, 2000.

Anderson, Troyer Steele. *The Command of the Howe Brothers during the American Revolution*. New York, NY: Oxford University Press, 1936.

Atkinson, Rick. *The British Are Coming, The War for America, Lexington to Princeton, 1775-1777*. New York, NY: Henry Holt and Company, 2019.

Borneman, Walter R. *American Spring, Lexington, Concord, and the Road to Revolution*. New York, NY: Little, Brown, and Company, 2014.

Chadwick, Burce. *George Washington's War, The Forging of a Revolutionary Leader and the American Presidency*. Naperville, IL: Sourcebooks, Inc., 2004.

De Costa, J. "A Plan of the Town and Harbour of Boston. and the Country Adjacent with the Road from Boston to Concord Shewing the Place of the Late Engagement." American Antiquarian Society. Accessed March 26, 2021. https://americanantiquarian.org/earlyamericannewsmedia/items/show/34.

Dupuy, T. N. *The Evolution of Weapons and Warfare*. Indianapolis, IN: The Bobbs-Merrill Company, 1980.

———. *A Genius for War: The German Army and General Staff 1807-1945*. Hoboken, NJ: Prentice-Hall Inc., 1977.

Ferling, John. *A Leap in the Dark, The Struggle to create the American Republic*. New York, NY: Oxford University Press, 2003.

Fischer, David Hackett. *Washington's Crossing*. New York, NY: Oxford University Press, 2004.

Harris, Michael. *Brandywine: A Military History of the Battle that Lost Philadelphia but Saved America, September 11, 1777.* El Dorado Hills, CA: Savas Beatie, 2017.

———. *Germantown: A Military History of the Battle for Philadelphia October 4, 1777.* El Dorado Hills, CA: Savas Beatie, 2020.

Hogg, Ian V. *Armies of the American Revolution*. Englewood Cliffs, NJ: Prentice-Hall Inc., 1975.

Jackson, John. *With the British Army in Philadelphia 1777-1778*. San Rafeal, CA: Presidio Press, 1979.

Ketchum, Richard. *Saratoga: Turning Point of America's Revolutionary War*. New York, NY: Holt Paperbacks. 1997.

Knight, Roger. *The Pursuit of Victory. The Life and Achievement of Horatio Nelson.* New York, NY: Perseus Books Group. 2005.

McCullough, David. *1776*. New York, NY: Simon & Schuster, 2005.

Pennypacker, Morton. *George Washington's Spies on Long Island and in New York*. New York, NY: Long Island Historical Society, 1939.

Snow, Dean. *1777 Tipping Point at Saratoga*. New York, NY: Oxford University Press, 2016.

Taaffe, Stephen R. *The Philadelphia Campaign, 1777-1778*. Lawrence, KS: University Press of Kansas, 2003.

Wargames and Wargame Literature

Koster, Raph. *A Theory of Fun*. Sebastopol, CA: O'Reilly Media, 2013.

Napoléon 1806. Denis Sauvage. Golden Bell Entertainment, LLC, 2017.

Nevsky. Volko Ruhnke. GMT Games LLC, 2019.

Perla, Peter. *The Art of Wargaming.* Edited by John Curry. Annapolis, MD: The United States Naval Institute, 2011.

Rubel, Robert. "The Epistemology of Wargaming." *Naval War College Review* 59, no. 2 (2006): 108-128.

Sabin, Philip. *Simulating War*. London: Bloomsbury Publishing, 2012.

Star Wars Rebellion. Corey Konieckza. Fantasy Flight Games, 2016.

Strike of the Eagle. Brian Bennett, Uwe Eickert, and Robert Zak. Academy Games, Inc., 2011.

Supply Lines of the American Revolution. Tom Russel. Hollandspiele LLC, 2017.

Twilight Imperium. 4th Ed. Corey Konieckza. Fantasy Flight, 2017.

Doctrine and Military Theory

Clausewitz, Carl von. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1984.

Headquarters, Department of the Army, Army Doctrine Publication 3-0, *Operations.* Washington, DC: Army Publishing Directorate, 2019.

———. Army Doctrine Publication 5-0, *The Operations Process*. Washington, DC: Army Publishing Directorate, 2019.

———. Field Manual 3-0, Change 1, *Operations*. Washington, DC: Army Publishing Directorate, 2017.

———. Field Manual 6-0, Change 2, *Commander and Staff Organization and Operations*. Washington, DC: Army Publishing Directorate, 2014.

Joint Chiefs of Staff. Joint Publication 1, Change 1, *Doctrine for the Armed Forces of the United States*. Washington, DC: Joint Chiefs of Staff, 2017.

———. Joint Publication 3-0, Change 1, *Joint Operations.* Washington, DC: Joint Chiefs of Staff. 2017.

———. Joint Publication 5-0, *Joint Planning.* Washington, DC: JCS, 2017.

Jomini, Antoine Henri. "The Art of War," In *Roots of Strategy,* Book 2, edited by J. D. Little, 388-557. Harrisburg, PA: Stackpole Books, 1987.

Leonhard, Robert. *Fighting by Minutes*. Coppell, TX, 2017.

Sun Tzu. *The Art of War: Complete Texts and Commentaries*. Translated by Thomas Cleary. Boston, MA: Shambhala, 2003).